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**The StartUPS Project at Politecnica Salesiana
University (UPS): a Common Good Approach to
Institutional Management and Human Development**

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The festival and its traditions, the sowing and its process, everyday life and its wonder, music and its magic, spirituality, and its ancestry: everything has its cycle, everything is intertwined, and everything comes back, always comes back.

Memory draws imperfect, mixed, but deep lines; lines that express what we were, continually shape what we are and imagine what we will be. The story is woven through everyday experiences, moments, knowledge.

We are, through time and we get stronger thanks to it. We are indissoluble substance, amalgamated to the sound of fire and memory. We are land, sea and jungle, and an imaginary line that bond us. We are one and we come back, we always come back.

“Somos Uno” Mural - Apitatán

La fiesta y sus tradiciones, la siembra y su proceso, la cotidianidad y su asombro, la música y su magia, la espiritualidad y su ancestralidad: todo tiene su ciclo, todo se entrelaza, y todo vuelve, siempre vuelve.

La memoria dibuja trazos imperfectos, mixtos, pero profundos; líneas que expresan lo que fuimos, van conformando continuamente lo que somos e imaginan lo que seremos. La historia se teje a través de experiencias cotidianas, momentos, saberes.

Somos, a través del tiempo y nos fortalecemos gracias a él. Somos sustancia indisoluble, amalgamada al son del fuego y memoria. Somos tierra, mar y selva, y una línea imaginaria que nos une. Somos uno y volvemos, siempre volvemos. [Original Spanish text].

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Gracias, sulpayki, thank you.

Abstract

The purpose of this research is to analyze the StartUPS project from the Politecnica Salesiana University and see how this open environment has enhanced people capabilities considering the person-centered vision and how the project base in common good management and capability approach helped the human development of these project participants. In this analysis the concept of development is reviewed from the well-fare to the well-being and contrast with modern and Andean perspectives aiming to understand different forms of development and management of common pool resources and how this set up a line for future research about how to mix these perspectives with the commonly known indicators to measure development. To measure the impact of the project over the participants development, quantitative and qualitative data was collected from the multiple activities and projects that took place under the project open spaces, data shown how almost unanimously not only the participants but also the mentors, professors and strategic allies improve their capabilities and indirectly their perceived self-well-being. Leaving also new research lines to study how strategic planned activities targeting specific functionings could be applied and improved, how Universities seen as an open environment could become community engagement agents improving the community and national well-being.

Key words: university ecosystem, entrepreneurship, innovation, capability approach, functionings, human development, Common Good

Resumen

El propósito de esta investigación es analizar el proyecto StartUPS de la Universidad Politécnica Salesiana y ver cómo este entorno abierto ha mejorado las capacidades de las personas considerando la visión centrada en la persona y cómo su base en la gestión del bien común y el capability approach ayudaron al desarrollo humano de los participantes. En este análisis se revisa el concepto de desarrollo desde la asistencia social (estatal) hasta el bienestar [integral] y se contrasta con las perspectivas modernas y andinas con el fin de comprender las diferentes formas de desarrollo, gestión de los recursos de uso común y cómo esto establece una línea para futuras investigaciones sobre cómo combinar estas perspectivas con los indicadores comúnmente conocidos para medir el desarrollo. Para medir el impacto del proyecto en el desarrollo de los participantes, se recopilaron datos cuantitativos y cualitativos de las múltiples actividades y proyectos que se llevaron a cabo bajo los espacios abiertos del proyecto, datos que muestran cómo casi unánimemente no solo los participantes sino también los mentores, profesores y aliados de la universidad

mejoraron sus capacidades e indirectamente su percibido auto bienestar. Dejando también nuevas líneas de investigación para estudiar cómo se podrían aplicar y mejorar las actividades estratégicas planificadas dirigidas a functionings, cómo las universidades vistas como un entorno abierto podrían convertirse en agentes de participación comunitaria que mejoren el bienestar comunitario y nacional.

Palabras claves: ecosistema universitario, emprendimiento, innovación, capability approach, desarrollo humano, bien común.

Sommario

Lo scopo di questa ricerca è analizzare il progetto StartUPS dell'Università Politecnica Salesiana e studiare come questo ambiente aperto abbia migliorato le capacità delle persone, considerando una visione centrata sulla persona e i pilastri del progetto: la gestione del bene comune e il capability approach, in modo che l'insieme migliorasse lo sviluppo umano dei partecipanti. Questa analisi passa in rassegna i concetti di sviluppo, dall'assistenza sociale (statale) al welfare [integrale], e li contrappone alle prospettive moderne e andine per comprendere le diverse forme di sviluppo, la gestione delle risorse del bene comune e, da questa prospettiva, stabilire una linea di ricerca che si combini con gli indicatori comunemente noti per misurare lo sviluppo. Per misurare l'impatto del progetto StartUPS sullo sviluppo dei partecipanti, sono stati raccolti dati quantitativi e qualitativi dalle molteplici attività e progetti realizzati negli ambienti aperti del progetto, dati che mostrano come quasi all'unanimità, non solo i partecipanti ma anche i mentori, i docenti e gli alleati dell'università abbiano migliorato le loro capacità e indirettamente il loro benessere percepito. Questa analisi propone anche nuove linee di ricerca per studiare come le attività strategiche possano essere implementate e migliorate per le functioning, e come le università, viste come un ambiente aperto, potrebbero diventare agenti di coinvolgimento della comunità che migliorano il benessere della comunità e del Paese.

Parole chiave: ecosistema universitario, imprenditorialità, innovazione, approccio delle capacità, sviluppo umano, bene comune.

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I. Purpose of the research

The purpose of this research is to analyze the StartUPS project at the Politecnica Salesian University as an environment that enhances people's capabilities from the Common Good and Capability approach as a person-centered initiative for human development.

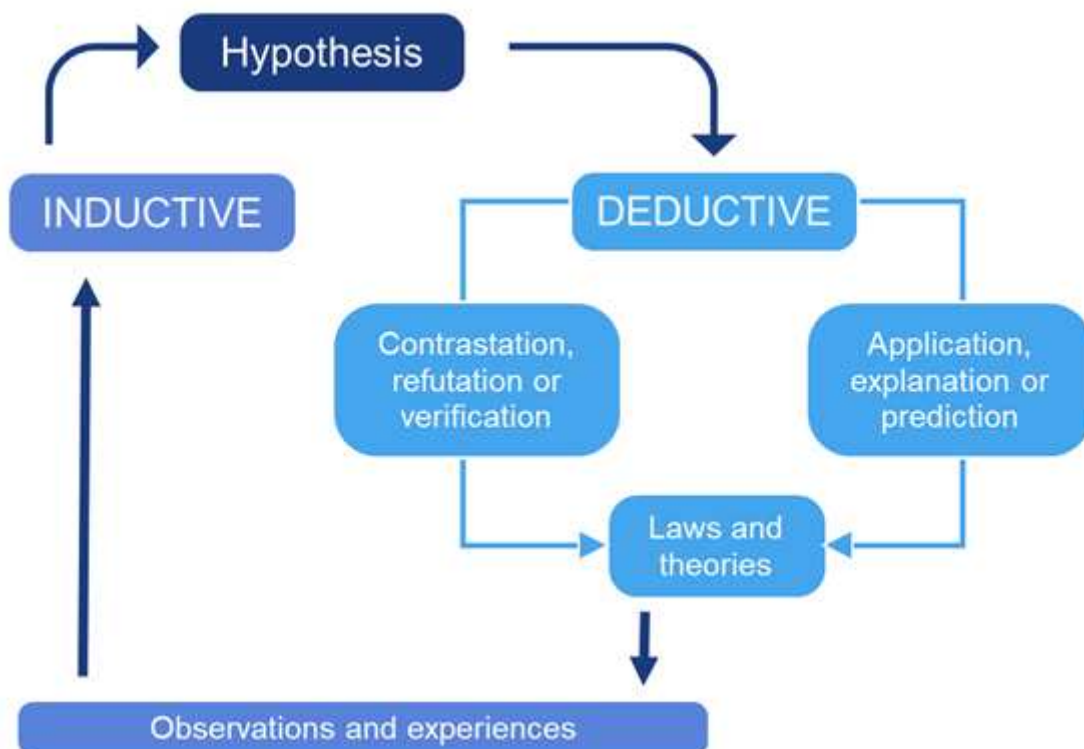
- Review economic development from a modern and Andean perspective in order to understand the new forms of organization and management of common pool resources (CPR).
- Explore human development from the well-fare perspective to the well-being, considering the Sumak Kawsay, the care of our common home and the capability approach.
- Understand Politecnica Salesiana University as an eco-systemic organization managed from the common good perspective, and as a development agent in the territory.
- Characterize StartUPS-project at UPS as an environment that promotes the development of programs, workshops and bootcamps that leverage the strengths of diverse learning environments and activities.
- Assess participants actions and functionings within activities developed at StartUPS project.
- Carry out personal interviews to different participants to obtain qualitative data.

II. Methodology overview

Theoretical research generates and is built up based on innovation, re-innovation, and conceptual migrations. That is why one of the major contributions of theoretical work is the idea systems that give birth to spaces where information becomes knowledge and how it is manage. In Social Science, the goal is not to duplicate reality but to understand it from a logical point of view. This research parts have a major component of theoretical work and in order to transform information into knowledge uses an inductive and hypothetical-deductive method [figure 1].

Figure 1

Inductive method, hypothetico-deductive model



Note. Based on (Sarabia Sánchez, 1999).

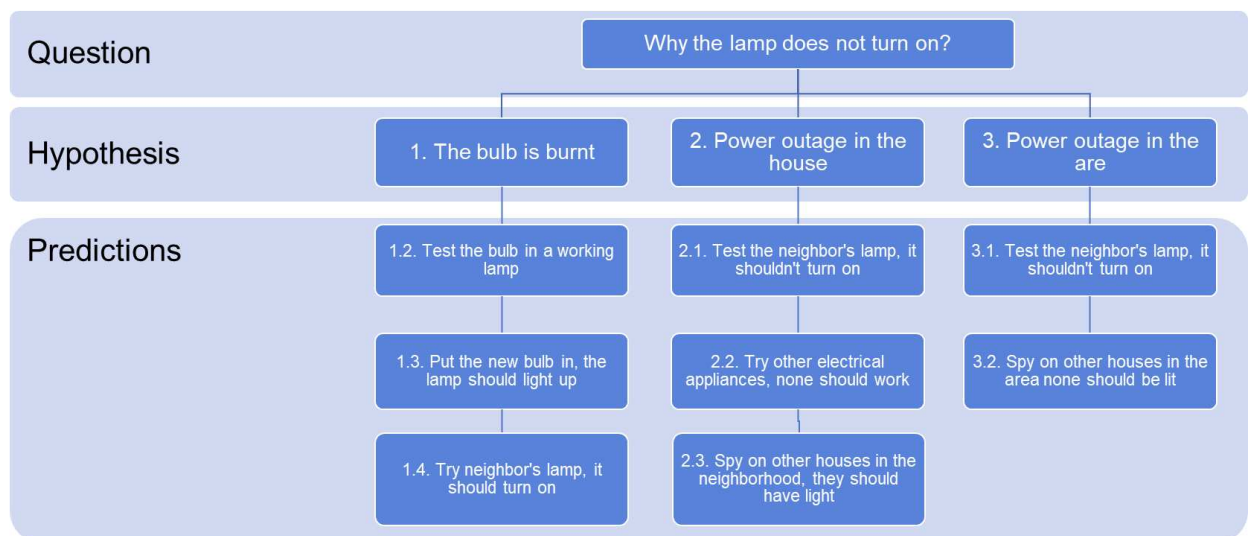
In one hand, the hypothetical-deductive method is a scientific research model, and it is based on the hypothesis formulation and the deduction of forecasting from those

hypotheses just to put them into empirical trial that will allow to accept or refuse the hypothesis (Hernández Chanto, 2008). The process starts with the observation of an event, once observed it is formulated a hypothesis that pretends to explain it (Díaz Novás et al., 2011). The hypothesis is an attempt to explain, so it must be coherent with the knowledge of these matter and, should be capable of generating predictions that could be put into empirical trials.

From the hypothesis the predictions are born, those can be put into trial via experiment of data observation [figure 2]. If the results of the empirical trials are coherent with the hypothesis predictions, it is considered that it has been proven and it can be accepted as a provisional explanation of the event. On the other hand, if the results are not coherent with the predictions, the hypothesis is rejected, and a new explanation should be sought out. The method allows new ideas and knowledge generation, constant revision, and updates (Klimovsky, 1971).

Figure 2

Hypothetico-deductive model example



Note. Translated from “UNA forma alternativa para la enseñanza del método hipotético-deductivo” by Farji-Brener, A. G., (2007) , Figura 1, Interciencia, 32(10), 716–720.

On the other hand, the inductive method is used to generate new theories or knowledge from observation and empirical data analysis. This data is recollected and analyzed, looking out for patterns, trends and regularity aiming to infer generalization and broader conclusions. The inductive process could be described in steps. First, an event or a compilation of empirical data is seen. Then, more data is collected for the completeness of

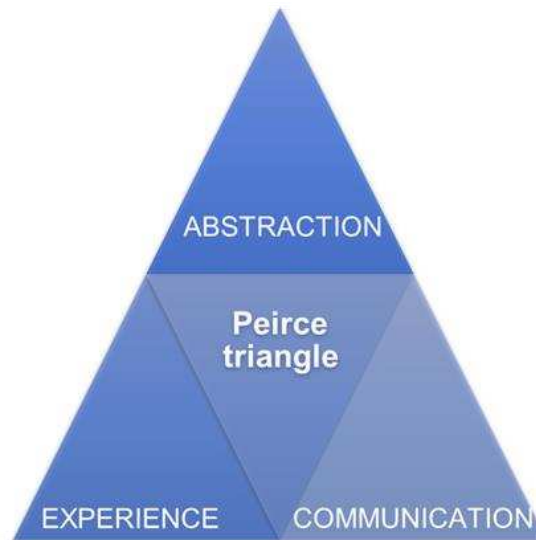
the information. After, the data analysis is performed seeking patterns or regularities and the provisional hypothesis are settled to explain these patterns. These hypotheses are adjusted and readjusted with the compilation of more data and information gets bigger (Sampieri et al., 1998).

The inductive process is repeated until a general theory has been developed and is able to explain the observed event. Inductive theory is also, a provisional explanation based on empirical evidence and is used to make future predictions, it is useful to explore new research areas and to generate initial hypothesis and theories.

On one side, the critics of the hypothetical-deductive method involves the simplification of reality, the bias that could exist at the moment of accept the hypothesis and not seen the big picture. On other side, the critics to the inductive model focus the possibility of important data missing or not being collected, or the data collection process will select bias information, and the lack of consideration of existent theories and alternative explanation. Because of this criticism is important to complement the research methods and use a mixed methodology [like the one will be used over this work], also data collection process that allows to have an extended, precise, and more complete comprehension about the events is a must.

Following this, the Peirce triangle [figure 3] is a useful tool to understand the knowledge acquisition (Hausman, 1996). This technique allows us to analyze and understand the meaning from different context because stands for the relationship among the fundamental concepts of scientific research and knowledge acquisition (Peirce, 1998): (i) Experience allow the observation of reality or facts, is the information obtained directly from the empirical experience; (ii) Abstraction, it is referred as the ability of the human brain to think, extract meaning and patterns, organize, generate concepts and theories from information; and (iii) Communication, related with language and other sign systems to transmit information from one person to another (Everaert-desmedt & Balmaceda, 2004).

For research purposes, the question is how [learning/training] environments such as StartUPS project at UPS enhance student's competencies? In order to explore the hypothesis that if through the self-driven and guided development of key functionings under diverse environments, it can contribute higher education student's ability to face a VUCA world. The research starts based on experience, these experiences give the data to be analyzed via an abstraction process and later communicated. The three concepts are connected, and their interaction allows us to share the findings that are discussed, evaluated, and tested.

Figure 3*Peirce Triangle*

The study case for the research

The study case consists of analyzing deeply the event in its real context to obtain a deeper and detailed comprehension. The researcher selects a specific case that could be a person, a group, organization, or an event. Gather detailed data about this case through many research techniques like observation, interviews, surveys, or document analysis. The researcher seeks to understand how the research case works and how it is related to its whole context.

Yin defines the case of study as “an empirical research that study a contemporary event within its real-life context” (2003, p. 13) allowing to understand its dynamic and processes. The study cases belong to a broadly applied methodology applied by public and private institutions in many areas and themes (Yacuzzi, 2005). International organization use this methodology to obtain “a comprehensive understanding, an extensive description and global [given its situation] analysis within its context” aiming to implement programs, policies and evaluation among different countries and regions where they take part (Morra & Friedlander, 2001, p. 2)

The case study could be of descriptive, exploratory, or explanatory nature, it depends on the research goal and the level of the previous knowledge of the event [table 1]. It is not of a uniform methodology, is something that adapts to each research depending on the objective and the context of it (Álvarez & San Fabián Maroto, 2012). One of the advantages

is that data collection could be quantitative and qualitative (Bonache Pérez, 1999) taken into account the strictness that has to be taken (Chetty, 1996; Martínez, 2006).

The information triangulation through many sources of data collection and analysis contributes to the quality and research validation (Yin, 2003). And the obtention of trustworthy conclusions. The potential source of data could be documents, archives, interview, direct observation and from participants from the case of study (Goodrick, 2014).

Table 1

Types of study Case

Yin (2003)	Stake (1995)
Explanatory: answer questions that look for explain the real-life cause of the event. Example, the link of the implementation of a program with its effects.	Intrinsic: better understanding of a case that is of particular interest for the researcher. Does not have as a goal to understand an event or build a theory.
Exploratory: evaluates where the intervention has no clear results.	Collective: similar multiple study cases.
Multiple study cases: Allow to find differences among all the cases and within itself. The goal is to replicate the findings. Comparisons are made and researchers could predict similarities or compare results.	Instrumental: perform a close look to an event and redefine a theory. The case of study is on a second priority, this is because it helps to understand of something else, deep analysis must be performed, each activity is detailed because it helps the researcher achieve his goal.

Note. Based on (Baxter & Jack, 2008).

Data Collection techniques

The mix research approach combines quantitative and qualitative methods aiming to obtain a more complete and detailed comprehension of the event of study, also targets to integrate results in a coherent synthesis (Pereira, 2011). The approach could take many forms, including the data collection and analysis of quantitative and qualitative data simultaneously, sequential or at the same time. The combination of both, quantitative and qualitative data could generate and enhanced deeper understanding of the event of study (Leech & Onwuegbuzie, 2009).

The mix research justifies themselves because they are complementary and gives different types of knowledge and advantages to the researcher such as detailed information and new research approach. This type of research could be performed in three ways: (i) Parallel, when data is collected at the same time and develop triangle research. (ii) Qualitative first and then quantitative, this way seeks to explore relationships among an event that lacks previous studies aiming to build a theory. (iii) Quantitative then qualitative, aiming to complement, clear out, enhance the research results (Ugalde Binda & Balbastre-Benavent, 2022, p. 185). Data collection techniques such as interviews, observing, and documentation were used for this research.

1.1. Literature revision

Literature revision is a critical and systematic process that carry on identifying, evaluate and synthetize the specific topics related to the research. It is developed before and during the research because allows the study to be contextualized accurately and understand the actual stage of knowledge of the field through the search and evaluation of different sources of information. This step of the research allows us to find the gap between current knowledge and the research question, show the areas that require more research, evaluates the quality of the earlier research and their results; allow the researcher to know deeply the different approaches, methodologies and debates of previous studies (Sampieri et al., 1998).

1.2. Research documentation and case of study

Documentation is the process of gathering, organizing and register the related information with the research project to guarantee integrity, validation and truthfulness of the research results so it holds up ethics and legal standards (Oberti & Bacci, 2021)

- Collected data registration: should be registered systematically and organized to make easy the analysis and interpretation. This could include the use of spread sheets, databases or specific research software.
- Registration of procedures and used methods: it is important to extensively register the procedures and methos used over the research, so it could be replicated and validated (including results)
- Registration of information: sources is essential to register the sources of information used in the research, this allows evaluation and verification of the information used.
- Registration of approvals and consent needed: like the consent of the participants of the interviews (Hernández-Sampieri, 2018).

1.3. Non-participant observation

The researcher observes the behavior and interaction of the research subjects without interfering with them during the activities. This can be performed with or without structure. In the structured observation, the researcher established a group of categories and criteria to observe and register the behavior of the research subjects. Over the unstructured way, the researcher does not have a group of preset categories and observe the behavior from a wider perspective (Díaz Sanjuán, 2011).

1.4. Participant Observation

This type of observation is a data collection technique that implies the researcher is part of the observed group or situation and registers the behaviors and interactions of the research subjects while participating with them. As the non-participant observation technique, it could be structured with the establishment of a group of categories and criteria to observe and register or it could also be unstructured, where no group of categories exist, and the behavior is studied more open. This allows to stablish a trust relationship between the researcher and the research subjects, this could lead to a better quality and quantity of collected information (Angrosino, 2012).

1.5. Interviews

Interviews is a data collection technique use in the research where the researcher ask questions to the research subjects with the objective of get relevant information for the research, could be structured, semi-structured or nonstructured, it depends on the flexibility scale of the formulated questions and answers (Díaz Bravo et al., 2013). The semi-structured interviews allow the researcher ask open questions and the have more freely answers, this allows exploration of broader and deeper topics (Troncoso-Pantoja & Amaya-Placencia, 2017). The interviews are a powerful tool for data collection since allow us to have details over experiences, perceptions, attitudes and behaviors from the research subjects (Callejo Gallego, 2002).

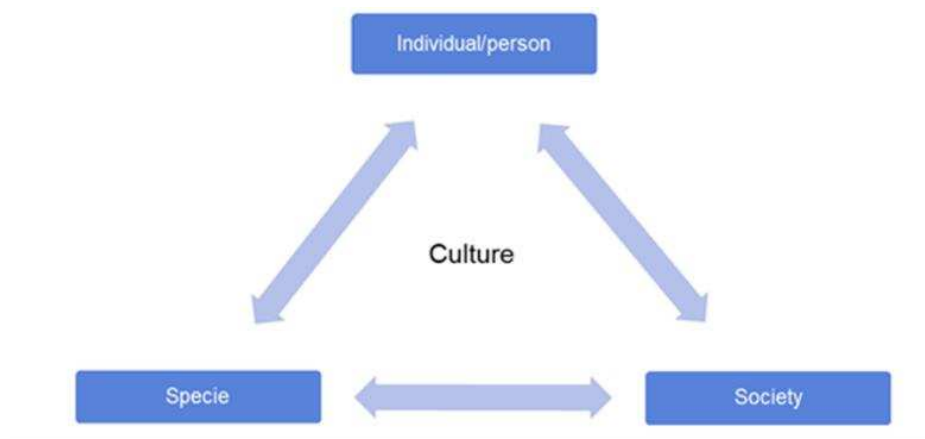
Organization theory

Organization theory allows the comprehension of an intended environment where the participants develop their skills/capabilities. Gives birth to a more flexible and dynamic organization with spaces that educate [figure 4]. Morin centers his study about society from a dynamic and heterogenic perspective, conceived from a complex unit susceptible to variations [figure 5], and with the study of history, allow to understand the historical subjects

that have interact and affect reality. From the complexity of understand society and the human being among the many different social events across a trans-disciplinary interaction of the object, method and challenges to study history from an integra point of view. All this taking into account the behavior of the participants of the group and the culture. Seeks out to overcome the dichotomy of the subjectivity from a wider vision were subjectivity and objectivity integrates

Figure 4

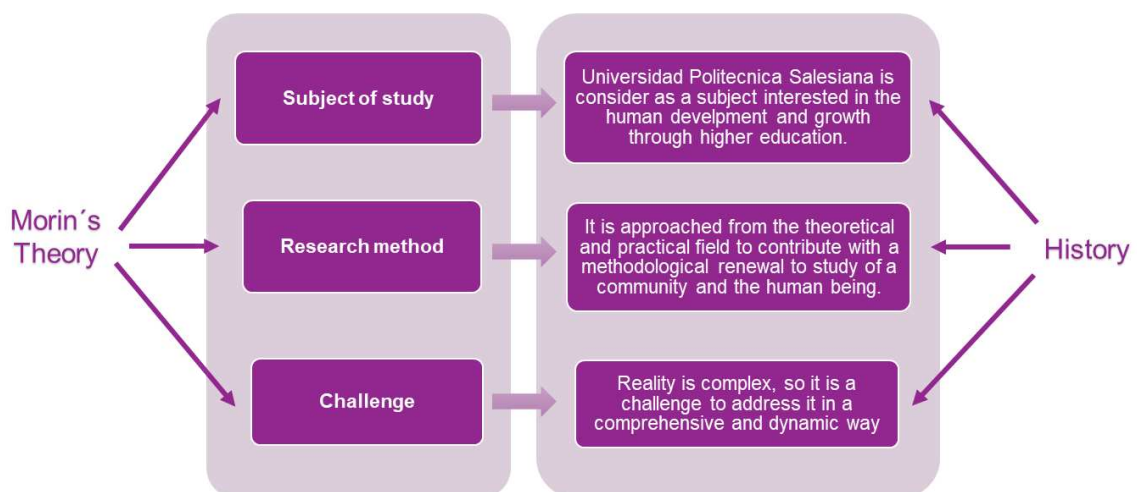
Participants in a context



Note. The species is understand in more globally perspective and the individual more personally (López, 2010, p. 140).

Figure 5

Morins' historical subject relation



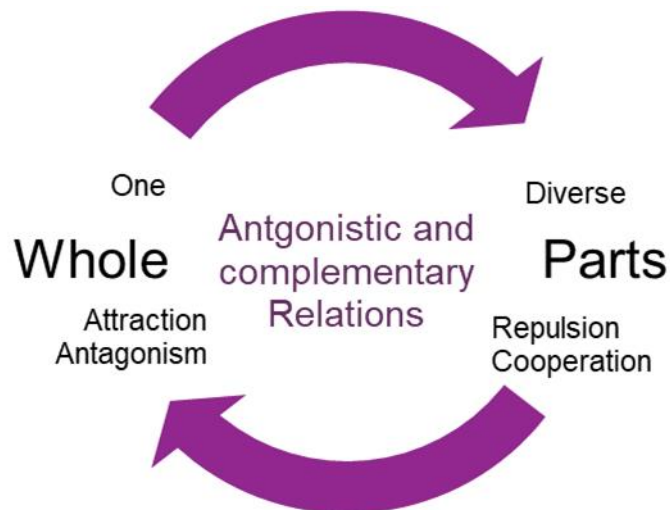
Note. Crisis as a starting point allows the historic subject transformation A en A¹ this is why historic transformation are promoted. To face complex events Morin focus on the necessity of have a solid theory base to study History (López, 2010, p. 140).

The system is important in Morin`s theory because it implies a relational cooperation integration, but also antagonism relationships because attraction, affinity, union possibility, rejection forces and dissociation games exist [figure 6]. Without these two directions, systems could not exist. This is why systemic and complex relationships define a complex system. Morin defines a system like this:

a global unit formed from the interrelationship elements [but not merged] which interpretation forms an organization [...] is a complex unit facing elemental unity. Every system is a combination of different elements that are inter-dependent or in interaction. The system does not identify with the event, it projects over it (Morin, 1974, p. 34).

Figure 6

Antagonism relationships in a system



Note. Antagonism relationships one situated in a situation with double contradiction gives places to vicious loop. They are complementary to each other in the movement that associates them because is impossible to know these parts without everything and vice versa.

This is why the system integrates the unit and the diversity in its interior. For this, Morin (Morin, 1977, p. 47) [en López, 2010, p. 145] summarize this conception in eight points:

- i. The whole is more than the parts that made it, the union of new parts presumes the appearance of emergent properties, new qualities that makes the whole.
- ii. The whole is less than the sum of all the parts, without the parts there is no inhibition that allows the qualities of the whole to emerge.

- iii. The whole is more than the given whole by the emergent properties that in fact belong to the whole. In this way the whole is where all potentialities to develop exist, for its own existence they are all contained by the organization.
- iv. The parts are at the same time more and less than the parts because the combination of parts overcome the inhibition of some qualities that could emerge, and at the same time overcomes the emergent properties/qualities that the parts doesn't have per se.
- v. The parts are eventually more than the whole, especially in the moments where the organization does not set a regulation to the parts relation, the parts overcome the potentiality of the whole development.
- vi. The whole is less than the whole because the constitution of the whole supposed the block if potentialities, ergo, the whole is insufficient.
- vii. The whole is uncertain y will be defined by the control that the organization establishes over the parts.
- viii. The whole is conflictive because it holds potential conflicts among the parties.

The organization through the control mechanism, negative feedback –coheres- and positive feedback –enhance- the system relationship through the self-regulation to keep in balance. The crisis concept is revalued as a loss of the equilibrium among the parts of the system concept, joining works of Cybernetics and theory of information. The crisis manifests itself as the root of an event but does not reduce it. From the action among the system elements where the parts interact and the whole, non-planned consequences occur. This gives as a result an event that alters the system equilibrium and produces a crisis, that is the system relationship to solve it. If the system cannot come back to the initial point, we are talking about an evolution that could take places as a reform¹ or as a revolution² [figure 7].

The environment where a system exists is an ecosystem and could be closed or open all depends on the interaction. Open systems have a permanent relationship with the ecosystem because the system feeds on matter, energy and information for its survival. The organization regulates the interaction with the environment, manages the organizational system relationship and consumes its resources. For this, following the concept of a crisis as an equilibrium loss, society is perceive as a system capable of have

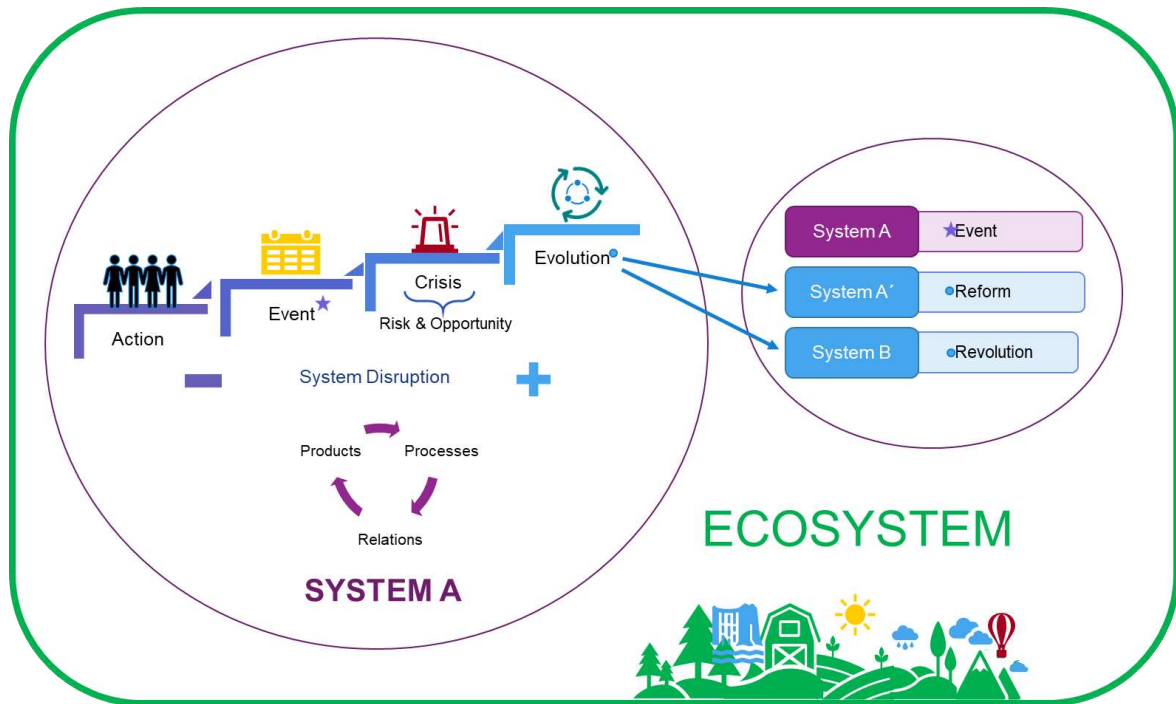
¹ The reform occurs when identity traits are maintained, but the systemic unit assumes part of the transformations.

² The revolution produces transformations in systemic relationships that affect the identity of the systemic unit.

crisis under three principles: (i) systemic, (ii) cybernetic and (iii) negentropic³ [figure 8] (Morin, 1976).

Figure 7

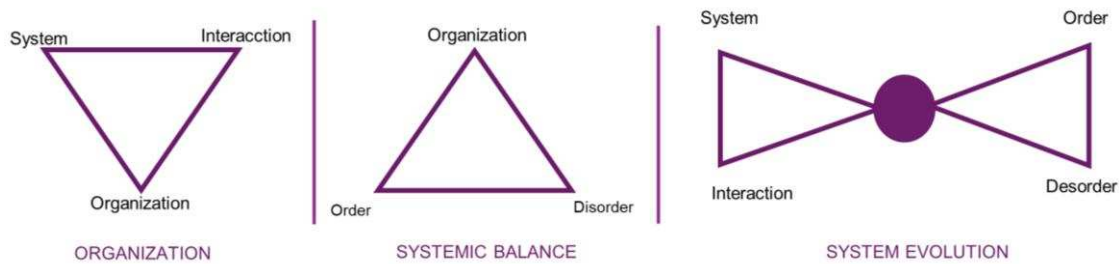
System within an Ecosystem



Note. System A has within products, processes, and relations. When an action occurs [with the characteristics described above], an event take place. This event must change the equilibrium in order to cause a crisis so the system can evolve. The evolution can take two forms: a reform -System A'- or a revolution -System B-. If the event does not create a crisis it is just enforce the current situation of the system -System A- (López, 2010, p. 148; Morin, 1972, p. 47).

The complexity degree of the system relays on the integration with the ecosystem, which manifest in the capabilities of the organization to hold onto the principles. The research will visualize how the selected environment for the case of study has evolved through time: Salesiana Politecnica University (UPS) with the StartUPS project.

³ The II principle of Thermodynamics, entropy, measures the disorder tendency. A state of equilibrium that has been disturbed. The absolute order in the system can die when decomposition and rigidity occur (Morin, 1976).

Figure 8*Systemic balance & evolution*

Note. Describes the organization through three points, these are the spine of the concept. (i) System: on one side, experience the complex unity and the phenomenal character of the whole, on the other side, the complexity of the relationships among the whole and the parts. (ii) Interactions: express a group of relationships, actions and retroactions, that are held and built within a system. (iii) Organization: is the constitutive character of these interactions that build, keep, protect, regulates, rule and regenerates (Morin, 1977, p. 48) (Morin, 1977, p. 48).

Metaphor and analogy as a way to reframe the common resources models.

Many authors have observed how people frequently represent their thought, conducts and experience through analogies and metaphors which help to set up categories with meaning. The use of a metaphor indicates how alike one or two natural variables and one or two variables from a model are. It is used to establish a relationship among two things that are not identical but have a certain level of similarity or connection. In this way, allow us to explain complex or abstract concepts in a simple way, easier to understand and explain to the target audience (Hernández-Sampieri, 2018).

One of the most common way to use a metaphor for research is with analogies. An analogy is a comparison between two things that have a level of similarity, but they are different in a few other aspects. For example, in the social sciences research, you could use a metaphor of the “social network” to explain how individuals are connected thought these relationships and how these influence on their behavior (Packer, 2018).

In this sense, natural resources have been very useful to guarantee the economy viability to the long term, meaning sustain the economy on the long term. The discussion has always been around the alternatives from the public or the State point of view to control the use and avoid tragedy or destruction or the privatization as other alternative. To explain the use and management of these resources metaphors and analogies have been very useful.

1.6. Tragedy of the commons⁴

The access and use of common resources has been a topic of interest since ancient times. Hardin, in his work *The Tragedy of the commons* summarizes the decadence of the natural environment when too many people make use of it at the same time without any type of regulation aiming to care and preserve.

The classic example developed by Hardin established there is a grassland open to everybody, each Shepherd- considered a rational agent- receives income generated by his animals. When the phenomenon of all livestock is consuming or eating the grass of the grassland in excess, the shepherds seek out to introduce more livestock –limitless- and increase their income, without considering how the over feeding will end with the resource of the grassland and with their animals. Ergo, the ruin is the destiny awaiting of a society that leaves freely the common goods [table 2] (Hardin, 1968, p. 1244).

Table 2

Authors approach on common resources

Author	Year	Approach
Aristotle	B.C	What is common is object of less care and attention (1988, p. 91)
Thomas Hobbes	1651	Men by nature pursue their own good and end up fighting each other (2017).
W. Foster Lloyd	1833	Careless use of common property (1833).
Scott Gordon	1954	Through fishing, he alludes to the fact that everyone's property is no one's property. He emphasizes that wealth, when it is free, is not valued (1954).
John H. Dales	1968	It addresses the perplexing problems that arise with resources that are owned in common, without an alternative for their management (2002).
Modern global economy	70s	The access of many to a common use resource implies that the units that are extracted will be much greater

⁴ "It has been used to describe problems of different kinds such as: the 1970s Sub-Saharan famine (Picardi and Seifert, 1977), third world forest fire crisis (Norman 1984, Thomson, 1977), acid rain (R. Wilson, 1985), organization of the Mormon Church (Bullock and Baden, 1977), lack of action by the US Congress to limit excessive spending (Shepsle and Weingast, 1984), urban crime (Neher, 1978), public-private sector relations (Scharpf, 1985, 1987, 1988), international cooperation (Snidal, 1985), communal conflicts in Cyprus (Lumsden, 1973)" (E. Ostrom, 2011, p. 28).

than the optimal economic level of extraction for said resource.

1.7. Prisoners' Dilemma

Prisoner's Dilemma is studied within Game Theory. It is a non-cooperative game, with non-zero sum, in the Nash equilibrium category and allows to understand the difficulty that two people can have to cooperate even if that cooperation is the best option for both of them. In most of its versions it is a symmetrical game where punishments of each prisoner are the same⁵.

Taking the example of the grassland mentioned above, there is a limit to the number of animals that can graze. To exemplify, we will establish that each shepherd can put a maximum of two cattle and obtain 10 of profits; if they put an unlimited number of cattle's they get nonprofit; and if one puts 2 while the other unlimited, the gain will be -1 and 11 respectively. This will be deepened later on chapter 1.

1.8. Collective action logic

The Logic of Collective Action develops a perspective on the difficulty that two individuals have in achieving a common well-being, questioning whether a common benefit is sufficient incentive to achieve collective action. Olson (2002) provides a less pessimistic perspective and focuses on the size of the group based on how attractive the actions carried out by the people that belongs to the group are.

Tools to manage knowledge: Creaminka

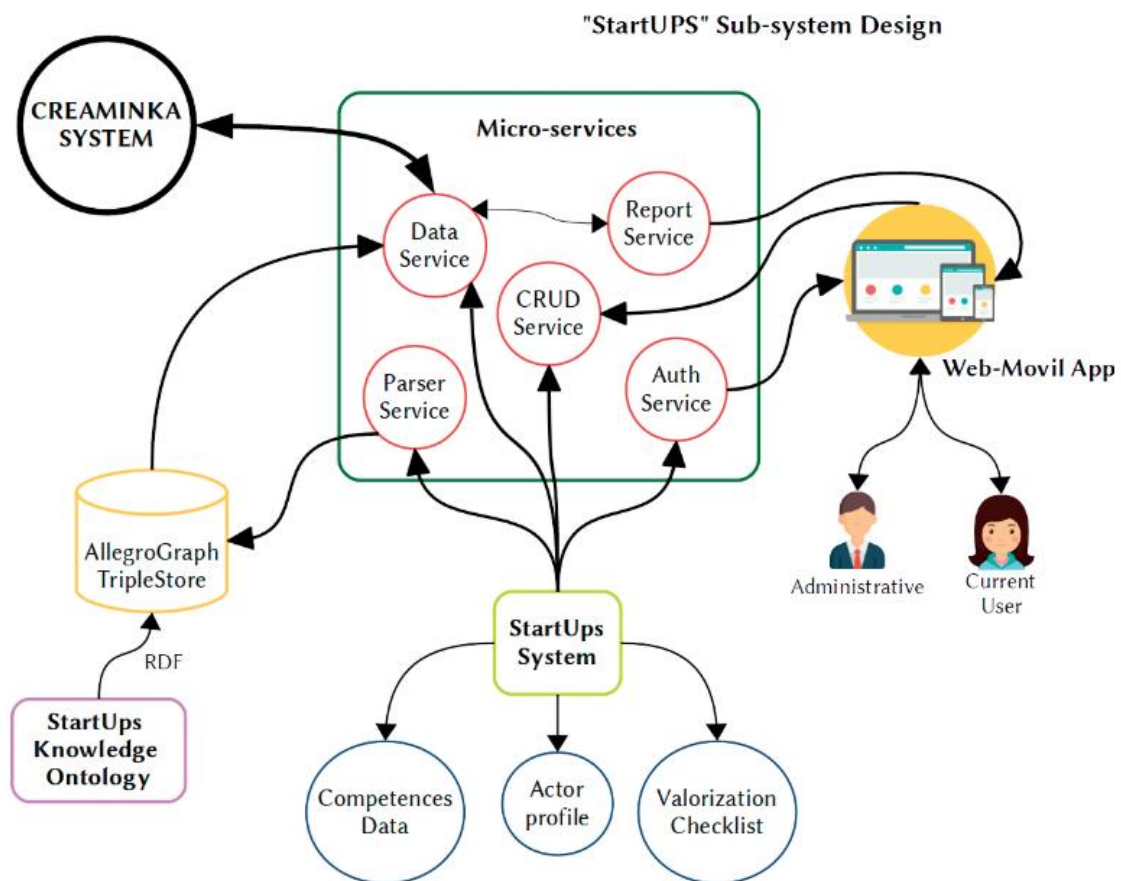
Knowledge management is crucial to guarantee that the information and knowledge generated over research will be effectively used and implies various process that involves, identification, organization and storage of the knowledge making it easy to be accessible and use. Nowadays there are many repositories and knowledge management systems (Bustelo Ruesta & Amarilla Iglesias, 2020). Nonetheless, the scientific knowledge generated must be storage on a repository, its principal functionality is allowing the development of solutions, practical applications and decision making within an organization.

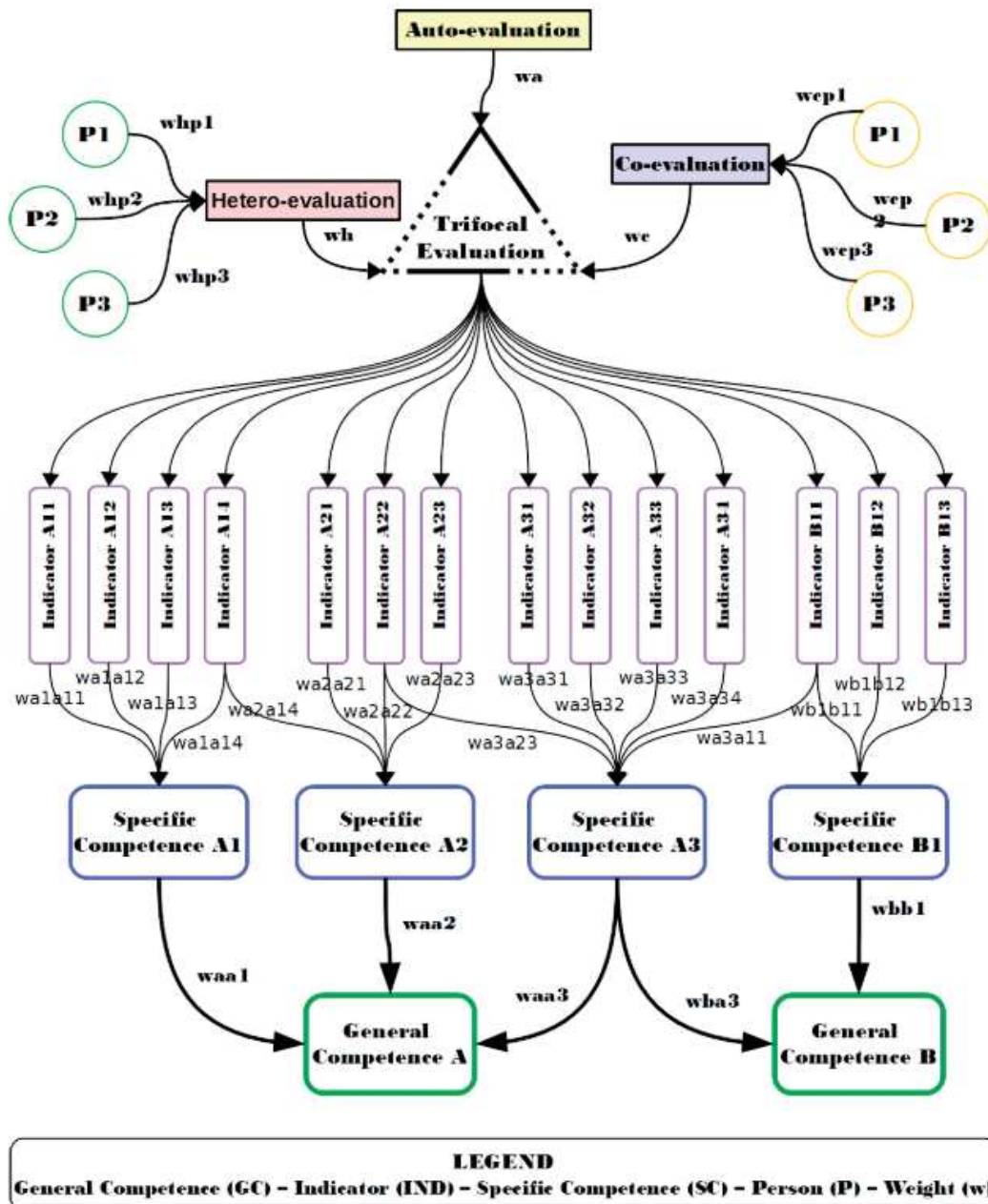
⁵ There are more than 2,000 articles that mention or talk about the prisoner's dilemma in the development of various themes.

Through tools of diagnostic and action, knowledge managements feeds of all interactions, people and objects that are within an organization and their context (Canals et al., 2003) (Canals et al., 2003). In this sense, the UPS has developed Creaminka, an *ecosystemic* platform of smart tools, “designed to support strategic decision-making regarding R+D+i (research + development + innovation) in the university. This component seeks to carry out a specific task, the analysis of competences/skills of the agents that make up this ecosystem by applying the corresponding metrics of these skills through indicators that are valued through a mixed evaluation mechanism” [figure 9] (Guerreo et al., 2018, p. 227). The data presented over this research comes from Creaminka.

Figure 9

Creaminka: StartUPS innovation subsystem design





Note. For the present research the terms that will be use are self-assessment [auto-evaluation], performance assessment [hetero-evaluation] and peer-assessment [co-evaluation]. Reprinted from “CREAMINKA: An Intelligent Ecosystem for Supporting Management and Information Discovery in Research and Innovation Fields in Universities”, by Guerreo, J. P. S., Sánchez, D. P., Mena, J. G., Bykbaev, V. R., Wong, V. C. L., & Narváez-Pacheco, A., 2018, p. 228-229, in M. Pomffyova (Ed.), Management of Information Systems. IntechOpen. <https://doi.org/10.5772/intechopen.73212>.

III. Research publications

Journal of Entrepreneurship Education | Volume 21, Issue 2, 2019

A BRIEF REVIEW ON STARTUP MENTORING IN HIGHER EDUCATION IN ECUADOR

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 Paula Carrera, Universidad Politécnica Salesiana

ABSTRACT

The present study reviews three recognized Ecuadorian academic start-up mentor programs and briefly discusses some government and private initiatives which support these academic programs. The main objective of the study is drawing attention to the importance of start-up advising and mentoring in higher education in general and at the national level.

Keywords: Startup mentoring, Ecuador, Co-working, Co-working Start-ups, Universidad Politécnica Salesiana.

INTRODUCTION

Ambitious young people who are brave enough to start new firms are creating jobs and more importantly, performing self-fulfillment. However, the reality shows that the lack of experience causes high percentage of failure after a few months of business launch. To reduce the failure rate of youth entrepreneurs and address critical issues during the start-up process, the public and private sectors are increasing their efforts to support young people by providing training, technical assistance and small credits (J. Estroff et al., 2006).

Start-up mentoring in Ecuador formally began in 2013 with a government's initiative called National Plan for Good Living (Llano, 2014). There are three governmental offices, which are responsible for promoting innovation: the National Secretariat for Science and Technology (SENESCYT), National Secretariat for Planning and Development (SENPLADES) and the office of the Vice Presidency. As part of the government's initiative SENPLADES designed a plan "Change of the Productive Matrix" (within de la Matrix Productiva) with the Korean Knowledge Sharing Program (KSP) that is part of the Korean Development Institute (London, 2015). Preparing the National Plan for Good Living in 2008, Ecuador began allocating 22 percent of national GDP or \$149 million, a percentage of the national budget to research and development (KPMG, 2012). These innovation promoting national initiatives support business development by equipping start-ups (startups), consolidating co-working spaces and business incubation centers and providing start-up mentoring opportunities (London, 2015). To support coordinating and systematizing the different programs and initiatives, a network called Alliance for Entrepreneurial Innovation (AEI) was established. AEI is a public, private and academic partnership that supports innovation by providing relational and seed capital, international in courses and training to entrepreneurs (AEI, 2014).

Mátyás, B., Soriano, B., Carpio, I., Carrera-Hidalgo, P., Mátyás, B., Carpio, I., Soriano, B., Carrera-Hidalgo, P., Carpio, M. I., Soriano, B., & Carrera-Hidalgo, P. (2018). A Brief Review on Startup Mentoring in Higher Education in Ecuador. *Journal of Entrepreneurship Education*, 21(2), 1–5. <https://www.abacademies.org/articles/a-brief-review-on-startup-mentoring-in-higher-education-in-ecuador-7039.html>

Journal of Entrepreneurship Education

Volume 21, Issue 2, 2019

A KAUFFMAN INDEX BASED ASSESSMENT TO MEASURE COWORKING STARTUPS PROJECT'S EFFICIENCY IN 2018

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 Paula Salazar, Universidad Politécnica Salesiana, Quito, Ecuador
 Henry Y. Bricio, Universidad Politécnica Salesiana, Quito, Ecuador
 María Ordóñez, Universidad Politécnica Salesiana, Cuenca, Ecuador
 Paula Carrera, Universidad Politécnica Salesiana, Cuenca, Ecuador
 Belén Soriano, Universidad Politécnica Salesiana, Cuenca, Ecuador
 Isabel Carpio, Universidad Politécnica Salesiana, Cuenca, Ecuador
 Juan Pablo Salgado, Universidad Politécnica Salesiana, Cuenca, Ecuador

ABSTRACT

Entrepreneurial activities cannot be properly controlled but measuring their efficiency is essential for improvement in decision-making. There are several ways to measure the level of entrepreneurial activity on national and international level but to measure efficiency of multiple initiatives such as academic co-working mentor programs is still a challenge. We applied the well-known Kauffman Index (KI) to measure the efficiency of multiple initiatives and assessed how it behaves using different co-working programs. We developed a methodology to assess the KI of 52 and 164 co-working initiatives in multiple co-working spaces in Quito and Cuenca. The average KI of the initiatives in Quito was 0.175 and in Cuenca 0.188. In Co-working Startups (CWS) using mentor project at Universidad Politécnica Salesiana, Ecuador. We were looking for the extent to how many of them have become viable companies in one year. 41.5% of the initiatives through their ongoing process, being considered as viable companies in 2018. The average return of the initiatives in Quito was 127.152 and in Cuenca 12.285 times greater than the maximum salary in Ecuador and of 1.57 times greater than the average salary of the capital. The results were promising because in our study only 10 out of 164 initiatives were incorporated as companies for developing B2B and B2C and the total number of jobs created in one year was 100. The results were promising because in our study only 10 out of 164 initiatives were incorporated as companies for developing B2B and B2C and the total number of jobs created in one year was 100.

Keywords: Startup Mentoring, Ecuador, Co-working Startups, Universidad Politécnica Salesiana, Kauffman Index.

INTRODUCTION

Entrepreneurship is a decisive and key activity of modern economy. Even though entrepreneurial activities cannot be properly managed and completely controlled due to the uncertain

Máyttas, B., Victoria, I., Salazar, P., Villacís, J., Ordoñez, A., Carrera-Hidalgo, P., Soriano, B., & Salgado, J. P. (2019). A KAUFFMAN INDEX BASED ASSESSMENT TO MEASURE COWORKING STARTUPS PROJECT'S EFFICIENCY IN 2018. *Academy of Entrepreneurship Journal*, 25(2). <https://www.abacademies.org/articles/A-kauffman-index-based-assessment-to-measure-coworking-1528-2686-25-2-226.pdf>

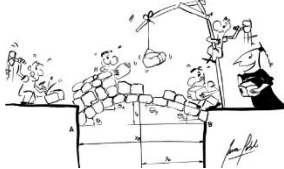
Universidad Politécnica Salesiana

Javier Heredia / Juan Pablo Salgado / José Jurcocha / Paula Carrera
 Argel Torres / Luis M. Romero / Bernardo Salgado

Fernando Salazar
 (Compilador)

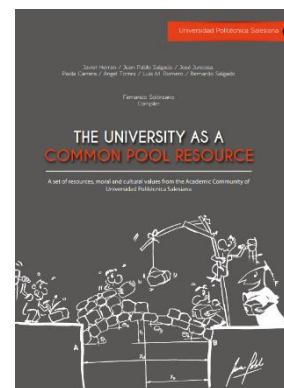
La universidad:
 Un bien de
 uso común

Construcción de memoria, valores morales y
 culturales de la Comunidad Académica de
 la Universidad Politécnica Salesiana



Salgado, J. P., Solórzano, F., & Carrera-Hidalgo, P. (2018). El bien común llamado conocimiento en el Universidad Politécnica Salesiana. In P. Carrera Hidalgo & F. Solórzano (Eds.), *La universidad: un bien de uso común* (pp. 45–78). Abya Yala.

Salgado, J. P., Solórzano, F., & Carrera-Hidalgo, P. (2019). Knowledge as a common pool resource at Universidad Politécnica Salesiana. In *The University as a common pool resource*. Abya Yala.



e-Ucumari: A multimedia device based on ontologies and embedded systems for pedagogical support of children with multi-disabilities

Published: IEEE. [View this](#) [Save](#)

V. Robles-Bykbaev, C. Arévalo-Illescas, P. Carrera-Hidalgo, Y. Robles-Bykbaev, G. Tigre Andrade, D. Ochoa-Fajardo, D. Quisi Peralta, F. P. All Authors

74
 Paper Citation Full Text Views

Abstract:
 In a world where approximately 10% of the population lives with some form of disability one of the most vulnerable groups is constituted by children that present multiple disabilities. For example, in these cases, a child can have cerebral palsy and hearing loss concomitantly. Working with children with multiple disabilities constitutes a challenge, given that their present affliction in several development areas. For these reasons, we have developed a system to support the educational and therapeutic intervention for children with multiple disabilities. Our system relies on an electronic device and an ontology that models some of the most relevant entities and relations of therapy sessions. This proposal has been validated in two stages: (i) a preliminary validation (aesthetic and technicality) with 17 students (higher education students); and (ii) a validation on a real scenario with 6 children with multiple disabilities during a period of two months. The results show high levels of motivation when children work with the device and positive comments by therapists and educators side.

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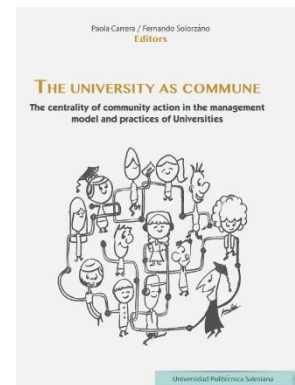
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Torres-Toukoumidis, A., Guerrero, J. P. S., Peñalva, S., & Carrera, P. (2020). Global game jam in latin-america, a collaborative videogame learning experience. *Social Sciences*, 9(3). <https://doi.org/10.3390/socsci9030028>



Universal Journal of Educational Research 9(4), 727-733, 2021
 DOI: 10.13189/ujer.2021.090403 <http://www.iijer.org>

Descriptive Study of Motivation in Gamification Experiences from Higher Education: Systematic Review of Scientific Literature

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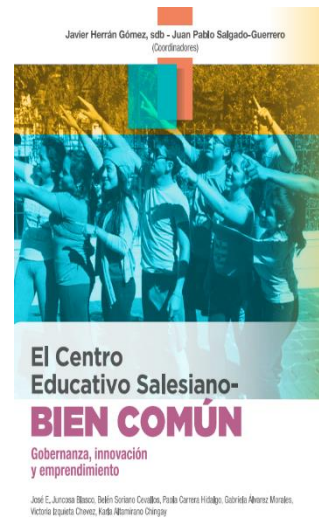
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Abstract The use of gamification in educational contexts has become popular during the last few decades. This article, providing a comprehensive overview of the literature on gamification, aims to identify the most relevant research in this field. The study was conducted through a systematic review of scientific literature. The search was performed in the Scopus database, and the results were analyzed using the PRISMA protocol. The findings indicate that gamification is an effective strategy to enhance student motivation and engagement in higher education. The most common gamification elements used in educational contexts are points, badges, and leaderboards. The study also highlights the importance of designing gamified experiences that are meaningful and relevant to students. The results suggest that gamification can be used as a tool to promote active learning and collaboration in the classroom. The study concludes that gamification is a promising approach to improve student motivation and engagement in higher education. The findings of this study have implications for educational practice and research. The study also identifies some limitations and suggests directions for future research. The study is limited by the search strategy used and the scope of the search. Future research should explore the long-term effects of gamification on student motivation and engagement. The study also suggests that further research is needed to investigate the effectiveness of different gamification elements and strategies. The study concludes that gamification is a promising approach to improve student motivation and engagement in higher education. The findings of this study have implications for educational practice and research. The study also identifies some limitations and suggests directions for future research.

Torres-Toukourmidis, A., Carrera-Hidalgo, P., Balcazar, I., & Balcazar, G. (2021). Descriptive Study of Motivation in Gamification Experiences from Higher Education: Systematic Review of Scientific Literature. *Universal Journal of Educational Research*, 9(4), 727–733.
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INTRODUCTION

From the beginning of the first societies, countless relationships and interaction within humans and communities, motivated the organization, management and administration of resources for the development of life. From the oikos in Greece to the ayllu in the South American Andes, societies have found forms of organization and management of their resources that respond to their context, history, and worldview. Currently, the economic model has been configured by a search for the maximization and utility of individuals -the homo economicus-, which have affected human development and people's well-being. Given this situation, various initiatives have emerged to promote more inclusive spaces for coexistence, aware of the environment and the need for cooperative and collaborative dynamics for the management of resources, which are limited.

Common use resources and the rebirth of the common are present in different contexts and organizations that have discovered new ways of interrelating and acting. Various approaches highlight the importance of the human being as the center and end of all action. The evolution from welfare to wellbeing, the Sumak Kawayay, capability approach, the insurgent power of the commons, have brought ancient practices and values that generate positive impacts on the environment thanks to cooperation and collaboration. Added to this, we live in a world that is advancing rapidly, which is volatile, uncertain, complex and ambiguous -VUCA world-, which requires adaptation to change in order to face the challenges that arise.

The present research seeks to carry out a brief look [figure 10] that begins in forms of organization conceived as the nucleus of society, the core or mother cell for resources management: the oikos and the ayllu; to understand the development of an economic model that has given greater relevance to macroeconomic indicators, on which the development of people has also been measured. The common good as a starting point, leads to explore different ways of measuring and promoting people's well-being, is connected again with the Andean worldview with the Sumak Kawsay and the importance of accessing to opportunities so people can be able to be and act in different contexts: the capability approach. The human being as the center and end of all action implies knowing how to act economically from a perspective of knowledge, understanding of the environment and care for the common home. This allows to comprehend how a university, conceived as a common resource, is organized from an ecosystem perspective to give space to intentional

environments that contribute to the development of people's capacities, empowering them and encouraging their active participation as agents of change in society. The case study is the Salesian Polytechnic University (UPS), located in Ecuador, which has promoted entrepreneurship and innovation through the StartUPS project.

Figure 10

Management of economic resources



CHAPTER 1: HUMAN BEING, COMMUNITY, AND ECONOMY

"The most valuable resource a country owns, is its people, their human potential that can bring real development to the economy and progress to the countries" (Yakunina & Bychkov, 2015).

"Money rules the world" is a popular saying that expresses a daily situation present in all areas of life. Immersed in an economic system that has generated inequities, exploitation and consumerism, which Bauman (2015) calls liquid modernity, it becomes increasingly complex for new societies to face the phenomenon of immediacy. In a globalized world, while some countries seek to inject money into the market, others apply more restrictive policies, require restructuring of state finances or go into debt to grow, leading to a growing economization and monetization of the world (Hemel, 2016b).

Since the flourishing of neoliberalism in the 1990s, the inclination towards the full domination of the markets has promoted economic and financial practices under the logic of money and capital. Theories about the intentionally rational decisions of homo economicus together with his search for profit and maximization have led to a deep questioning of who the human being is when he performs economically (Barry et al., 2013).

It has been forgotten that economic action is carried out by human beings, therefore, economics is not isolated from other sciences such as sociology, politics or even psychology. For this reason, this human dimension must begin to be considered. People's aspirations lead them to achieve their dreams, goals, expectations, which is why the economic world is connected to the anthropological world (Hemel, 2016a).

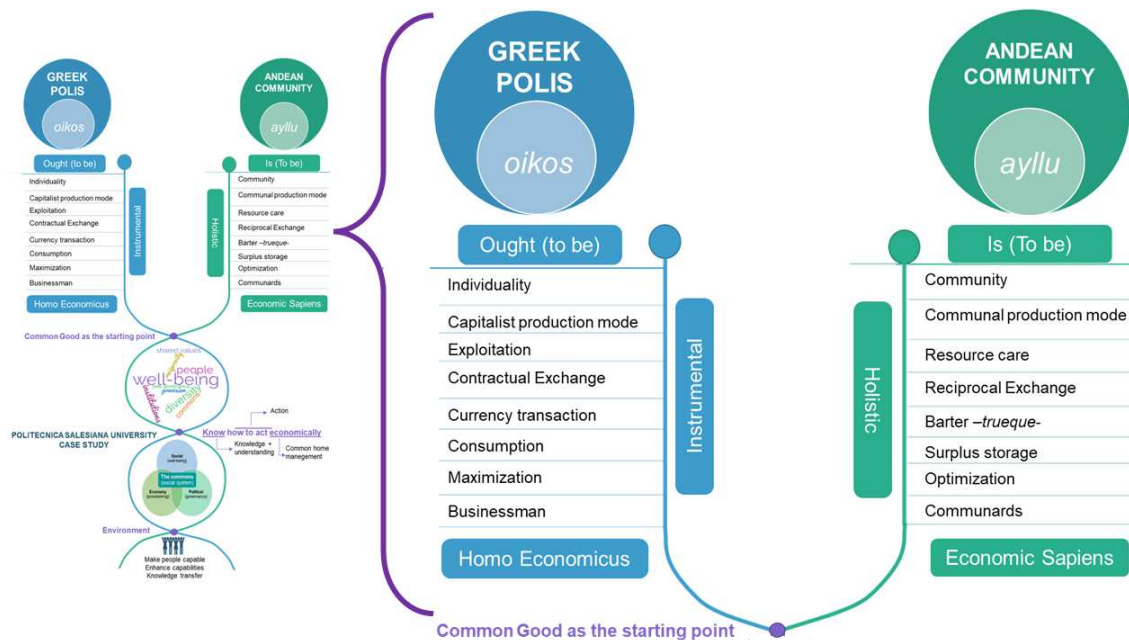
The tension between cooperation and competition has always existed, and thus, game rules are established based on values and norms that seek to build an economy more worthy of human beings, improving living conditions, new forms of interactive coexistence.

Nowadays, human beings have limited their ability to act in the face of our daily duties and needs. In many parts of the world, citizens do not feel represented by their States. The environment degradation, significant social gaps, inequality, migration, poverty, violence, and overexploitation are some of the conflicts of this century. This leads us to ask ourselves in which society and world we want to live in. In this sense, it is important to explore new paths of economic anthropology that allow us to respond to these challenges.

This chapter has 3 sections [figure 11]. As a starting point it would analyze the concept of Ancient Greek oikos as the mother cell of economy, where resources were generated, managed and exchanged. The oikonomia that gave birth to economic theory and the analysis of the homo economicus and its rational decision-making process within the economic system. The second section examines the ayllu within de Andean communities and its resources management as the basic unit for the social, political, and economic organization of the common good and collective wellbeing which was a priority interest for all the inhabitants of the territory Finally, the common pool resources and how to manage them on our present time.

Figure 11

Oikos and Ayllu perspectives on resources management



1. The Oikos: the mother cell of economic resources management

In Ancient Greece, Aristotle described the oikos as the basic social unit of the polis [society]; it was integrated by the house, family, and properties. The house was the physical space where the family lived; family as people who lived in the house; and property included money, land, slaves, cattle, and other goods. The family represented a social relationship for production and reproduction -both in economic terms-. Having children was an economic activity because it reproduced the oikos, generated exchange with other oikos. For house administration, each member had a role with the aim to contribute to resources transformation: food, clothing, directing farm activities. As the basic unit, the oikos had to

ensure life by providing nourishment so the cycle can continue (Weber, 2014). When talking about property it included all the assets, including land, crops, animals, slaves, buildings, clothes, money, credits, and anything else a man owned (MacDowell, 1989).

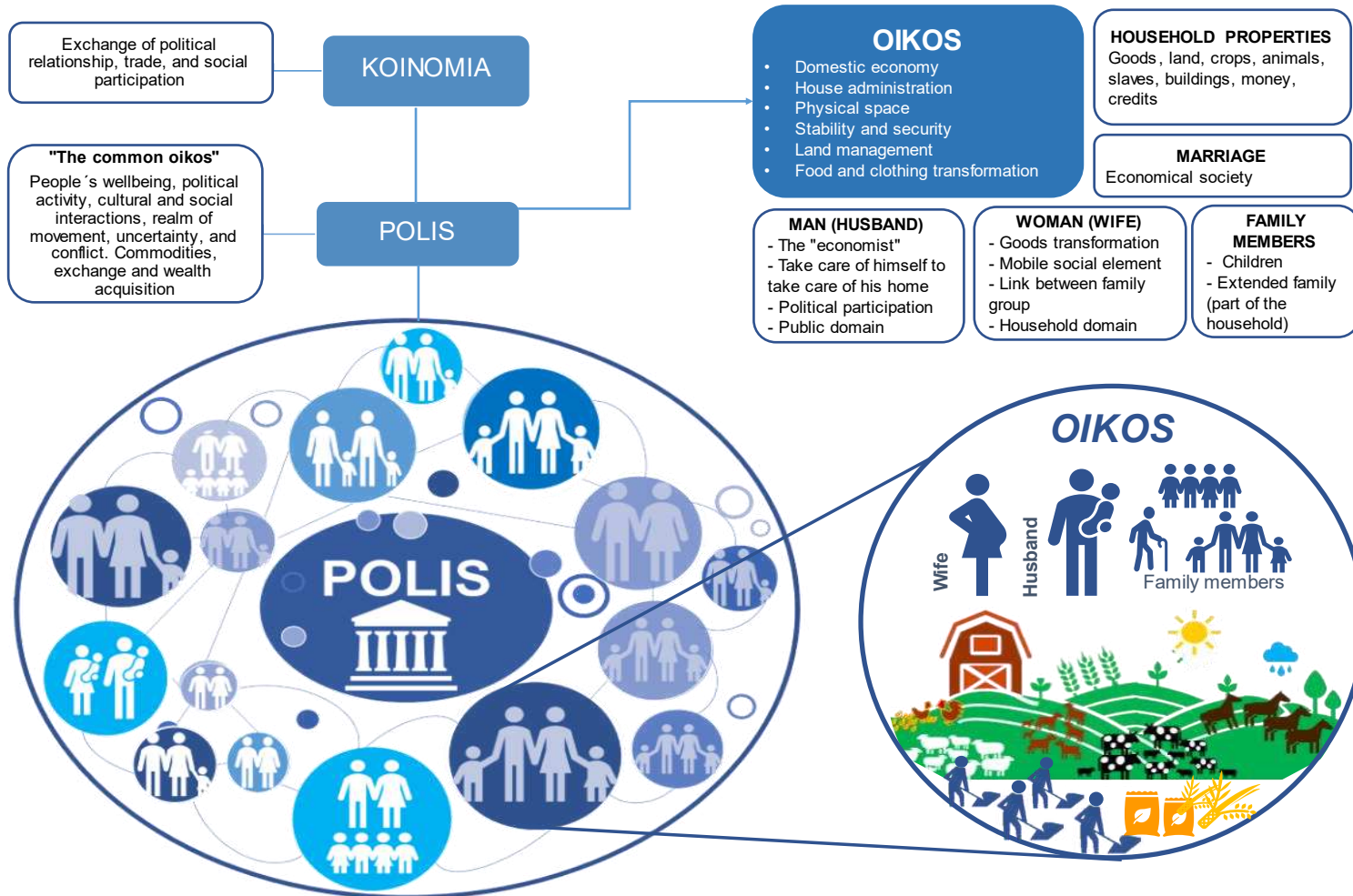
Marriage was the key piece for maintaining the social, political, and economic system. It was not only a matter of private and affective union, since it had a complex function within the polis: in economic terms, it allowed that family properties and assets to be transferred from generation to generation; in politics brought new citizens to the polis to guarantee its continuity; in social terms, granted legitimacy to the polis and security to its members. In this sense, the interrelation between multiple oikos regulated the different economic, political, and social mechanisms. Marriage was an essential institution within the democratic system, since families founded the city-state, ideology and society (Martínez, 2015).

Since ancient times, marriage between brothers and relatives served to preserve the economic means of the house power and the elimination of political struggle between suitors (Weber, 2002). The oikos was considered as an economic productive unit in terms of agriculture and farming -livestock-. The transfer of property and goods was also an economic activity that took place in the family nucleus and its interaction with other Oikos in the polis was known as the mercantile economy [figure 12]. The economic functions were clearly defined for each member. An important aspect to highlight is the self-sufficiency that households had when managing their resources; actually, sound economic performance depended on self-supply and sustainability (Cendejas Bueno, 2017).

From the social perspective, the oikos also had a symbolic explanation from Greek mythology [table 3] through Hermes and Hestia. Hermes, known as the god messenger, the wanderer. Hestia is known as the god of the heart, therefore is on the center of the oikos -and also the communal hearth- to show stability and the navel the connection to the earth. This polarity showed the Greeks, in one hand the outside world [Hermes], and on the other the interior world [Hestia], both necessary for human group itself and its interactions with others. In this means, oikos is not a simple dichotomy, it centers the movement of human community (Vernant, 1969).

Figure 12

Oikos interrelations and interactions



Note. The figure was created based on the work of different authors Cameron, 2008; De Jong, 2021; MacDowell, 1989; Sjöberg, 2014.

Table 3*The Oikos from a spiritual conception*

Hestia – Oikos	Hermes - polis
Is the [communal] heart, the center of the oikos, symbolizes its stability, connection to the earth, and permanence in time.	Protector [god] of the polis, is the wanderer, with no specific home, the messenger god, symbolizes the interconnection
The interior world, the enclosed, stable, the individual within itself	The outside world, the movements, opportunity, the exchange with others
A centering space	A moving space
The woman domain in the house[hold], her movement creates relations among other families.	It is not settled, definite, permanent, or stable; is a centrifugal element within the polis life.
“The oikos is the realm of stability, certainty, rootedness and security” (p. 124).	“The Polis is the realm of movement, uncertainty and conflict” (p. 124).

Note. From Cameron, 2008; Vernant, 1969.

The oikos, as an internal economic organization in the household led to the appearance of patrimonial relationships that later served as the foundation of political organization (Weber, 2009, p. 756). Oikos members were holders of domestic power and gender division of labor. Later, women would also be the ruler land -farms- due to their role and management of the soil, farming, and food preparation.

The transmission of property from one generation to another was regulated by the laws of the polis, which also was effective to avoid authority abuse within the oikos (Roy, 1999). Laws aimed to protect the oikos, even the orphans had guardians with the responsibility of looking after the oikos. It also allowed adoption and the person became part of the oikos. Regarding the rights and duties of the members, the law addressed the political rights, death, and inheritance. Also, many authors discussed that oikos was the legal term for family, but Athenian law recognize only individual rights, not families (MacDowell, 1989).

The polis was a great common oikos [see figure 12], that is, a set of oikos that are united for the well-being of the people. The oikos and the polis had a mutual implication and interpenetration relationship: “the oikos is the realm of stability, certainty, rootedness and security, whereas the polis is the realm of movement, uncertainty and conflict” (Cameron,

2008, p. 122). Therefore, the household was the space for private life of the citizens, associated with women and children, setting the limits for the private and public sphere. While the polis was the space for public and political matters where male participation contributed to the Athenian democracy system (Sjöberg, 2014).

Among the many economic activities within the oikos, it can be mentioned agriculture, cattle raising, food supply, home textile industry, wool transformed into clothing, ceramics, art, perfumes. Within female role, procreating new descendants, considered a new workforce. Commercialization and exchange relations with other oikos and cities outside Athens, was an important economic booster.

In ancient Greece labor forces as a source of income was showed as an incipient form of monopoly. For example, Demosthenes' father imported ivory for trade, ivory was applied to knife handles and furniture as a fine ornament. He then had his slaves start making knives, in his own workshops, and incorporated cabinetmaking as well, thus generating a significant income for his oikos (Weber, 2014).

Between oikos, surpluses were exchanged for items that the family needed, and the first credits began to appear as a form of exchange and provision. Later, those local urban markets in medieval cities were configured as a replica of the oikos where economic management depended on an orderly distribution of benefits and taxes, where the exchange between agricultural and non-agricultural producers as well as with local merchants was an important economic activity. From the local workshop without capital to reinvest, farmers, merchants, to clients showed the diverse economies gathered in an oikos – medieval city- (Weber, 2014).

1.1. Oikonomia, Koinomia, oeconomocius

Oikonomia is composed of two words *oikos* and *nemo*. The first one as mentioned above has a more complex meaning, while the second one means distribution and management. Oikos as the first human association, the union of male and female -as it occurs among animals- with a view to procreation, to life. It represented a necessary and natural community, the basis of existence, where its members are characterized by sharing the same food and living under the same roof. Therefore, in its literal meaning it has been translated as “the house” (M. Mirón Pérez, 2004), but has also been used to refer to the city -polis- government, as a common oikos [figure 12].

Another Greek word that has been subject of studies is *koinonia*. The word evokes an ancient conceptual debate around community property and family in the human group, but also in terms of ancient politics, civil society and its cohesion and internal relationships from

the classical world to the socio-religious group in the Christian era (Hernández de la Fuente, 2014). The interest of koinonia in this research is because it has been used from the notion of sharing the land property and goods (the oikos) and the family community. Promoting a common life or "community of life" in political and economic terms. Reason why, oikonomia differs from the modern conception of economy.

Weber (2014) refers to the term as the exchange of relationships, communication, trade, and social participation; the family was a key element for the machinery of any society because it is the home where the first care and education are received. Therefore, as an inheritance, for this conception the social and spatial relations are essential to understand the koinonia (De Jong, 2021), where the exchange and acquisition of wealth took place in the oikos.

The term has evolved [table 4] throughout time and its transformation shows the way human social space is defined, because economics implies not only economical aspects but also social, political, cultural, religious, moral. According to Schumpeter, *Economicus* -from the Greek oikos, house; and nomos, law- consisted of managing the household with practical reason, therefore, for this author the original term differs substantially with the modern economic as it merges politics and economics (Cameron, 2008; Schumpeter, 1954).

Table 4

Evolution of the term oikonomia

AUTHOR	PERIOD	APPROACH
Philosophers in Ancient Greece	800 BC	Management and administration of household (resources)
Aristotle		Government of the children, wife, and the household.
Xenophon		Science or theoretical knowledge that makes it possible for men to increase their wealth (oikos)
Brison		Elements of the oikos: money, slaves, housewife and children
Francis Hutcheson	1742	Political economy: the value of goods, coins, law of war.
Adam Smith	1776	The wealth of nations
Marcel Mauss	1872	The concept of exchange in primitive societies as a social movement phenomenon and activity.

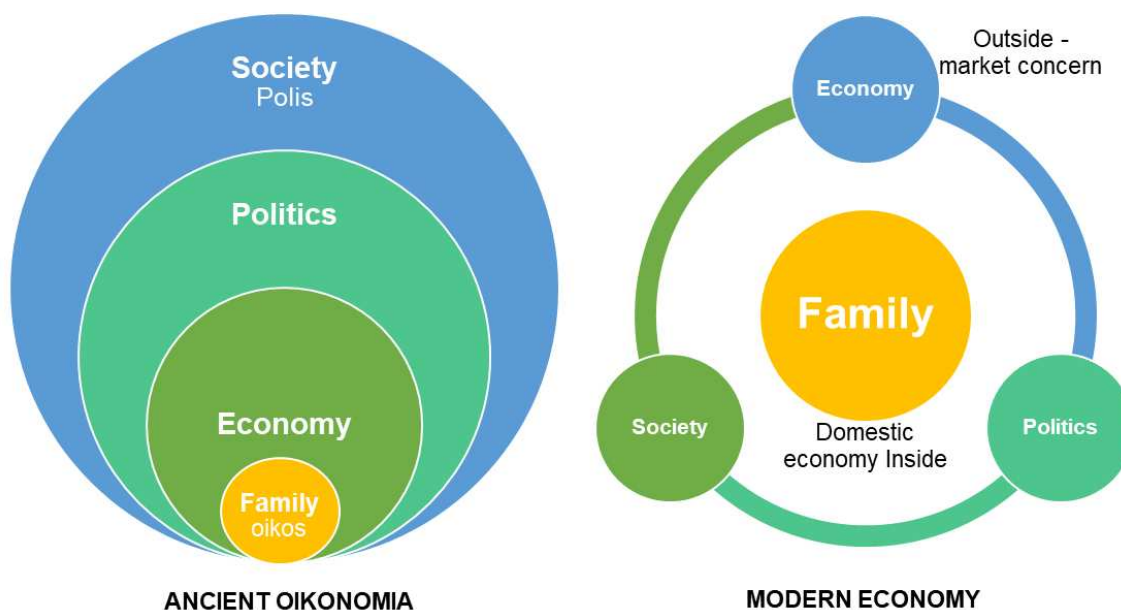
Liddel and Scott	1925	House, household goods -properties- and family.
Leduc	1976	Democracy and Athenian marriage.
MacDowel	1989	The house and the property owned by that person.

Note. Based on Roy, 1999.

Weber (2002), describes social Economics as the study of (i) economic phenomena, meaning economic events and economic institutions; (ii) economically relevant phenomena; events and institutions that despite not being economic in a strict sense, have economic consequences; and (iii) economically conditioned phenomena, studies a non-economic behavior that is partly influenced by economic phenomena [figure 13] (Boettke & Storr, 2002; Granovetter, 1985; Weber, 2009).

Figure 13

Economic rationality embedded within social relationships



Note. In ancient Greece, oikonomia considered domestic and polis economy, as well as its relationship with polity and society. Modern economy is more concerned about the market and other aspects that comes from the outside (Granovetter, 1985; Hernández de la Fuente, 2014; Weber, 2009).

In modern times, mostly capitalist times, the economy that has been studied is the economy from outside, that is, paid work and production for the market [male world in ancient times]. Studies on women have also focused on their incorporation into the outside world. On the other hand, what is inside -oikos-, work and production not destined for the market, as well as the reproduction of the labor force, carried out fundamentally by women, have been devalued or not considered economic (M. Mirón Pérez, 2004).

However, women in ancient times not only reproduced and maintained the labor force, but also, in their internal space, they were producers of goods, in a much larger quantity than in today's world. In this way, economic activities as essential as the storage and transformation of food, the preparation of bread -the basic food of the ancient Mediterranean diet-, the supply of water, the care of animals inside the house, textile manufacturing, among others, were eminently feminine tasks (Comín Comín, 2011; Hernández de la Fuente, 2014).

Society is a space where ambiguity and dichotomy have been reconciled, reconsidered, and reorganized in each culture that has been studied in a certain period. This is the main reason why theories, phenomena and authors are studied in the local and global context of the time they lived in.

In this case, the Economics concept is considered as an effort to explain human behavior assuming its rational behavior as a starting point. Meaning that individuals make rational choices to achieve their purposes, among alternatives and scarce resources. According to many different authors that have studied economy in this terms, considered relationships between people as forms of exchange (Kirchgässner, 2008a).

Until these days, the acquisition of wealth and the market continue to be the center of attention of economy. This has left out other essential elements that were considered in ancient times such as domestic work and “production of children”. For this reason, many social movements fight for the economy to consider commercial and non-commercial aspects.

1.2. The human action as a way of doing economy

Weber considers the oikos as a domestic association in which the community covers the need for goods and work in daily life. In this terms, oikos economy -pure and natural economy- members had natural personal benefits according to fixed rules, equal for all or specified, and the obtaining of things that are needed⁶ in the form of fixed or obligatory in-

⁶ For example, all the goods and food that were required for the prince's table or for the administration of the army (Weber, 2002, p.283).

kind tributes (2002). For this reason, in this section individual, collective and communitarian action will be analyzed from an economic point of view, considering economic action as one of the many types of human actions.

Since the beginning of time, human beings have been the protagonist of social processes. The so-called 'primitive communities' developed forms of organization as social, political, economic and cultural relations (Weber, 2002). For this reason, no historical event can be described without referring to those interested in it, the place and date in which it occurred, since society, its relationships, interrelationships, and the role of the human being as an individual who is part of a whole⁷, respond to this reality.

Despite the diversity of nature, the inequality of men's abilities and the distribution of wealth, society has understood that coordinated human effort makes it possible to achieve the desired goal. Therefore, throughout history, human cooperation and the division of labor allowed each assignment of tasks to increase productivity and generate better and greater profits (Von Mises, 2011).

Within economy based on collecting and hunting, communities linked by blood, language, customs, and beliefs formed the clan the main social phenomena of the primitive evolution⁸. Although the clan took different forms throughout its existence, these forms of kinship organization gave the economy that cooperative character. Cooperation promoted greater stability and permanence in time for that group, that is, it was more likely to survive over time. Despite the variations, everything that strengthened the clan contributed to the well-being of all, just as the contribution of a member affected the well-being of the clan (Kirchhoff, 1977).

As stated above, the guiding norms of man's action have resulted in social cooperation. This implies that the human being has accommodated his conduct in favor of social cooperation as the individual cannot be conceived isolated from the rest of humanity without social ties, because, ultimately, he is a member of a community. With this preamble, action is understood as human behavior and the social action guided by the actions and behavior of others (Olson, 2002).

⁷ Weber (1982) established three criteria to define the social character of the action: (i) the action has to take into account the behavior of others as well as the existence of them ; (ii) social action must have a symbolic meaning that can be transmitted and understood within the social context in which the subject develops; and (iii) individual through their behavior demonstrate that they have understood the expectations of others, and that they accept or do not respond to them.

⁸ The clan's decisive role in early human history is impressively manifested by the fact that its disappearance as the dominant form of social organization marks the end of an entire historical phase, and the beginning of another dominated by social classes and their struggles -class struggles-

The action implies substituting one situation for another and can occur in one hand in the intrapersonal sphere, when it does not have the cooperation of third parties; and on the other in the interpersonal sphere that implies mutuality, serving instead of being served, and that is where an interpersonal exchange of goods and services happens. In this context, whoever acts is the object of the action and, there are also the subjects of the action, such as the babies or the homos who did not speak (Parsons, 1968).

Human action as a way of doing economy is analyzed from a different point of view than what is good and bad, fair, and unfair, loyal, or disloyal. For this reason, the action for matters of this research is studied from the praxeology, it handles the action itself, individually, completely neutral to evaluative judgments that seek to understand what the action seeks. Praxeology does not condemn, but describes reality; therefore, psychological phenomena⁹ that can influence certain actions, correspond to another study field. However, selfishness itself well understood, was one of human being drivers to accommodate his behavior towards life in society. For example, peaceful cooperation brought better results in fighting for survival than war (Corominas, 1996; Kant, 2007; Parsons, 1968; Von Mises, 2011).

Therefore, any analysis of human action must abstract or simplify the specific characteristics of men and women and select those that are most significant for the study. For example, based on a certain anthropological conception, in economic terms the characteristics that could define a man or women are: (i) evaluator, as he is interested in the world around, not indifferent to it, capable of differentiating, classifying, and ordering the environment in which is living; (ii) resourceful, the individual can use internal and external resources in order to achieve his purpose despite the circumstances, challenges or environment¹⁰; and (iii) maximizer, he is aware that resources are scarce -including his own time- therefore he will try to optimize and maximize the results achieved (Argandoña, 1996).

If the action represents the change from a state of things that has a level of satisfaction to a more satisfactory level, in economic terms it can be described as what must be given up achieving the desire level or goal; and the price of that change of state is called cost. When

⁹ Actions with psychological influence are referred, for example, to a violent act of murder. For praxeology, the very act of making a choice is an ego. The ego is the unity of the acting being, the us is the result of a grouping of two or more egos (Agassi, 1960).

¹⁰ This is considered as an intrinsic human characteristic. It is developed in chapter 4 when talking about the environments that enhances people's capabilities.

people try to increase satisfaction and their notion of well-being, we are talking about a human pursuing the maximization of his own benefit [indifference curves¹¹].

Economy deals with any type of human activity, as that conscious proceeding to achieve specific goals. Not only in terms of the market, but human beings seek to improve their material well-being through the choices they make. The action to achieve it implies selecting certain ways or means to reach those welfare purposes. For this reason, from the economic perspective, it is analyzed whether these means used by the human being are the ideal ones to achieve the purposes (R. Cameron & Neal, 2015; Polanyi, 1957). For example, actions such as consuming or recreating, as well as giving them up.

The action is the expression of the human will and its desire to live in abundance. Every action has a business and speculative component. Business is understood as the ability of human beings to realize and create opportunities for profit and benefit in their environment. This aspect is key to understanding the coordinating trend that arises in the market in a spontaneous and continuous way. An economically oriented action has a desire to make a profit and there are also violent actions that can be considered economic, e.g., a trade war between two countries.

To be considered economic, an action must arise from an allocation process of scarce means among alternative purposes -ends-. The allocative or economic processes are characterized by implementing and applying the optimization of efficiency principle, which governs the relationship between means and ends, and is the base of all the theoretical construction of the economy (Argandoña, 1996).

According to Weber, the economic activity of an individual is considered as such when it considers the activity of third parties and can be:

- (i) Rational according to purposes, determined by internal and external expectations that become the means or the condition to achieve the purpose.
- (ii) Rational according to values, values understood as the conscious belief in various areas that influence behavior and therefore action.
- (iii) Affective, which is determined by feelings, emotions, and affections; and
- (iv) Traditional, influenced by traditions.

The means that people must satisfy their needs are also scarce. These means may also be required within a broader set of needs and foreseeable present and future actions of third

¹¹ Indifference curves: is a graph that shows the different combinations between two goods that give the same satisfaction to a person, and that are preferred to other combinations [preferences between two goods] (Spencer, 1993). See section 1.3.1.

parties. For this reason, those who act economically guide their choice of their economic measures based on current laws or conventions (Weber, 2014). It has been noted that when talking about means, it could be anything, from satisfactions of needs, knowledge acquisition, power, pleasure, joy; and the means might be money, material goods, time, reputation, knowledge, influence, promises, threats, among other. Then, human action in economic processes is characterized by:

- (i) Definition of the decision-making agent [e.g., consumer, producer, job offeror]
- (ii) Identification of the purpose and -scarce- means of the action in that environment.
- (iii) Characterization of an economic process when a specific -scarce- means is chosen in accordance with the optimizing principle of the economy [greater results with fewer necessary means].
- (iv) The agent expresses his choice through action plans.
- (v) Interpersonal coordination of the individual action plan through the market or other institutions (Argandoña, 1996).

Praxeology warns that while work is more fruitful and the human being can perceive it, human action will have a spontaneous tendency to cooperation and association. In other words, the incentive or motivation of the human being is the benefit that he obtains by carrying out that activity. Von Mises (1949) called David Ricardo's law of comparative advantage the law of association, concluding that it also occurred between human beings who tend to increase human cooperation. The collaboration between the most talented, capable, and hard-working with the less talented, capable, and hard-working benefits everyone, then each person specializes in what they produce best and exchanges the results of their products with others¹².

In this regard, since Aristotle time, the conception of human action in terms of rationality¹³ was analyzed. Moreover, for the action to be considered human, it must be carried out in a context where there are other human factors that are part of that environment. Therefore, the social system is internal to the activity of individuals (Corominas, 1996). The macro and the micro, the local and the global are integrated into a system of habits that articulates from

¹² An example is described by Bock (1976) in his book "Defending the Undefendable" when talking about labor division between a lawyer and his assistant, where the lawyer is 100 times better as a lawyer than his assistant, but only 5 times better at shorthand. Every hour that the lawyer is shorthand is an hour that he is not working on what is most valuable such as defending his clients in court. The lawyer will live better if he oversees doing those tasks that only he knows and on which he has a relative comparative advantage and hires a secretary to do tasks in which the relative comparative advantage of the lawyer with respect to the secretary is less.

¹³ For Habermas, the intentionality of the subject plays an essential role in the analysis of human action in order not to confuse them with biological body movements, which are natural to human beings (Habermas, 1987).

the movements of phonation and the movements of the hands to the technical treatment with things -production-, and their distribution -economy-.

Overall, the economic action exercised responsibly by a human being cannot be understood apart from the dimensions of personality, sociality, humanity, sustainability, and economic purpose¹⁴ [figure 14]. For example, a nurse cancels her weekend shift because her son is sick. From the dimension of her personality, she has a dilemma due to responsibility, on the one hand leaving her colleagues alone and on the other the very personal care of her own son. From sociality, she considers the cultural aspect and those norms that are specific to the nurse and her environment. Humanity implies that she is not going to cancel her turn 5 minutes before but is going to communicate it in time for all the implications that this has. Sustainability refers to the fact that we live in a world with finite resources, so we must be aware and understand the effects of an action on sustainability. Finally, the economic purpose establishes that it must operate in a rational manner, considering the scarcity of financial, temporal, and personal resources.

Thus, the individual action in a specific context will be deepened later when we talk about the environments that enhance capabilities as a hotbed¹⁵ and the -liquid- networks¹⁶ that are derived from it.

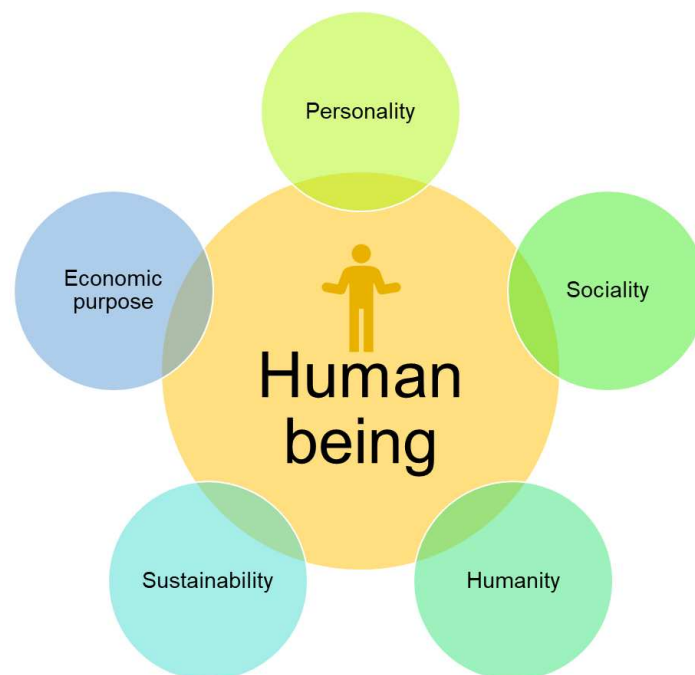
¹⁴ For example, a nurse cancels her weekend shift because her son is sick. From the dimension of her personality, she has a dilemma due to responsibility, on the one hand leaving her colleagues alone and on the other the very personal care of her own son. From sociality, she considers the cultural aspect and those norms that are specific to the nurse and her environment. Humanity implies that she is not going to cancel her turn 5 minutes before but is going to communicate it in time for all the implications that this has. Sustainability refers to the fact that we live in a world with finite resources, so we must be aware and understand the effects of an action on sustainability. Finally, the economic purpose establishes that it must operate in a rational manner, considering the scarcity of financial, temporal, and personal resources.

¹⁵ The basic concept of Hotbed is a term used to describe an environment (ecosystem) that promotes growth and development (Cambridge University Press, 2022). Currently, hotbeds are applied in different fields: innovation, entrepreneurship, research, development, agriculture, education, sports, etc. See chapter 3, section 0 subsection 2.1.

¹⁶ Liquid network is a metaphor that starts from the concept of a network as a specific constellation of neurons that activate each other for the first time, gives the brain the idea of a conscious level. When talking about ideas or people, these brain networks are imitated within environments, places and cities. They are based on ideas of sustainability and fluidity that allow the generation of urban spaces for collaborative innovation (Johnson, 2011, p. 55).

Figure 14

Economic actions Dimensions



Note. (Hemel, 2016b, p. 247).

1.2.1. Domestic community

The domestic community is considered primitive, represents a more extended economic community, and has a continuous and intense community action. Solidarity against the outside and communism in the use and consumption of everyday goods inside, forming an undivided unit. The individual contributes according to his strength and enjoys according to his needs, limited to domestic consumption.

For this reason, Weber (2002) considered the oikos as a space where needs were covered in an organized way. Analyzing medieval cities, he made an analogy of the Oikos as a large domestic estate that aims to cover in a natural and organized way the needs of the lord/prince or patrician, who runs the estate in an authoritarian manner. For this reason, he uses all the means at his disposal to achieve this end. The domestic community is what supports common work. When the number of members increases, the division is forced and gives rise to the birth of domestic communities [residence community].

Most types of communities bear some relation to the economy. It is understood, on the one hand, when there is a need(s) and on the other the subject's perception of a scarce stock of means that he must satisfy said need(s). Then, social action can be oriented according

to the subjective sense conceived by the participants towards an economic result to cover a need or for profit, which gives rise to the economic community.

1.2.2. Actions within a community

Community action can arise to face a specific economic situation that seeks to cover a [common] need. For example, an association is formed to clear a forest. When a group of individuals pays someone to care and promote common interests -or when the representation of the interests of that community is paid for in some direct or indirect way- a society has been created, which guarantees the survival of community action [figure 15] constantly and conscientiously.

Figure 15

Domestic community as the base of economic relations



Note. Domestic community was explained above on 1.2.2. The relations within the domestic community -oikos- represent the bases for the upcoming development of economic actions in a society (Weber, 2002).

Economy is considered a social science; therefore, it is a human science itself. This is one of the reasons why the individual behavior facing a decision to make to meet their needs, in an environment where resources are scarce and limited, is one of the topics of

economics. Human actions are considered as a rational choice between different alternatives and the human being as the individual, the analysis unit (Tversky & Kahneman, 1986).

In one hand, it has been noted that human behavior, for its nature, can be comprehended as a rational action guided by the norms and rules of the place -society, community- where he lives. Restrictions and preferences are part of the decision-making process. The first one limits his leeway and depends on many other factors such as income, market prices, legal frame, etc. This is the reason why before taking a decision he must evaluate the alternatives, research additional information to increase his knowledge about the action, consequences and alternatives. The second one considers the idea of value that the individual has and make him prefer one from another. In economics terms, the utility maximization (Deaton & Muellbauer, 1980).

On the other, purposes and means also play an important role when talking about human actions, because for the individual it is important how the goal is achieved in each situation¹⁷. This is one of the reasons why many authors affirm that homo economicus is not only motivated by financial purposes [table 5].

It has been stated that individuals do not live in isolation, they are part of a society, so it has a social orientation. The reason why despite individuals acts according for its own interests, envy, altruism and benevolence can be excluded as a “mutually disinterested rationality”¹⁸; and rationality “means that the individual, following his intentions is principally in a position to assess and evaluate his action range and the to act accordingly” (Kirchgässner, 2008a, p. 16).

Regardless of the positions of classical authors, the individual search to maximize utility maximizes collective utility, rational decisions imply that the main objective is to maximize profit, with limited resources and means, to obtain greater well-being. This statement connects with the one of Hotbed, a term use to describe an environment (ecosystem) that promotes growth and development (Cambridge University Press, 2022) within the people that is part of it. Nowadays, hotbeds are applied in different fields: innovation, entrepreneurship, research, development, agriculture, education, sports, etc.

¹⁷ For example, when the person wants to travel from place A to place B, it is not only important to get to the destiny, it is also how he reaches the destination: transportation, cost, time (Kirchgässner, 2008a, p. 13)

¹⁸ See Theory of Justice, Jhon Rawls 1971. He establishes that liberty, equality and rewarding contributions are justice principles that seek the promotion of common good (Freeman, 2018).

Table 5

Individual actions and economic agent's - author's approach

AUTHOR	PERIOD	APPROACH
Adam Smith	1776	None of the individuals active in the market [agents] had the intention of initiating a mechanism of social coordination, they all contribute to it consciously or unconsciously.
Neoclassical	1870	Scarcity and competition principle follow the assumption of an institution-free theory.
Austrians	1870	They construct their theory on a social foundation where questions about institutions naturally evolve.
Karl Popper	1945	The actions of many individuals have as a side effect, and not desired, the functioning of the market mechanism.
New institutionalism	1977	(i) Institutions evolve to reduce the cost of doing business in an uncertain and unpredictable world. (ii) Information available is incomplete and individual have limited mental capacity to process that information so human interaction is needed.
Gary Becker and James Coleman	1980	The rational choice - sociology. Studied human behavior and interaction, including non-market behavior, broadening microeconomic analysis.
Reinhard Zintil	1989	Individual behavior can be explained or predicted, when individual's alternatives are severely reduced due to constraints, then personal preferences play a minor role.
Mark Granovetter	1991	The use of network in the analysis of economy. Individuals live in a context of ongoing social relations; therefore, organizations and institutions have influence in that context.
Williamson	2000	Clarification on institutions that change very slow so progress might be truncate.

Note. Table was build form the work of several authors (Boettke & Storr, 2002; Kirchgässner, 2008a, 2008b)

Essentially, society, conceived as a cooperative action with a view that all participants can achieve their own goals, is the product of human action, and human action is guided by ideologies, therefore, social relations are the result of those ideologies. For example, one

of the great advantages that the individual enjoys thanks to society is that of being able to live despite being sick or physically disabled while the suffering animal is sentenced to death. Social cooperation implies contract and coordination, versus command and subordination implies hegemony. Another example is the university who has not only the mission of teaching, but also the promotion of the advancement of science and knowledge, it is not limited to instilling knowledge, but to increase the body of knowledge.

With the appearance of homo economicus, economic theory expanded considerably, since its existence implies the exchange of material or non-material possessions, from one's own will to generate one's own benefit. In this exchange scenario, (i) each of the parties has access to complete information, in addition to (ii) a sufficiently high and coherent rational capacity to handle that information, invariably oriented towards optimizing the usefulness of the exchange, and finally (3) this way of proceeding is generalized and affects all agents in a market. Excluding any non-commercial reality it brings a starting situation that allows a broad, agile and accurate modeling with multiple theoretical applications to explain and reproduce economic behavior (Bowles & Gintis, 1993)

1.3. The homo economicus

One of the postulates of mainstream economics establishes that the individual isolated and focused on their own interests, freely and rationally chooses between various action alternatives after weighing their presumed costs and benefits (Hirschman, 2013, p. 157). For this reason, several authors consider the homo economicus to be a mythical being and its concept has been questioned from various multidisciplinary approaches since it has excluded important aspects that are part of the psychological and anthropological characteristics of individuals [figure 16].

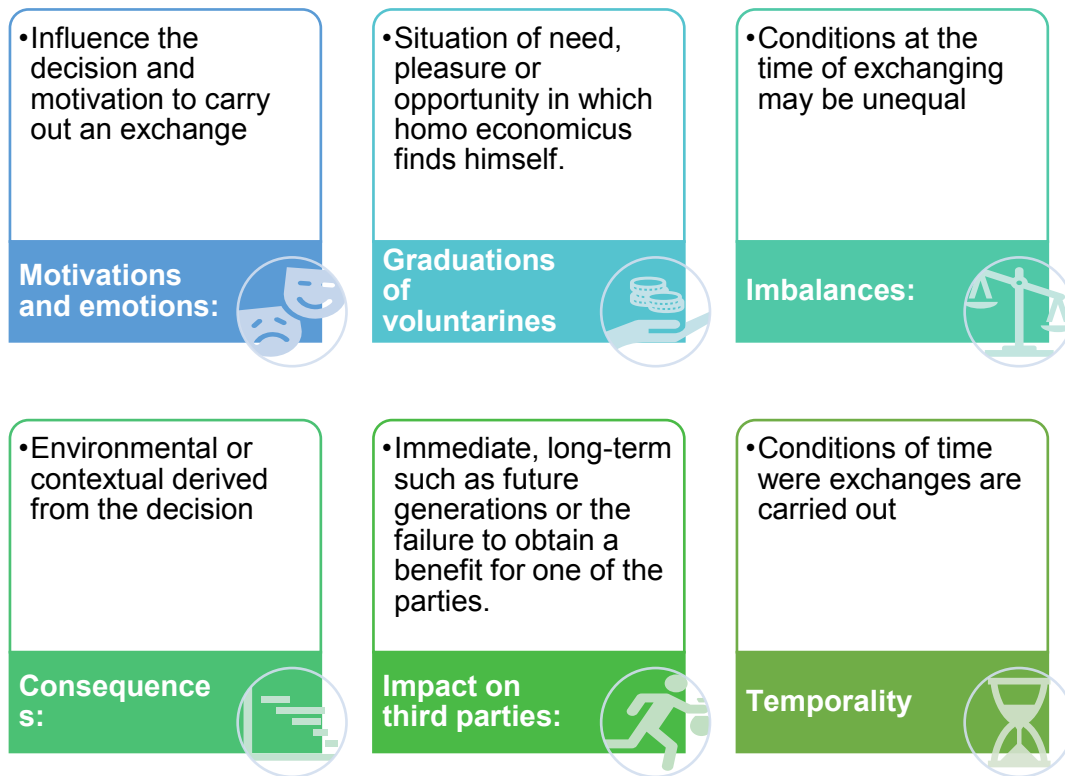
The homo economicus, leaving these aspects behind can be summarized in the following sentence said by Buchanan: "I do not know the fruit salesman personally, and I have no particular interest in his well-being. He reciprocates this attitude. I do not know, and have no need to know, whether he is in direct poverty, extremely wealthy, or somewhere in between... Yet the two of us [can] transact exchanges efficiently because both parties agree on the property rights relevant to them." (Bowles & Gintis, 1993, p. 85).

As noted, for the traditional economic doctrine, an individual obtains utility mainly when he achieves the goal of consumption -the process of consuming or enjoying its use-. Under this logic, homo economicus is described as a being who operates through costs and benefits, without passion, temptations, empathy, who only seeks to maximize his assets

and minimize his evils, which is why he has been classified as a selfish, rational being and calculating (Levitt & List, 2008).

Figure 16

What the homo economicus left out



Note. Based on (Manzano, 2016).

The examples above show the way that anthropological characteristics help determine how the preference of agents like the homo economicus is formed. Originally, homo economicus was modeled on the idea that his utilitarian motivation was the reason to act rationally in order to maximize the satisfaction of his own interests and needs according to his preferences and restrictions (Maletta, 2010). Throughout time, other aspects have been considered, including the psychological and sociological perspectives regarding human action in economic terms, opening a debate between the economists who defend classic perspective or more recent approaches.

In one hand, in the classical model, the homo economicus has certain characteristics: (i) absence of complete information in the decision-making process, (ii) learnings as a result was not considered, (iii) did not consider human's nature characteristics, and (iv) rationality of agents. On the other, Behavioral Economics (BE) considers the psychological factors

and the environment that has an influence on the decision. In other words, they humanize the homo economicus, giving him qualities that are part of human beings (Brzezicka & Wisniewski, 2014).

BE is methodologically eclectic and is defined by its focus on the analysis of economic behavior, empirically observed and analyzed by any appropriate method, including experimental. In contrast, experimental economics is defined, by the method it uses, real or artificially created experimental situations, in which it is possible to recreate semi-experimental conditions (Tversky & Kahneman, 1986).

As an experimental science, it combines economic deduction with psychological induction when analyzing human behavior, based on the principle of rationality when taking economic decisions. This has also been applied to game theory when there is conflict of interests. For instance, Aristotle observed that humans are by nature a social animal. Behavioral economists added how human relationships affect thoughts and actions of individuals, and are not necessarily consciously formed (Camerer & Loewenstein, 2004).

“The observation that humans, similarly to animals are dependent on their environment and circumstances, indicates a powerful relationship between Darwinism and cognitive psychology” (Lea, 2008). Therefore, connections create systems where societies work/relate under all elements of that system and human nature are part of economic life.

In middle grounds, the general model of individual behavior helps to understand human action as a rational choice between alternatives in social sciences, including economy, where the individual is a social being is the starting point of any study. As mentioned before, preferences and restrictions are the frame in which the individual must decide and make a [economic] decision.

A feature that is repeated in practically all social science models, including economy, is that statements are focus over the average behavior of the population instead of individual cases. For example, when the course of water that runs through a x channel is predicted by natural sciences, they do not consider the position and trajectory of each water molecule but of the river. In another context, when physiology determines that prolonged intake of tobacco smoke is correlated with lung cancer, it refers to the processes that occur in the internal organs in human bodies, not to a particular case because depending on various factors, the individual may die of lung cancer at any age, live a long life, or die of any other disease (Maletta, 2010).

An economic example can be summarized as follows. The price of good A increases, and each consumer will have a different behavior, Francisco reduces consumption by 50%,

Pedro by 5% and so on indistinctly. Economists have no idea what each subject will do, nor they are interested in finding out [table 6] but reach to the conclusion that each consumer has a different price elasticity of demand for that specific good. In other words, each one reduces it by a different percentage, but does not explain that individual difference.

Table 6

Consumers behavior when a good price increase

CONSUMER	BEHAVIOR
Person A	Continues to consume the same amount as before, regardless of the price change
Person B	May increase his consumption for status reasons to show that he can afford that good even though his price has risen.
Person C	Has never consumed that good before, will continue without consuming it after the price increased
Person D	Has never consumed that good before, could start consuming it after the price went up, for whatever reason

Note. The example was taken from the section 4. Macro rationality without micro rationality of the article The evolution of Homo economicus: problems of the rational decision framework in Economics (Maletta, 2010).

As an example of general model vs individual analysis: overall if we observe a price variation of good A, we can estimate an overall change of demand of -10 quantities of the product. If we disaggregate this variation we will see that person A, had 0 change over his/her consumption, person B had a -6, person C had -2 and person D -1, over all change is -10, but we do not imply that each agent is going to decrease by 10 units his/her consumption every time price change in the same amount.

On a study carried out by Becker (1962), he concludes that, regardless of having rational or random -erratic, inertial- consumers the same type of decreasing demand curve will be generated. He arrived at the same conclusion with companies -rational or erratic-demanding a good, create a rising supply curve. The supply (increasing) and demand (decreasing) curves arise equally in any case, with rational or irrational agents [figure 17]. He establishes that what decides rational, is the income restriction which is a good way to represent the scarcity of goods.

Figure 17

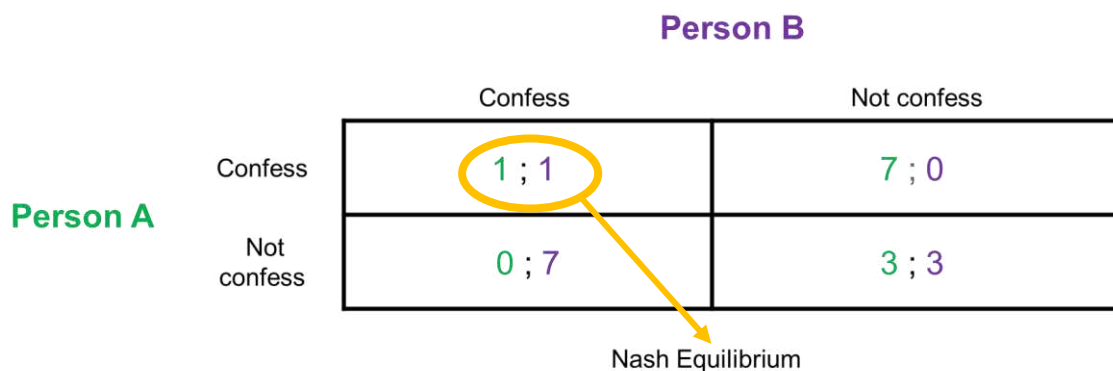
Rational or irrational agent's curve



For example, Nash addresses an important issue of the uncertainty of the action of other agents, establishing that it does not necessarily generate an efficient equilibrium. Consequently, they fail to maximize their welfare or utility. The analysis is applied in situations called non-cooperative games [figure 18] where the actors make decisions without knowing what other actors will do. In addition, their costs and benefits can also be affected by their own and others decision (Holt & Roth, 2004).

Figure 18

Prisoner's Dilemma



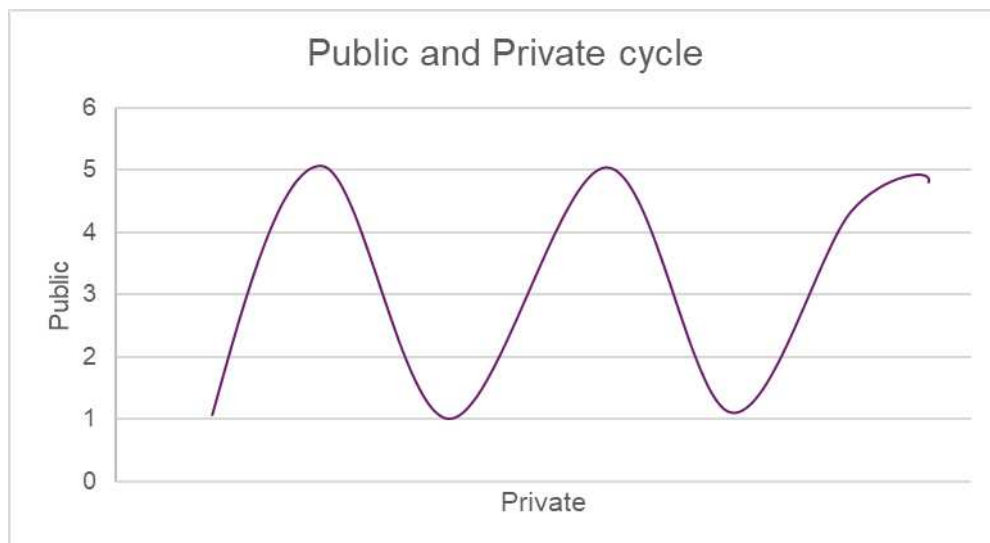
Note. Nash equilibrium is the strategy that benefits both because the one that confess knows that either way if the other one confesses has less to loss. But still, both are guilty (Holt & Roth, 2004).

Game Theory addresses economic relations from a context of imbalance, imperfect information, and uncertainty. Therefore, agents consider their own preferences and try to anticipate the possible decisions of other actors that cannot be known with accuracy or certainty. Also, the evolutionary version¹⁹ of it, «games» are transformed as agents «learn» from their repeated experiences in similar situations, and thus develop «evolutionarily stable» strategies (Gintis, 2009).

Furthermore, human beings -agents- have been interested in non-routine/non-instrumental activities such as justice, liberty, community, truth, happiness, and many others where calculating cost-benefits is almost impossible. Hirschman²⁰ is another author that proposes an enriched version of the traditional economic model since social forces influence individual decisions. Therefore, social forces represent an important force because social context indeed influence actions, people behavior and receptiveness to new ideas. Though involvements and disappointments phenomenology, the author presents a private-public cycle²¹ [figure 19].

Figure 19

Hirschman's Public and Private Cycle



¹⁹ For Gintis the evolutionary perspective helps to (i) understand through the interaction of cooperation and conflict, strengths and weaknesses of the market economy and strengths (and weaknesses) as human kind; (ii) understand human sociability through learning about other animal species; (iii) follow a sophisticated mathematical argument to understand strategic interactions; (iv) relationship between economics and biology (2009, p. xii).

²⁰ By public action, the author refers to an action in the political realm and also uses the terms action in the public interest and striving for public happiness.

²¹ "A cycle is [...] defined as a process in whose course identical forces are responsible over and over again for moving economy or society from one phase to the next (Hirschman, 2002, p. 15).

Note. From this perspective, shifting involvements aims to explain the reason why people incur in costs and in a cyclical pattern in the public and private sphere. In ancient times, active involvement in public affairs made the individual had an active live, while not being active meant that the individual had a contemplative live and voluntarily decided not to participate in the public (Hirschman, 2002).

Before engaging in any activity people formulate a project, this project includes mental images or expectations about its nature, kind, and satisfaction degree that might produce, opening a space for disappointment or satisfaction. In this means, Hirschman pays attention to a scenario where humans think they want one thing, when they finally get it, they discover they did not want as much as they thought or simply did not want at all and now, they are aware they want something else. He calls the meta preference²².

Throughout decisions, agents experiment disappointments²³ linked to private consumption of goods and services, so “exit” and “voice” raise as alternatives [figure 20]. The first one relates to the way out an agent has and look for a different source of supply; the second one to raise the voice and engage in actions to complain. And there is a third aspect that considers the psychological condition of the individual: loyalty, which means that the individual belong to a common system of norms that links the individual with a community in a sense of collective identity (Hirschman, 1970).

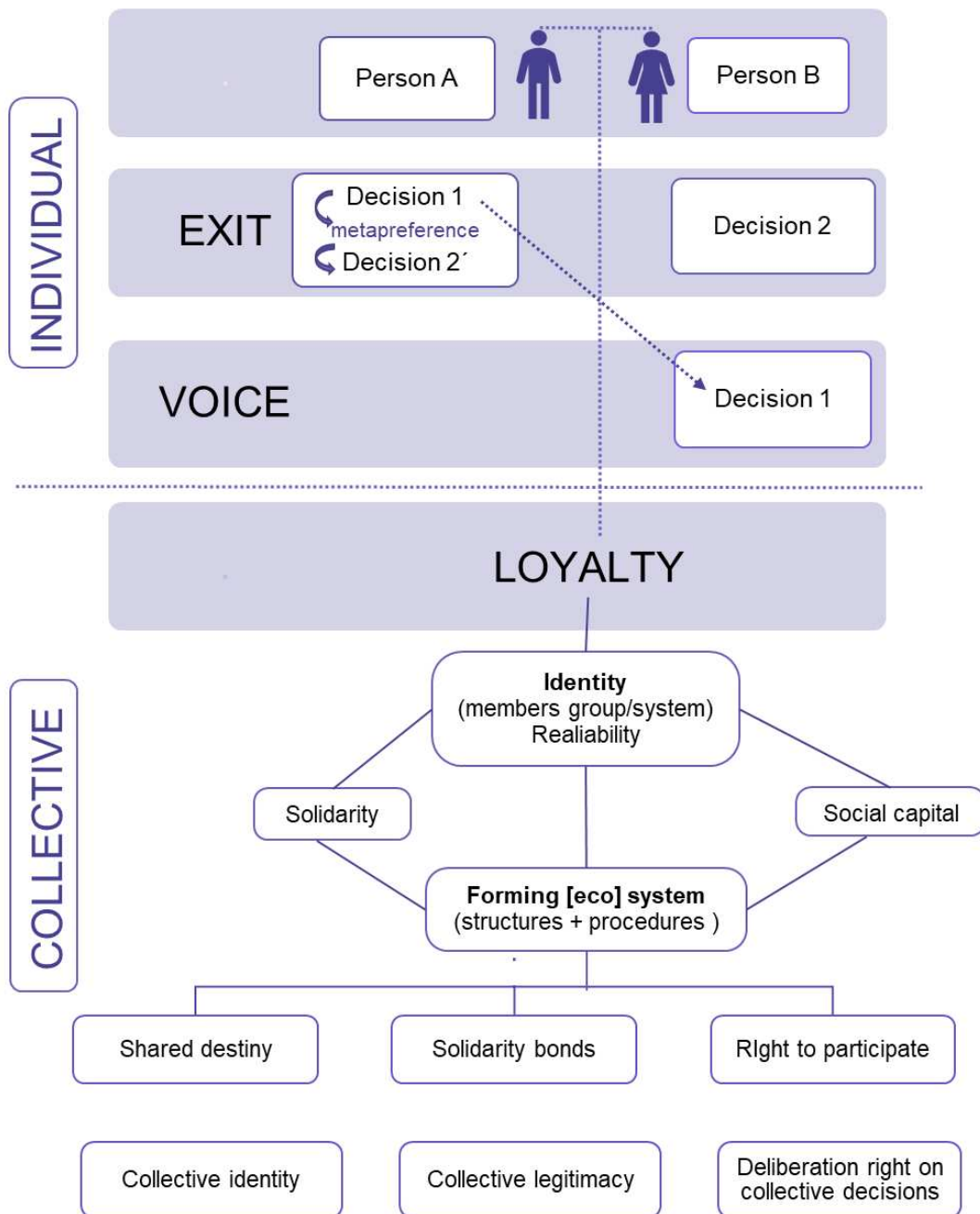
Throughout economics theorists, there has been many examples that demonstrate that, by definition, the option that the agent choose is the one that the consumer or producer considers optimal, and that effective option is the one that reveals their subjective preferences. In addition, the market works under certain institutional frameworks that, together with its rules and forces, have an influence on agents (Camerer & Loewenstein, 2004).

²² As shown, the choices made by economic agents have been an important topic of study since currents have been emerging that add other variables in decision making as well as first and second order preferences. Meta preference is a word introduced for the first time by Harry Frankfurt (1971) in “Freedom of the Will and the Concept of a Person”. And has been studied by other author like Richard C. Jeffrey. (1974) “Preferences Among Preferences”, or Gerald Dworkin (1992) in *The Theory and Concept of Autonomy* (Cambridge: Cambridge University Press, 1988). As Dworkin, writes, “Autonomy is conceived of as a second-order capacity of persons to reflect critically upon their first-order preferences, desires, wishes, and so forth and the capacity to accept or attempt to change these in light of higher order preferences and values”.

²³ Disappointments arises because new types of purchase are undertaken with the kind of expectations that consumers associate with more traditional purchase

Figure 20

Exit & Voice individual and collective context



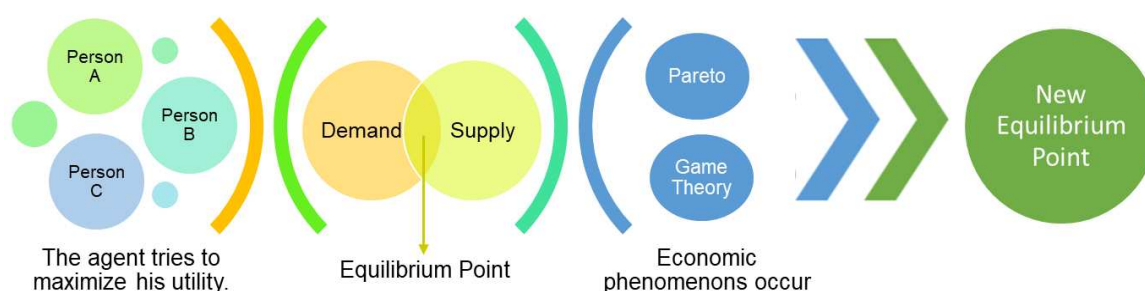
Note. Most of the choices, preferences and decisions made by agents can affect other agent and the meta preference refers to desires of desires when the agent has achieved. For Hirschman (1970, 2002), the effect can lead to decisions in the voice sphere and vice versa.

It is not the aim of this research to determine whether the decision is rational or not, but to understand in the context, how human actions from an economic point of view are

influenced by the environment. For this reason, adaptive models help understand adaptive behavior of economic agents under unbalanced or uncertain situations [figure 21]. In this means, microeconomic analysis appeals to the decision-making process of individuals, each with their untransferable personal preferences to explain a result at the aggregate level²⁴ (De Gregorio, 2012).

Figure 21

Agents and utility



The reformist contributions have sought to improve homo economicus, solving some of his problems. However, they show an incidence that is at least debatable, since it implies an appreciable complexity around behavior, making theoretical developments a difficult task.

Then, the homo economicus, as it has been described by the classical authors, forgets that the human being has subsisted by his instinct to be social, which lies in his ability to communicate. Our society is characterized not only by the natural and biological rules of coexistence, but also by the elaboration of values resulting from the social organization that differentiates us from the other species that inhabit the planet -as described on the oikos-.

1.3.1. The homo economicus in our time: the Utility Model

As mentioned above, the homo economicus in our time, as an economic agent tries to maximize its utility. In economic terms the utility is a representation of how satisfied a consumer is and represents through an economic equation consumers' preference. The

²⁴ For example, it focuses on the decision process of each consumer, who distributes his/her budget in the consumption of different quantities of goods and services, with the aim of deriving the aggregate demand curve for each good and all the goods in general, i.e., the demand curve -of one good or all of them- at a market scale (De Gregorio, 2012, pp. 479–497).

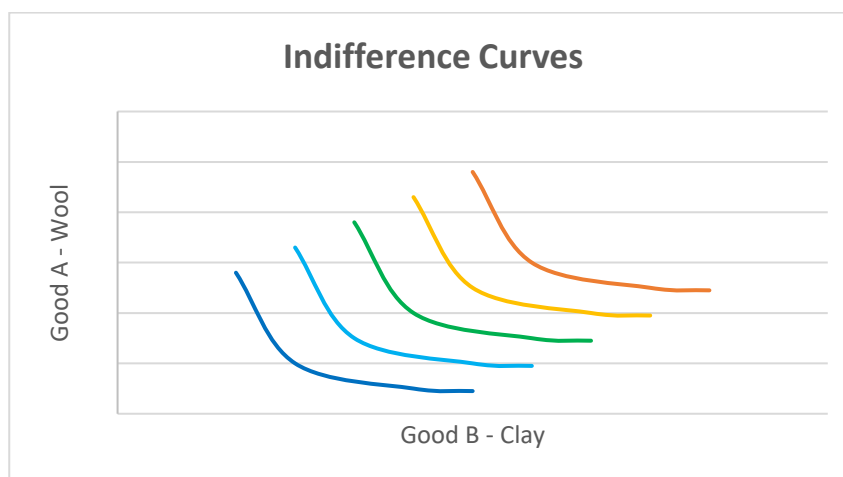
utility function²⁵ is used to track the choices made by a consumer and measures the welfare or satisfaction. It has been used under the idea of the agent's rational choice -theory- in order to analyze human behavior (Comín Comín, 2011).

The utility function assigns a numerical value to each quantity of the good that one chooses to consume. Thus, the higher that value, the better the consumer's situation. Economists use the term utility to calculate people's satisfaction that derive from activities such as work, consumption, investment, etc. These activities generate positive utility and others that do not satisfy produce negative utility, since preferences can be different in each person.

To explain this abstract concept in visual way, the indifference curve is a graph that helps to show the different combinations between two goods that give the same satisfaction to a person, and that are preferred to other combinations. For example, considering the people who lived in the polis, when it comes to two options that are indifferent to the individual, these two points that represent them lie on the same indifference curve. If he moves along the curve in one direction, he is willing to accept more wool for fewer clay; and if it moves the other way, it is willing to accept more clay and fewer wool. But any point inside that curve gives the same level of satisfaction²⁶ [figure 22]. So, consumer's goods are subject to a budget restriction. In other words, restrictions such as budget, is determine by both the consumer's income and the relative prices of goods.

Figure 22

Indifference Curve



²⁵ The utility increases but in a decreasing way, meaning, it has a maximum value and from that point the utility will decrease. If consumption of the good increases, total satisfaction increases. However, at a certain point, the variations in utility become smaller and smaller (De Gregorio, 2012).

²⁶ When talking about environments that enhances capabilities, agent's preferences will be analyzed in terms of capital, training, and know-how for example.

It has been noted that agents -rational or irrational- make decisions based on their preferences and restrictions, unaware of the consequences or effects for having chosen such decision. For this reason, the expected utility model is used. This theory describes a rational choice model with uncertain outcomes. It allows to classify the results in terms of utility and represent them graphically. Thus, the chosen result is the one with the highest utility. In simpler terms, the equilibrium point represents the point where the agents' expected utility is maximized. Generally, it is used combined with game theory [see numeral 1.3.4].

Also, the discounted utility model, along with its axiomatic derivations, define individual behavior on a time frame in normative terms (Lazaro et al., 2002). Later studies showed that the model must be corrected considering the anomalies in the intertemporal choice, so that the procedure can adequately define the behavior of the agents. The most known anomalies are the effect, magnitude, sign, sequence, and dissemination effect. Another anomaly is about the propensity of agents to make risky decisions when the amount at risk is less (Cruz Rambaud & Sánchez Pérez, 2018).

1.3.2. The Economic equilibrium for reaching maximization.

In a time, frame, things tend to converge to a point where everything is balance even for a fraction of time, so economic equilibrium is where the maximization point is reached. The general benefit of all agents occurs when the benefit of all is maximized, meaning that when an individual maximizes its benefit, a collective benefit can be achieved and contribute to society overall well-being (Maletta, 2010). Efficient outcomes imply welfare maximization based on agent restrictions. When the greatest benefit is obtained using the least number of resources. This implies that every equilibrium point is efficient, the maximum efficient chosen by the agent - make decisions in the best way every time-.

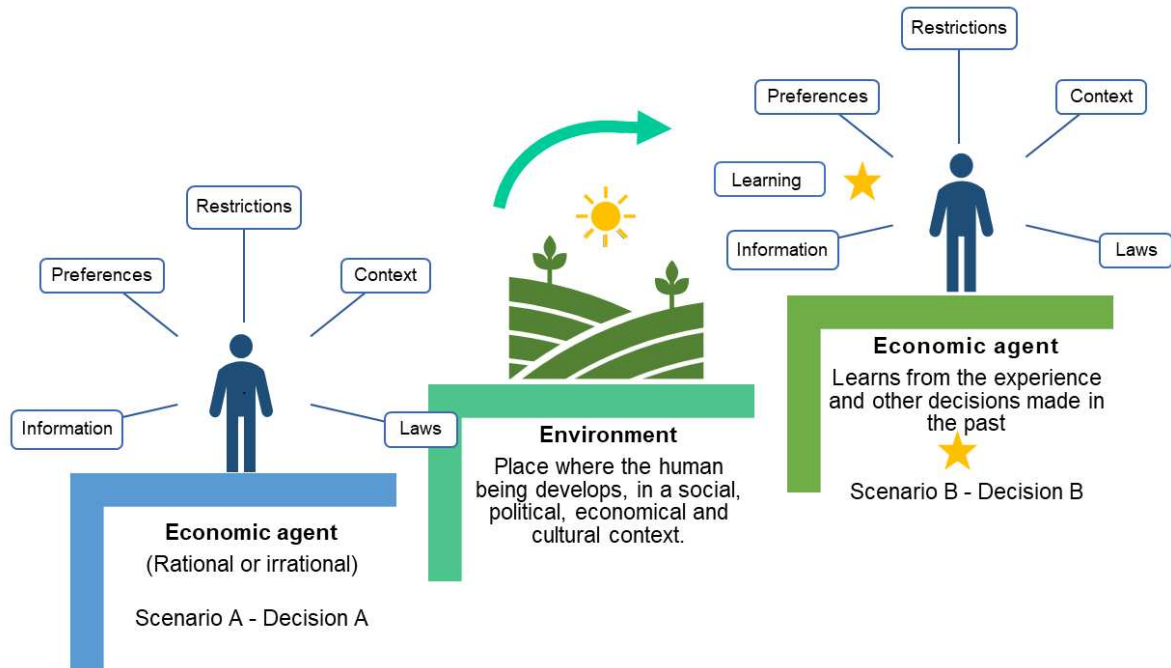
According to classical economic assumptions of perfect knowledge, agents are supposed to balance their preferences based on the available consumption experiences. This theory has become more compel through time because phenomenon's such as uncertainty and ignorance have been incorporated, so probabilities and utilities change within the decision-making processes because of the information acquired through actions and experiences.

As mentioned above, BE adds a new factor regarding the learning process of the agent after deciding, and how that experience can have an influence on the next decision [figure 23]. In this context, the decision made by the agent in each scenario is the one where he/she maximizes the utility, and a new equilibrium point is reach.

Therefore, efficient outcomes imply that the agent maximizes welfare considering their restrictions and preferences, using the least number of resources. Every equilibrium point is efficient, the maximum efficient.

Figure 23

Agent decision-making process

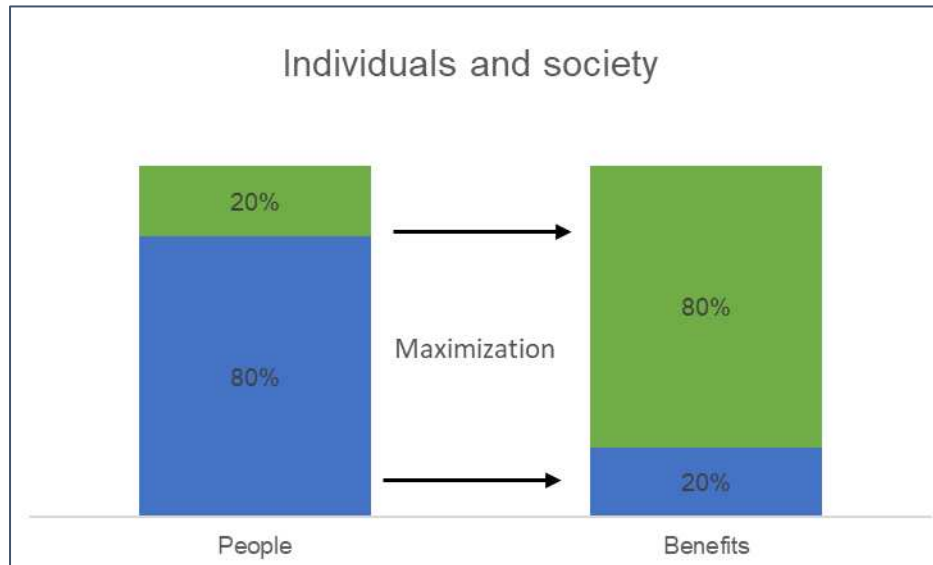


1.3.3. Pareto principle: ignoring the distribution issue?

Pareto principles establishes that 80% of consequences come from 20% of causes, or 80% of revenue comes from 20% of the customers [figure 24]. An example within today's society in contrast with the polis where rules and laws were established. The concentration of wealth could be landed on the polis, but a collective benefit was desire, where everyone as whole grow up and scale, breaking the concentration of those benefits. Also, as in most of situations, there actors who might take advantage forming concentrations of people who have more benefits. Unfortunately, this situation does not consider a real social improvement and real distribution of utilities within all members, therefore real well-being cannot be perceived. On the following chapter, section 4, this issue will be addressed when explaining the capability approach that makes a difference is the scenario described above, with the right framework, all agents have access to same opportunities, so the ones gaining more benefits are the ones who are capable of, freely choosing.

Figure 24

Pareto principle and society



Note. The graph visualizes that the interaction that takes place applying the Pareto principle, however it occurs that homo economicus will seek to generate the maximum possible, with or without concentration. The distribution of that benefit does affect the optimal benefit for the 80% of the people. It shows how even if in equal opportunities environments there might be a Pareto effect. For example, on a specific environment that offers the agents equal access to opportunities, still can happen that the 20% that produces de 80% of the benefits, are the ones that take bigger positive advantages of the environment. The key thing is considering if indeed everyone has access to the opportunities.

1.3.4. Game theory in the economic decision-making process

Game theory, as briefly mentioned above, is a branch that studies the choice of optimal behavior of an individual when this decision depends on the choices of other individuals. In economic [and social] life, many situations arise in which two or more people must choose strategies and make decisions that affect each other. Game theory analyzes these cases and through economics, studies the markets where agents interact (Cunningham, 1967). It has also been applied in other sciences such as politics, biology, philosophy, and business field as well.

In this theory, homo economicus is conceived as a player who chooses the actions that best satisfy his purpose -goal- based on his beliefs. In addition, it demonstrates how cooperation leads to the common good of the agents vs. individual action. There are several cooperative games that can be divided into 6 main categories [figure 25].

Figure 25

Cooperative games categories

Symmetric or asymmetric	<ul style="list-style-type: none">•The rewards and punishments of each player are the same. Most of the 2x2 games are symmetrical, for example: the hawk and the dove, the prisoner's dilemma and the deer hunt. In contrast, the ultimatum game and the dictator game are asymmetrical.
Zero-sum or non-zero games	<ul style="list-style-type: none">•When one player wins, the other loses exactly the same amount. The stock market, chess, poker, and the bear game are all zero-sum games.
Cooperative or non-cooperative games	<ul style="list-style-type: none">•Cooperative games are those in which two or more players form a team to achieve a goal, the optimal strategies for groups of individuals are analyzed, assuming that they can reach agreements among themselves about the most appropriate strategies.
Nash equilibrium	<ul style="list-style-type: none">•The final solution that is reached is an equilibrium in which neither player gains anything by modifying their strategy while the other or others maintain theirs.
Simultaneous or sequential	<ul style="list-style-type: none">•In the sequential ones each player acts after another, while in the simultaneous ones they act at the same time.
Of perfect or imperfect information	<ul style="list-style-type: none">•In games of perfect information, all players know what the others have done before.

Note. The prisoner's dilemma [see Figure 18] is a different sum game -no zero-sum-. If there is a tie you win a point, but if you win, three points are added [if two were added when winning, as in the old days, it would be a zero-sum game] (Cunningham, 1967; Dawes, 1973; Gintis, 2009).

The capacity for self-organization and determination of the agents that are members of a community [polis, environment, society] does not imply that they have property rights over the common resources to which they have access. For this reason, as mentioned above, various studies try to understand human behavior in conditions of freedom to obtain common benefits, and game theory is considered as toolbox for agents [human beings] to reach cooperative results and general wellbeing for that community.

2. The ayllu: the Andean core of economic resources

The Andean region integrates the current territories of Bolivia, Ecuador, and Peru, share culturally with northwestern Argentina, northern Chile, southwestern Colombia, and the southeastern region of Venezuela. The inhabitants of the Andean region live in complex climatic and geographical conditions, but throughout history they have shown that they are not only capable of surviving but also of creating systems and ways to expand and flourish.

From the anthropological point of view, in any part of the world when speaking of village or human settlements, it refers to men united by natural kinship ties. Since the first settlements, human beings have lived in family groups, which conform the social composition within a community. The *ayllu* [figure 26] was considered the social nucleus, the starting point of the social fabric and was made up of a small group of people with blood kinship. Some historians have discovered that the ayllu was earlier to the Inca empire and has been present in the Andean zone before the pre-Columbian period (Murra, 1978, 2022).

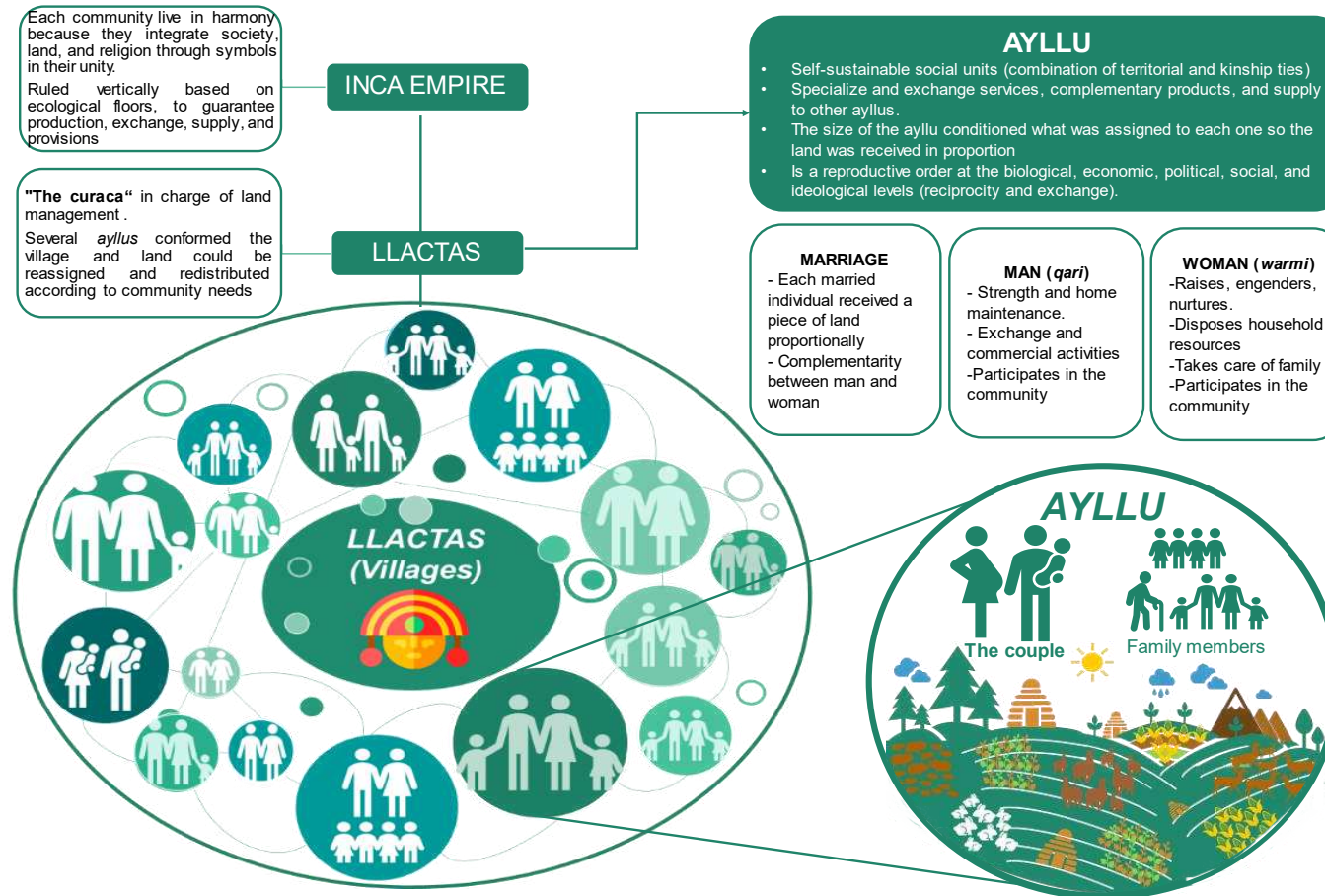
Throughout time, this figure has been used to explain family relationships, possession of land, the system of authorities, positions, festivities, or the economic system. But for the Andeans, the ayllu does not refer to an institution, but to an ontological position in the world. It means to be interrelated with humans and with other beings that populate the Andean landscape. It is living and experiencing a landscape and common places. The ayllu can be summed up in one word: family. Because the relationships within the ayllu are the relationships with the extended family that is distributed throughout the territory. These relationships translate into reciprocities, exchanges, and mutual visits on sacred festivities (Saavedra, 1971).

Each married individual without children received a *chacra*²⁷, when having a son an additional one is given, while for daughters only half. The size of the ayllu conditioned what was assigned to each one so the land was received in proportion to the number of families, women, and number of servants. There was no right to absolute property, offices or titles, and the land could be redistributed according to the needs. The settlements that controlled certain farms were called *llactas* -villages- made up of several ayllu's. The land was owned and cultivated ayllu by ayllu, based on the common and work they put in to till it. It could be reassigned according to the needs of the extended family and the ayllu. This redistribution policy was maintained for a long time (Murra, 1978).

²⁷ Chacra-chakra, vocabulary of the Kichwa-quichua-quechua that means piece of land given to an ayllu -family- for agriculture and farming.

Figure 26

The Ayllu



Note. The figure was created based on the work of different authors (Fernández, 2018; Murra, 1978; Rivera Cusicanqui et al., 1992; Saavedra, 1971).

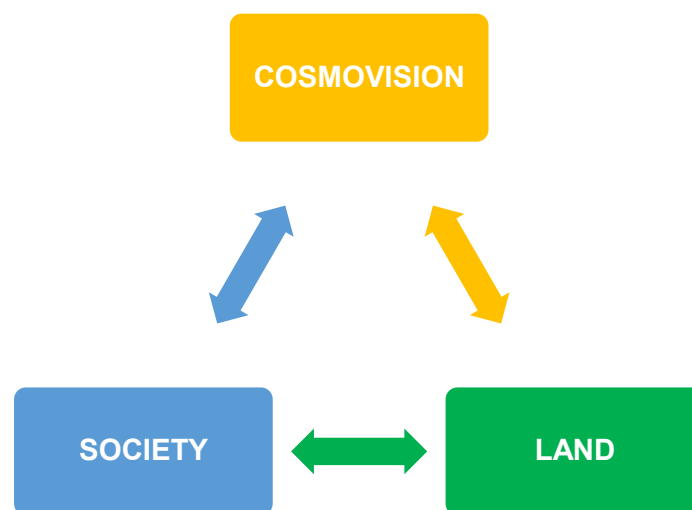
Ayllu solidarity is a combination of territorial and kinship ties. Like a family, you have ancestors. It is made up of people who live in the same territory and who feed the sanctuaries dedicated to the land of that territory. Spirituality, people also understand the ayllu as a way of living within the Andean region. The analogy with the mountain has helped to understand the ayllu from a broader and more complex sense. The mountains for the inhabitants of the Andean zone are like a human body that has three parts:

- Apacheta, the highlands -ancestors, leaders or apus-
- Kaata, middle lands, and
- Niñokorin -lowlands -child from below, descendant generations- (Basiien, 1996).

Each part has a community, and they live in harmony because they integrate society, land, and religion through symbols in their unity with the mountain [figure 27].

Figure 27

Andean community



Note. (Basiien, 1996).

They feed and are feed by the mountain, according to the labor division of the ayllu they specialize and exchange services, complementary products, and supply to each other. The elders of each community know the agricultural methods because the soils are marginal and the climate is variable, that is why they study the climate, soils, and plants in each climatic zone. For example, there were potters, jewelers, tool makers, hat makers, ornament makers. In terms of food, they sought to have a balanced diet through exchange, and shared banquets were a common symbol of integration in the area.

Later, the ayllus were strictly linked to the lineage of the founders of the empire, so they became aristocratic and patronymic. They were aggregating and congregating for ethnic and geographical reasons, giving rise to village communities and tribes. The community is a tacit association of ayllu's. In this sense, the Inca empire ruled vertically based on ecological floors, to guarantee production, exchange, supply, and provisions. The specialization of the ayllus was an effective strategy to use the resources of the territories throughout the empire (Murra, 2022).

2.1. Andean social organization

The ayllu is not only made up of a set of kinship rules, but rather is a reproductive order at the biological, economic, political, social, and ideological levels. They cannot be analyzed individually, since they combine three elements: cooperation, work and organization [figure 28] (A. Mayer & Salazar, 1974).

- Cooperation: when the ayllu was described in the previous section, it was mentioned the vertical control of the ecological levels by the Inca's. Production was organized, encompassing territories from the sea, through the mountains and reaching the jungle habitat. The work of the farms and pastures was organized to solve the problem of production due to parcel -chacras- dispersion. For this reason, the vegetative cycle of the plants, location of the plot, composition of the labor force and productive resources were well studied, to be able to exchange the products. For example: (i) land irrigation, the ditch belonged to the community regulations and technical standards were considered for the management of the irrigation system; (ii) rainfed land, rotation and access regulations were applied due to soil fertility problems; (iii) natural pastures, they practiced crop rotation for fertilization and preservation working through their kinship networks.

For the chacra cultivation rules were established to save work, time, and obtain a larger harvest, because the surplus was important within the economic system, distribution, and exchange products. Rules could vary slightly as a technological/social response to the specific conditions of production in each community, soil, and weather. Sort of membership were generated²⁸ for the use of common resources of common that guaranteed that everyone participated in the reciprocal exchange of agricultural work. Labor was also a form of exchange depending on the product, the time of year and its abundance.

²⁸ Dairy farms memberships (vaquerías, Spanish word) implied that the cattle of an ayllu could graze throughout the year without the presence of a family member being necessary; in exchange, the local learn, develop knowledge, and have social/technological participation of the land (De la Cadena, 1986, p. 14).

- Work: It is not a commodity because the right to participation is acquired through kinship, which grants access not only to the productive good, but also to relatives and what they mean in the Andes: a network of relationships that entail rights and obligations. Work within the ayllu has qualitative characteristics such as the commitment to retribution²⁹, as well as social sanctions when duties and obligations are not fulfilled. The organization of work in the community supposes the equitable distribution of available resources or the product of common work. Payment in money does not automatically imply a salary relationship.
- Community organization: implies working, helping an exchanging with others so everyone has a say and a role within the community, based on the rules and principles mentioned above.

Figure 28

Ayllu values



Note. Pictures by Unknown Author is licensed under CC BY-ND³⁰

²⁹ For example, the "peons" are obtained by "begging" them or surrounding them with favors: at the very moment of work, coca must be offered, good food served and even in certain agricultural tasks, dishes indicated by custom are served. Finally, between "acquaintances" the relationship does not end when the task is finished, and the agreed sum is "paid". for the work received an obligation has been incurred. Among "equals", this consists of being willing to return the work, perhaps also in exchange for money, when requested. Among those with different economic positions, the obligation on the part of who has a better economy will consist, for example, in sponsoring the son of the person who gives him his job, or in lending him money or supplies when he needs them (De la Cadena, 1986, p. 18).

³⁰ Picture: <https://www.brasildefatores.com.br/2021/07/31/artigo-1-de-agosto-e-dia-de-pachamama>. Under the license <https://creativecommons.org/licenses/by-nd/3.0/>

2.2. Agriculture

Through the ayllu, a system of agricultural and rent distribution was consolidated, in which the productive unit shared obligations and reciprocal rights. In the territory there was a distributive and cultivation system, of individual and communal organization where the distribution of the chacras allocation and land distribution implied the role of the individual against his community and the community against the empire -Inca-. As mentioned, each married individual without children received a piece land, having a son he received an additional one and a half for the daughters. Land was received in proportion to the number of families, women, and number of servants. The land was tilled by all the skillful arms of the community:

- Lands for solar worship and ministers – the chacras of the sun
- Lands for widows and orphans
- Land for elder, sick, and disabled and soldiers
- Land for the distribution of each family. Community land distributed each year (E. Mayer, 1974, p. 120).

Territorial coexistence was guaranteed through cultivation since there was family possession of the land and agricultural cooperative system. This gave rise to the collective right to receive the fruits and consume [like the German Gesamteigentum – joint ownership]. The pacha³¹ mama was considered a resource of common use, that needed to be taken care of, because life depended on it (Fernández, 2018).

In this sense, various cultivation techniques were developed and promoted to guarantee the supply to the entire territory. Crops were adapted, they domesticated the llama, planted tubers capable of resisting frost such as potato, oca, ulluco, using various techniques. Crop rotation was an ancient technique used to prevent desertification. Platforms or terraces were another cultivation technique on very steep slopes and difficult to plant, reaching extensions between 60 and 240 hectares. The dry land has been another highly practiced technique in this area and for every 4 or 5 years of cultivation the land rests 7 years. The populations that inhabited the region of the Andes, before the Incas, already possessed the technology for the cultivation systems, the main change that the Inca empire introduced was in the social, economic, and political organization of agriculture (Murra, 1978).

The water sources were treated with respect and care, since they provided the vital liquid for the crops, especially corn. In September and October various rituals and ceremonies

³¹ In Kichwa, pacha means both time and space (Qespi & Eusebio, 1994).

were organized for good harvests. The ditches -irrigation channels- were considered one of the technological wonders of the New World -the Andes-, which caused admiration in Europe. They were channels so well designed with their routes, that some seemed mighty rivers, which were distributed over large areas of the territory, reaching 600 kilometers in length. In fact, the reason for war and negotiation were the water sources, because of what they meant for the inhabitants of the Andes (Murra, 1978; Saavedra, 1971).

The main public works carried out in the empire were closely related to irrigation systems. The administration of the irrigation network implied, on the one hand, the main and arterial canals built as public works; and on the other hand, the local distribution of water to state farms, settlements, individual domestic units -ayllu-: (i) Management and administration of the resource: “tucuyricu” regional representative of the king, “michu” the subordinate, the “curaca” at the local level; (ii) the ayllu’s had rights over certain canals and sources, since they owned irrigation associations, whose members were linked by irrigation kinship ties (Saavedra, 1971).

Agriculture was able to systematically produce surpluses after the needs of the communities were met and warehouses were built to store food for times of scarcity. The Spanish chroniclers found a deposit in Coque -current Ecuador- where there was food and supplies so that the Spaniards could live 4 years (De la Cadena, 1986).

2.3. Religion and spirituality

For Andean people, the world is made up of three spaces or levels, each one independent but also interrelated: Uku pacha, the underworld; Kay pacha, the earthly world; and Hanan pacha, the heavenly/celestial world. The future, present and past are not conceived as a linear structure, but as a three-dimensional world where human beings can access any of them, therefore, time is circular. The present is recreated, renewed by including the past, but at the same time, it is capable of knowing how the future will present itself; there is no sharp division between past and future because the present contains both³² (Durán, 2011).

This knowledge considers that just as humans have a soul, so do all the beings that constitute Nature; consequently, all the elements that exist in the Andean world, including people, have the same essence and hierarchical level, so their relationship is not based on dominance but rather on a harmonious coexistence (Basiien, 1996).

Astrological observatories were an essential part of Andean life, they can still be found throughout the Andean region, in addition to having a strong spiritual meaning, also determined

³² See footnote 31

the beginning of the agricultural work of fallowing, irrigation and sowing. Priests were responsible of observing the progression of the shadows and reporting the proximity of the sowing time. It was said that the poorest and most needy areas did not observe the rites or observe the religion. In times of famine due to poor potato harvest, to mitigate frost and water scarcity they applied fasting, sacrifices and propitiatory victims. In this sense, the cultivation of corn was a matter of ceremonial and state importance (Murra, 2022).

Recalling the metaphor of the mountain, healers can soothe mental illnesses with guayasa³³, weld bones with plaster of Paris bandages, and stretch muscles with frog skins. Its pharmacopoeia includes more than a thousand remedies, some of which are the natural equivalents of aspirin, penicillin, and quinine, in addition to others that have not yet been discovered by Western medicine (Basiien, 1996, p. 17).

One of the common practices was the rite of burying the deceased, the offerings of food and drink at the graves of the dead. The inhabitants of the Andes continued to practice the traditional rites after the conquest and despite being baptized in catholic religion. The celebration of the ayllu in the cemetery in past times consisted of a staggered altar on seven floors, with an approximate height of four meters. Each of the flats is the responsibility of a family member, usually children or godchildren. Therefore, the number of flats depended on the number of relatives who want to be part of the ceremony. Once again, through this religious practice becomes visible how kinship and family union ruled every aspect of life (Muñoz Morán, 2017).

In Andean communities, contemplating the mountains, the birth of a sunrise or sunset, transports the individual to other dimensions, which helps a permanent renewal of energy or, failing that, to stay present, alive, in difficult situations that communities have had to endure. Nature itself is constituted as a motivation that invites to cling to life and fight for it, to fight for a present and for better days. The places and individuals are closely related, the level of influence is mutual, and are elements that permanently recall the spiritual relationship that has managed to develop between people and nature. For that same reason, the Kichwa community constantly refers to the pacha mama, that is, to the universe, living among values and actions that represent their worldview [table 7].

³³ Scientific name: *Ilex guayasa*.

Table 7*Spiritual expressions among Andean communities*

KICHWA WORD	MEANING
Allpa Mama	Allpa-earth, Mama-mother, that is mother earth.
Pacha mama	Pacha-time/universe, means mother of the universe.
Yaku mama	Yaku-water and mama-mother.
Waka Mama	Waka-sacred, mama-mother, refers to the sites considered sacred in where it is customary to leave the tumines ³⁴ or the payments as a retribution for the favors that are received from the mother earth and from life.
Inti tayta	Inti-sun, tayta-father, that is “sun father”.
Killa mama	Killa-moon, mama-mother, that is “moon mother”.
Achik	The luminous

Note. Based on (Kowii, 2018, p. 440).

2.4. Marriage

The duality is present in every aspect of life in the Andes, when speaking of the upper part and the lower part, it is not related to hierarchy and subordination, but rather so that both complement each other harmoniously. The complementarity between the feminine and the masculine is evident in many aspects and is ratified in the man/woman relationship with agricultural activities and the tasks assigned according to gender (Larrú Salazar & Viera Mendoza, 2022).

Man and woman achieve the right balance in marriage, each one made their contribution through a work distribution system by tasks. The masculine and feminine roles in the Andean worldview are based on the principle of complementarity. The couple relationship is a relationship that founds social life, for example as a father, mother, public and community responsibilities. It is really common within Andean people to represent the figure of a strong, powerful, warrior, woman leader who at the same time takes care of her home and does the housework (Murra, 1978).

Marriage was one of the ways in which the ayllus could gain access to corn lands, enter ranches, or have access to chacras in the mountains. The woman joined her husband's ayllu but inherited her parents' land. For example, when there was a wedding, the

³⁴ Kichwa word that constitutes an offering of products to mother earth, to nature, to the universe.

community had to build the house for the bride and groom and the kitchenware was provided by relatives. In addition, the ayllu also had the purpose of defense. The social and geographical factors, common resources were developed to exploit the land in fertile areas and in wild ones for that reason there was a communal property of the State organs (Isbell, 1974).

In spiritual terms, Pachamama is feminine, the place where animals, plants and water grow and are raised. Andean woman as well, raises, engenders, nurtures another being and transmits ancestral knowledge, disposes household resources, cooks' food, takes care of family health and participates in the community. The role of men is more associated with the strength and maintenance of the home, with the dynamic dimension of the masculine principle in the work of the land and trade. Both, complementary, are linked to the land, to the work of the crops and the community (Alberti & Mayer, 1974).

2.5. Non-monetary relations

The Andean economic system is carried out under a reciprocal³⁵ mode of exchange of goods and services, unlike the contractual exchanges that characterize monetary economies. The importance of the flow of labor, services, and goods between the institutions of production [ayllu], distribution and consumption. Reciprocity is a community-type mode of production, present before the Incas and that, despite meeting other production modes, persists today with their respective modifications. Reciprocity, redistribution, and vertical control of ecology is what defines the Andean economic system. The Inca is the center of convergence and emergence of all activity in the Andean world; receives benefits from the population for work on the land, pays them to ensure peace and redistributes products to guarantee harmony (Murra, 1978).

Reciprocity is defined as the normative and continuous exchange of goods and services between a provision and its return must elapse a certain time, and the negotiation process of the parties; instead of being an open bargain, is rather covered up by forms of behavior ceremonial. The interacting parties can be both individuals and institutions. At the communal level, the shift is given by the social age of the individual. At each stage of his life, he will have to serve the community in the positions that it establishes. Each person will have their turn to provide services to the community (E. Mayer, 1974).

³⁵ Marcel Mauss (1951) expressed that reciprocal relationships constitute a total social phenomenon because in them all kinds of institutions find their simultaneous expression: religious, legal, moral, and economic. Furthermore, these phenomena have their aesthetic aspects and reveal morphological variations.

Then, on an annual basis, a count is made of all the people who have served the community in various functions before assigning the new sectors of land to be cultivated³⁶. The concepts and logics are applied at the individual and community level, for this reason reciprocity was the most used way to obtain labor, mainly between relatives and closest people/neighbors according to the need for labor for the type of activity to be carried out (Malengreau, 1974).

For example, in barter *-trueque-* relations, the equivalences between products of peasant origin are established by themselves. A pound of coca is equivalent to an arroba of corn. The rates are variable from region to region and from time to time, although they change more slowly compared to prices of the national sector (Isbell, 1974).

2.6. The beginning of the global economy: a dead-end road? modern and Andean perspectives

Before the Spanish conquest, the individual, member of the Andean organization, served - its community- to carry out the productive tasks necessary to feed the family group, while the productive surpluses were administered by the central organization of the ayllu. In addition to this, collective works were carried out to create and/or maintain productive infrastructure within the community and among the territory. This meant that while the individual only acted in the domain of production, the collective also acted in the domain of distribution, managing work and its surplus product, aiming for collective well-being.

With the conquest, Spaniards introduced the European production mode in economic terms, in which, the individual *-homo economicus-* seeks to maximize his benefit and many relationships are defined by economic purposes [table 8]. With the insertion of the Andean producer in the market, the patterns of organization of reproduction were altered, and consequently, the relationship between the individual and the collective was transformed: the collective base is restricted to the productive sphere, while the individual aspect expands its scope of management to reach the administration of the product of work and its commercialization.

Nowadays, many of these practices continue to be applied, however they have been weakened because it is not possible to maintain a system of cooperation in the maintenance of the farms, due to the lack of young hands to work the land. In the past, as has been indicated, the same person managed to cultivate land in several communities and/or ecological zones thanks to the help of relatives who lived there [figure 29].

³⁶ The Kichwa word for this is *morocho*.

Table 8

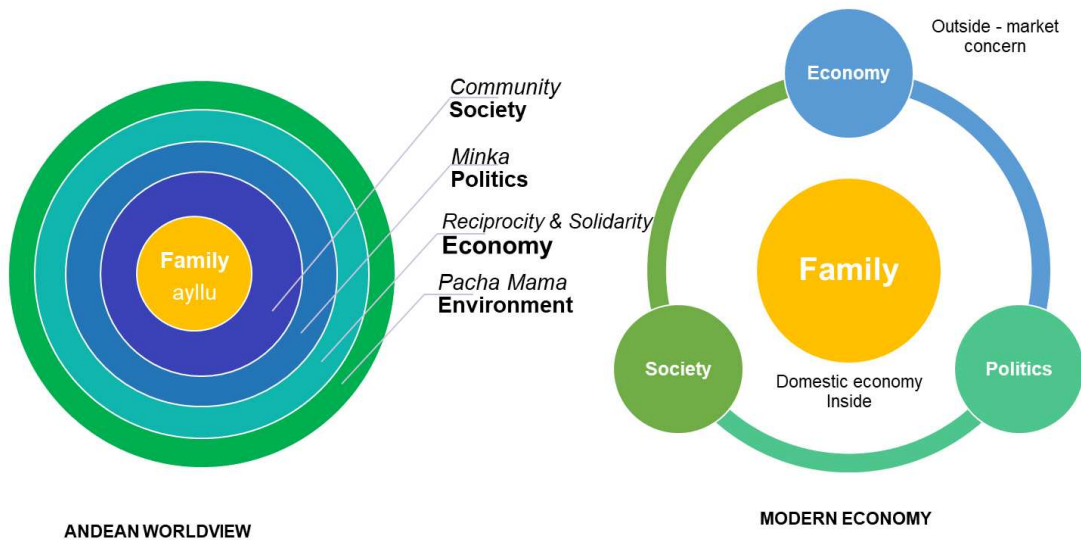
Andean versus modern production mode

Andean system	Introduced [modern] system
Reciprocal exchange	Contractual exchange
Reciprocity	Exploitation
Barter	Currency-transaction
Tribute	Taxes
Community mode of production	State modes of production
Optimization	Maximization
Community	Individuality
Surplus storage	Consumption
Consumption needs	Market needs
Communards ³⁷	Businessman
Agency	Individualism

Note. Based on (Murra, 2022).

Figure 29

Andean and modern economy



³⁷ “In the world view of the comunard, the land is the origin of all life. The land is animated in its heights, the mountains, by the apu, spirits that watch over the safety and protection of the animals that graze there. The land, the pacha mama, receives libations of alcohol and chicha before being worked; in turn, it keeps its character of inaccessibility and sovereignty in its heights and is more the object of a transformation action in its lower parts and closer to the town (Malengreau, 1974).”

The absence of these relatives has caused the abandonment of the land and with it an important part of the local economy has suffer. Young people no longer want to dedicate to the farming and countryside activities, they emigrate to the city to work or study. Evangelicals, who are more and more present, do not participate in the festivities or in the exchange traditional activities, which means that their presence is very limited.

3. Common pool resources as a catalyst in society

Since the beginning of humanity, the management, care, and protection of resources has been the main reason for societies to develop, seeking forms of organization that guarantee the supply and satisfaction of basic human needs, making more and more complex human relationships and interactions.

For example, as described in part 1 and 2 of this chapter, the Greeks in the polis, the management of household resources, economic activities, exchange, the satisfaction of needs and the entire evolution of economic thought with oikonomia as the starting point. Also, in the politic sphere, Aristotle affirmed that the decision to apply to the government “agencies” of the polis was born from a desire and a will to participate in the public/politic sphere. Being a candidate to govern had no other foundation than the individual desire to govern: the person wants to govern because they desire and will to do so, and the polis - the collective will- endorse that desire through an election (Cendejas Bueno, 2017).

In contrast with the Andean vision, the form of organization and resources management from the community, where the common good is the starting point to interweave and configure all relationships in the territory and its collective development. The Andean experience in the communes, the assignment of responsibilities starts from the collective's reading of the people it appoints. In the local territories, the subjects are designated, and they accept the role of government, which can be reassigned as the community and the needs require.

Under this dichotomy, the economic model that we currently live together with mainstream economics has aroused criticism and questioning that has led to the emergence of various school thoughts that have tried to resolve the issue of maximization in search of more sustainable models. One of them has been the management of common goods, which are characterized by the role of collective action and, appropriation-provision issues. In this sense, the Andean logics allow a better understanding of its responsible management.

Common good, different from public good³⁸, is identified as that good to which a community has access and which it disposes of with certain regulations and organization. When talking about the commons, it is not only about rights but also about responsibilities and relationships of giving and taking. In general terms, these resources are use in a way that makes sense for society, with open access and responsible management (Helfrich, 2008). The goal is to ensure the stability, sustainability, equity of access, use and distribution of the resource for human beings.

The management of common goods implies, on the one hand, the analysis of the relationship between community action and the groups that own the property -public or private-: and on the other, the internal logics of self-organization for the management of the common good. These two situations can be a source of conflict, but also allows the community to understand the use, forms, government, and sustainability of the common good.

To understand better this, Hardin (1968) proposed a metaphor about overpopulation, cattle herders share common pastures but each one of them seeks personal benefit and grazes as many cattle as possible. This produces “the tragedy of the commons” which means that ruin is the destiny when men pursue their own interest, and collective ruin when there is freedom over common goods.

The characteristics of human behavior such as competition for use, parasitism and overexploitation are actions that are self-regulating as a result of relationships and interactions in the community (J. P. Salgado, 2018). However, in the absence of authoritarian coercion, collective cooperation is only possible if participation in it is stimulated by selective incentives that can only be obtained by cooperating, since, otherwise, the members will behave as rational parasites benefiting from the cooperation of others without contributing to its maintenance (Olson, 2002).

Although the incentive system allows people to contribute to a shared goal, it does not ignore the problem of parasitism, in which a person reaps the benefits of common goods without contributing to their maintenance. Although with all this, the future of humanity may become complex, it is necessary to contribute from different fronts to take care of the “common house” and the environment in which we develop.

³⁸A public good, from the legal point of view, is one that belongs to or is provided by the state through all those organizations that are part of the public sector. In the economic discipline, it is understood as a good that is available to all and whose use by one person does not subtract from the use of others (E. Ostrom, 2011).

Thus, it is important to consider some aspects related to the management of common goods. Differentiate open access and management of commons; when there are adequate conditions, appropriate rules and conflict resolution mechanisms, cases of individuals or groups working for common benefits and managing common resources can emerge (V. Ostrom & Ostrom, 1977). A key aspect in order to study and analyze common good resources is that human beings are part of the ecosystem, therefore there are relationships, interdependencies and synergies but our current economic system that does not consider the common wills (Felber, 2012; Holling, 2001).

Under this perspective, it is sought that the person finds for himself ways to increase trust, self-organization to generate reciprocity agreements, therefore, diversity and complexity mean that there are no solutions for all the dilemmas of common goods and that these must be built in community.

Therefore, studies in this area seek to understand how a group of actors in an independent context can self-organize and self-govern to obtain common benefits. One of the main argument establishes that the behavior of the actors depends on the way in which they know, consider and evaluate the costs and benefits of their actions, as well as the perception they have about the relationship between these actions and the results (Dietz et al., 2003).

Elinor Ostrom³⁹ (2011) is one of the foremost scholars in common pool resources, studying humans' interaction in order to maintain long-term production levels of common resources, such as forests, hydrological resources, including fisheries, irrigation systems, grassland areas, among others. She has studied the way that societies have developed institutional forms in which communities have instituted communal practices that have allowed the preservation of common resources and avoid environment degradation.

Her work analyzes the behavior of the agents/actors who participate in a Common Pool Resource (CPR) with appropriation and provision relations. She argues that when actors act independently, the total benefits are generally lower than if they had established a joint strategy (Gardner et al., 1990). Therefore, they feel compelled to establish organizational mechanisms. For this reason, game theory is considered within the analysis of the management of common goods from the perspective of cooperation. Now, this does not

³⁹ Elinor Ostrom was born in Los Angeles, California, USA in 1933. Grew up during the Great Depression and during World War II knitted scarves for "boys overseas". She studied Political Science and her PhD in University of California Los Angeles (UCLA). Later went to work at Indiana University and was affiliated with Arizona State University. In 2009 Won the The Sveriges Riksbank Prize in Economic Sciences "for her analysis of economic governance, especially the commons" (NobelPrize.org, 2023).

necessarily imply creating some type of organization, but rather self-organization based on systemic, interdependent, circumstantial behaviors, and the frequency with which these may occur (Kreps et al., 1982).

3.1. Understanding appropriation and provision through the Greek and Andean reciprocity and redistribution

All ownership of natural resources has been born historically thanks to the gradual appropriation of the shares held by the monopolizing members of a community. In the feudal economy, peasants were used as labor to obtain monetary income, which eventually led to the large agricultural exploitation within the oikos. Later, the large industrial exploitation is very close to the lord of the oikos, since it involved the use of servile labor, owned or hired (M. D. Mirón Pérez, 2005). This is one of the reasons why appropriation-provision generate conflicts.

For example, when too many agents appropriate the common resource or a larger quantity of it, often is because they have a greater capacity to take advantage of it [pareto principle – figure11]. This is also the issue of temporary access to resources, due to heterogeneity and uncertainty, which can put certain agents in privileged positions with respect to others. If agents perceive that access to resources is unfairly distributed, they can reverse their willingness to invest in provision activities, as was the case with the ayllus in the Andean system.

The problem of appropriation⁴⁰ and its regulation, have to do with the organization for supervision and control, implying a modification of organizational structures (Sandler, 1992). In the Inca empire, as an institution administering the territory, it maintained the role of the ayllu but also implemented a system of vertical control of the ecological floors with a representative in the territory to monitor productive activities.

The supply problems not only have to do with the construction of the CPR, but also with the extraction/exploitation of resources. Consequently, it is important to establish the limits to not to affect the resource itself, especially in our times where sustainable and sustainability are becoming part of every country agenda. Following Ostrom theory, some key rules are proposed to manage the CPR and guarantee its preservation over time.

⁴⁰ Appropriation has also been studied attached to the sociological perspective to understand the concept of power, domination and social change. There has been talk of appropriation-expropriation as a relationship of advance-regress. The right has represented a possibility to the property, in turn that the property the option of being able to inherit it and the power as the possibility of imposing one's own will (Torres Castaños, 2011).

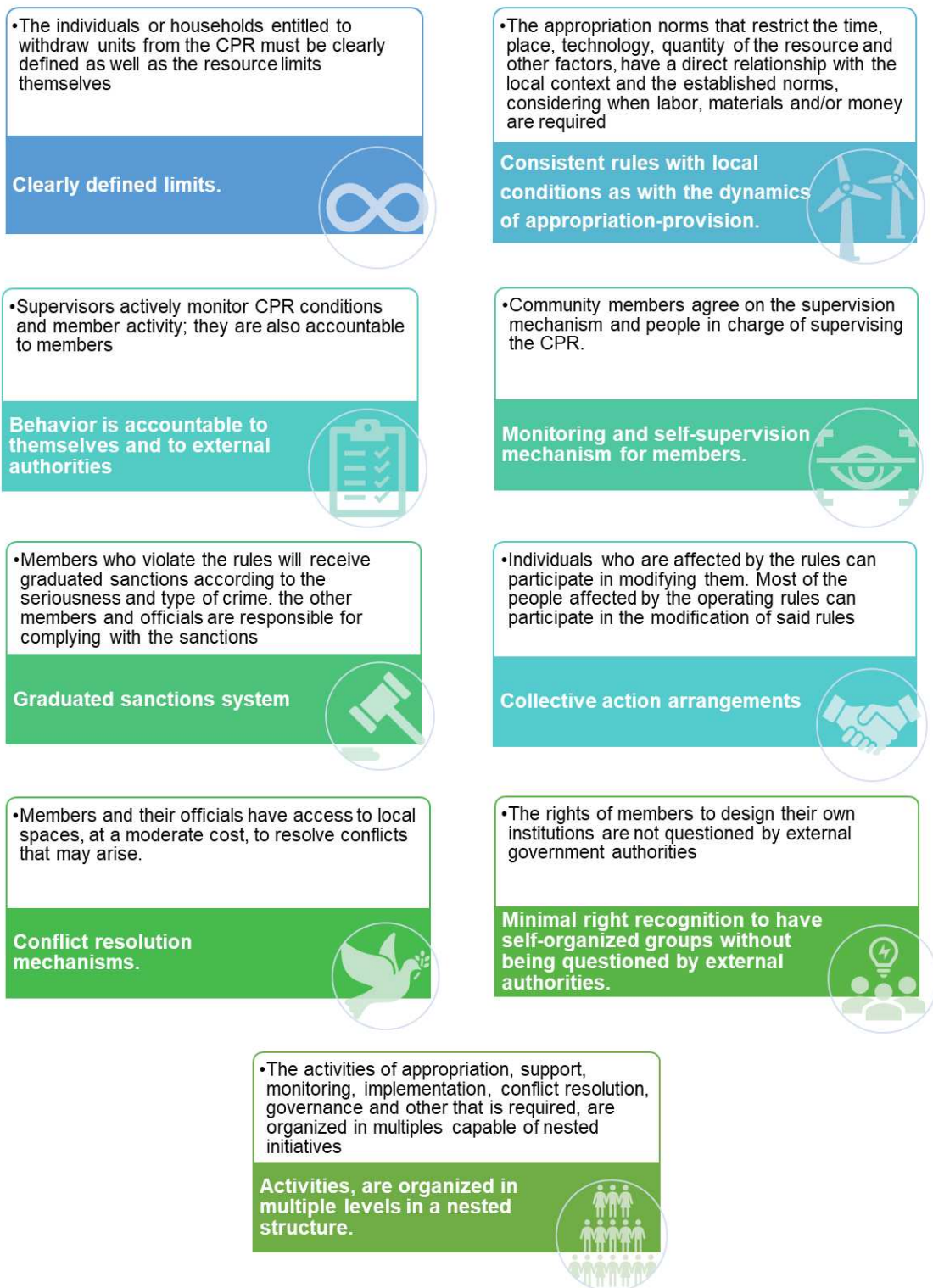
3.2. Key rules for managing a common pool resource.

As it has been mentioned before, the tragedy of the commons and other examples of cooperation are studied under the condition that those involved cannot change the restrictions that are imposed by the system. For this reason, one aspect to highlight is that the rules proposed by Elinor Ostrom (2011) seek to increase the capacities of the participants to change the coercive rules of the game to achieve results other than tragedies [figure 30].

Key rules for managing a common pool resource becomes necessary so that the choice of an individual strategy and the choices that the other agents make are in harmony, therefore institutions play an important role. However, Ostrom's contribution reveals its limits as it focuses on the conditions of the agreements around common resources, the importance of ensuring the provision-appropriation cycle, credible commitment, and mutual monitoring; leaving aside the subject that decides, the community to whom he belongs, and the importance of the territory were CPR's are manage. In this sense, for research purposes it is stressed that Latin America, South America, and Andean region presents a different reality from the European one. The characteristics and dynamics of those territories will be addressed throughout the following chapters.

Figure 30

Common Pool Resources rules management



Note. Based on “El gobierno de los bienes comunes: la evolución de las instituciones de acción colectiva”, by Ostrom, E., 2011, p. 111., 2da ed, Mexico: UNAM-CRIM-FCE. Copyright 1990, by Cambridge University Press.

CHAPTER 2: THE COMMON GOOD AS A STARTING POINT

“Irrespective of cultural, chronological, and geographical settings, the house can be regarded as a dynamic and ideological construction that encodes the principles and praxis of the group using the house” (Sjöberg, 2014, p. 315).

Greeks and Andean people⁴¹ considered the community as the center where social relations, interactions, and reciprocity were part of day to day as it contributes to collective development. It was a physical space to meet with each other, coexist and learn. Communes appeared with protection purposes, defense for self-determination⁴² and resources. The communes worked under self-government⁴³ regimes to manage local issues, seeking to manage resources in such a way that they become self-sufficient communities and with a more solid economy (Azzellini, 2017; B. Salgado & Carrera-Hidalgo, 2019).

Private property drove societies to organize themselves in a different way. Thus, from the primitive community we went through a capitalist system that seeks efficiency in production (R. Cameron & Neal, 2015). Since then, countries progress and development has been measured through macroeconomic indicators, which leave aside important areas such as education, health, social security, poverty (Stiglitz et al., 2008).

The homo economicus has developed into an imposed model in which the extractive economy in its search for maximization and profitability, in the different crises that the world has experienced, has shown to have structural deficiencies in which the State is not capable of attending its functions such as public health, education, social services, among others.

⁴¹ See Chapter 1, section 0 and 2

⁴² See Chapter 2, section 0, subsection 1.2

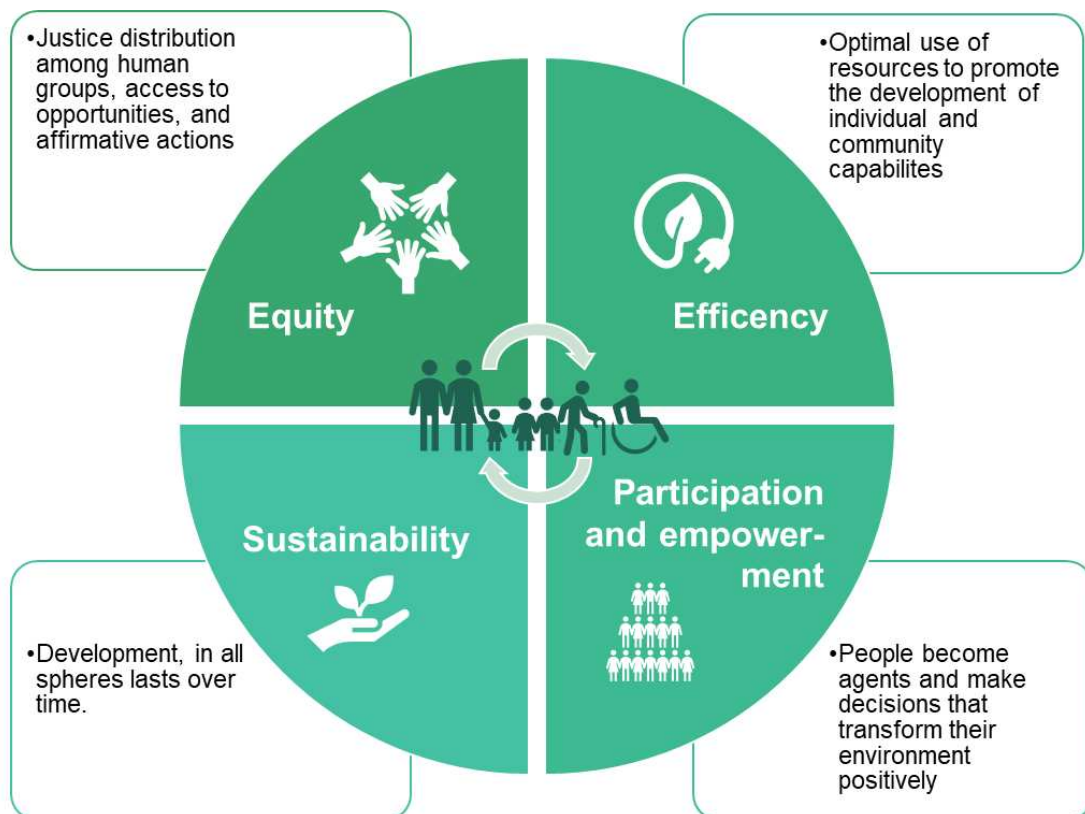
⁴³ Self-government in its context refers to self-organization for the CPR, that will be address on section 1 of the present chapter. The purpose is to guarantee equitable access, democratic control, and protection over time of the CPR which implies a strong capacity for collective action and a high degree of social capital (Ramis, 2013, p. 119).

This has led to natural systems, communities and cultural -social relations- being susceptible to monetization for market purposes (Sánchez Parga, 1997b, 2013).

For this reason, new approaches have emerged such as Human Development, the Capability Approach, the Economy for the Common Good (ECG)⁴⁴ that seek to measure well-being from a multidimensional vision, give a new meaning to the sense of community and put the person at the center. This includes working for the common good, the promotion of freedoms, dignity of human beings and enhancing what they are capable of doing and being a [figure 31] (Ellerani, 2017, p. 161).

Figure 31

Human Development Principles



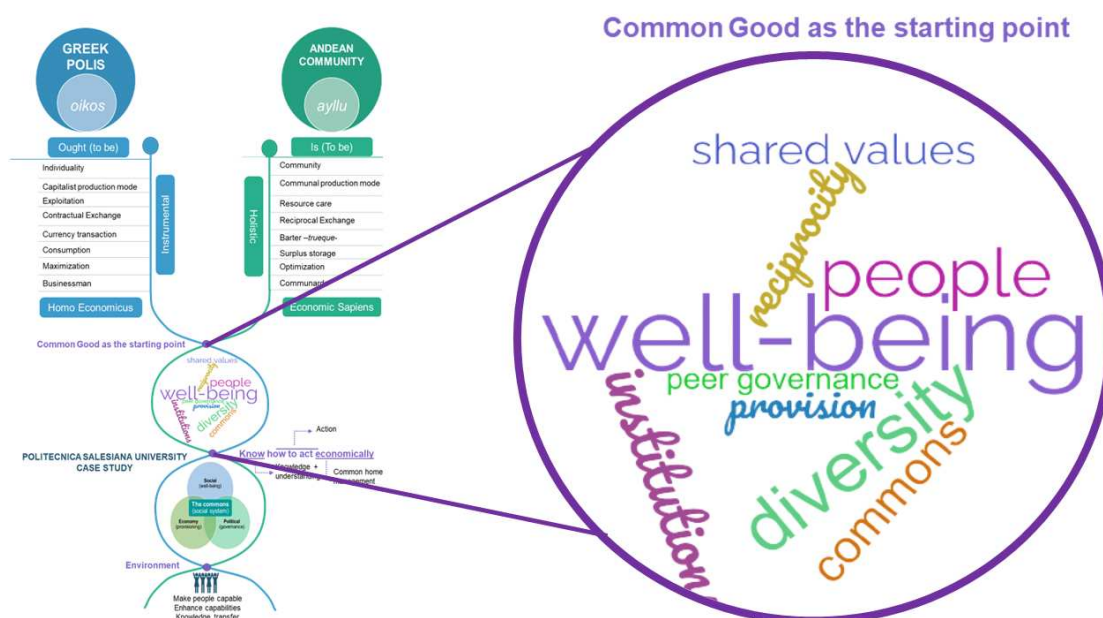
Note. (Bollier & Helfrich, 2012; Nussbaum, 2001; Ordoñez Tovar, 2014; UNDP, 2018).

⁴⁴ The ECG is a movement that arises with the objective of rethinking the economy that is based solely on the accumulation of capital and economic growth, in one focused on the common good. It seeks the co-construction of an economic model in favor of the common good, which bases its economic relations on cooperation and collaboration, and its political-social relations on democracy. For this, there must be rules and incentives that create the right conditions to achieve true human and social development. Civil society has an important role within this model and therefore all human activity must contribute to the development of values and participatory dialogue. Christian Felber, founder of the movement, proposes a series of human values that, within this model, contribute to the construction of the common good: human dignity, solidity, ecological sustainability, social justice, democratic participation, transparency (Felber, 2012; Gómez-Alvarez Díaz et al., 2017).

Chapter 2 is divided into five sections. The first one deals with welfare and wellbeing as perspectives of human development. The second is the Andean worldview from Sumak Kawsay and the importance of living in harmony with the environment. The third section introduces the concept of the capability approach and the ability of the human being to function in different contexts. The fourth raises development from a common's perspective and the last one, lists examples around the world on the management of the commons together with human development. On the whole, the reflection in the upcoming sections of this chapter evolve around what we can do collectively, inspired by initiatives around the world that consider mutual benefits, respect for the resources of Planet Earth and a long-term commitment [Figure 32].

Figure 32

The common good as the starting point



1. From the welfare economy to the development of human capabilities

Human development (HD) is a subject that has been analyzed since ancient times and its discussions have revolved around the context in which the person develops and the search for their good. Aristotle (1988) when studying politics, measure successes or failures based on how they lead people to have prosperous lives. Since then, many authors in the social sciences field have been concerned with understanding the well-being of the human being as the main goal of all activity. Classical economics authors have also devoted part of their analysis to this aspect, considering the focus of wealth accumulation or income.

It has been discussed in the first chapter [sections 1.2 and 1.3 1.2], that people have desires, aspirations, projects and make decisions based on a series of aspects that influence this process. Human development arises with the purpose of expanding people's options in different areas, such as access to knowledge, nutrition, health, social security, mobility, and countless others that are part of a person's life. Development is directly linked to the environment, as it allows people to access and enjoy these opportunities.

Living in a society implies the existence of a series of aspects, norms and policies that are considered in a broader context and of the territory, unfortunately they not necessarily promote or contribute directly to human development. Classic economic models have pay attention to this issue through the concept of welfare, were the Government gives special -financial- help to -poor- people (Cambridge University Press, 2022) Later, during the 20th century, welfare and well-being have been under discussion within human development, social justice and public policy (Anand & Sen, 1994).

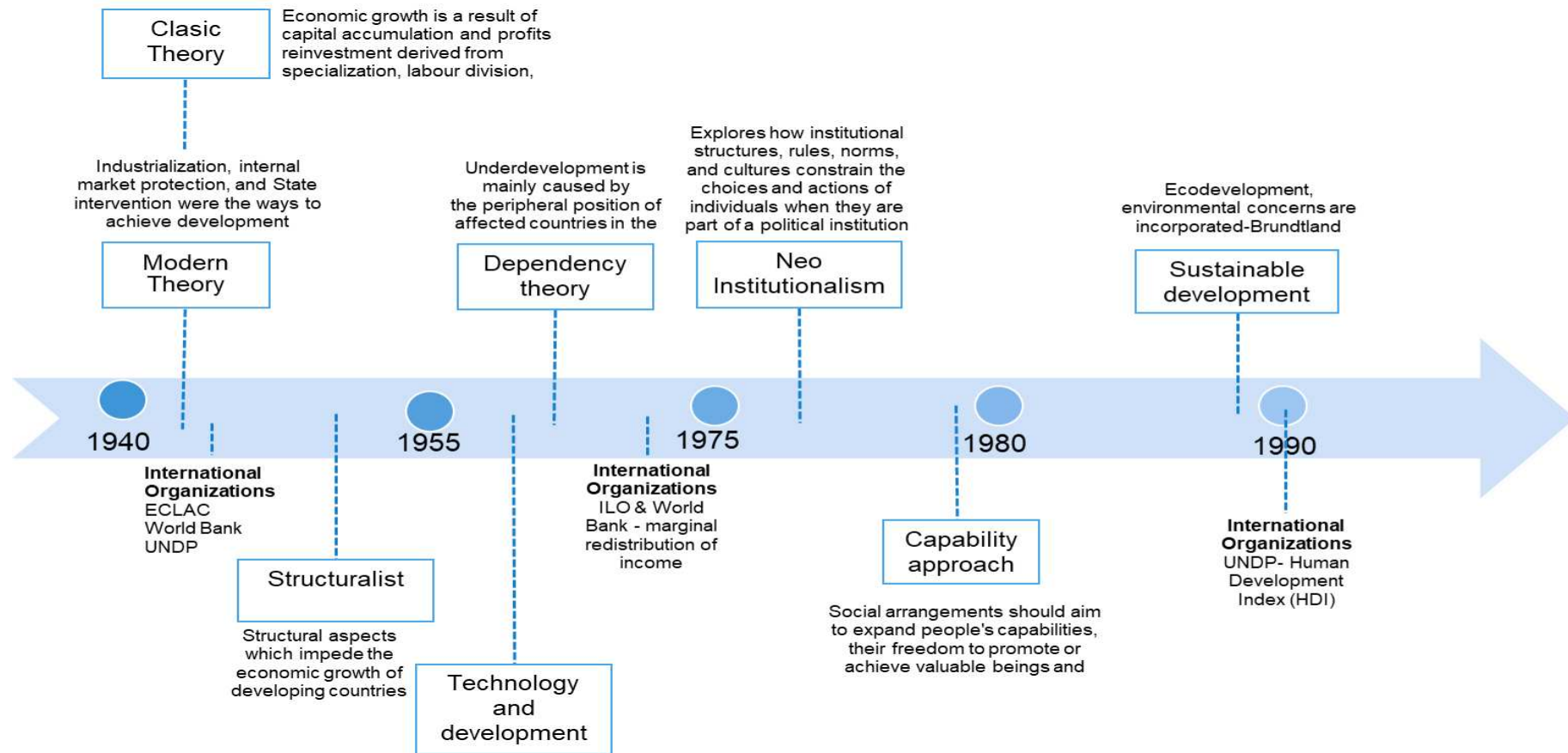
The concept of welfare in economic model has evolve throughout the years and Economic Schools approaches as well, but closely linked to optimization and not to people's overall satisfaction with their lives. Welfare has had several mechanisms to quantify and operationalize it, while well-being is more subjective as it measures other life aspects such as parent's happiness⁴⁵ for example (Jordan, 2008). Welfare is a concept that has been linked to poverty meaning pro-poor policies for people facing difficulty due to income restriction, while well-being can be consider a more pro-active term towards the feeling of accomplishment of human being.

Capital accumulation has been an issue linked to the evolving concept of development [figure 33] that has incorporated multiple aspects such as the important role of institutions. The central theme has focused around seeking explanations that allow us to understand the factors that have influenced the relationship between rich and poor countries in terms of productive structure, underemployment, productivity levels, wages, markets, income distribution structure, equipment institutional, business activity as well as factors linked to the culture and history of the countries that can influence their development (Ordoñez Tovar, 2014).

⁴⁵ To illustrate the difference between welfare and well-being, Jordan gives an example based on a report of a children's day care center, the manager made the decision of applying a penalty fee for those parents who picked up late their children. Once the new rule was adopted, the record of late parents increased. The system of penalties puts a price on lateness and goes in line with the economic model, substituting the prior cultural environment were perhaps parents waited to their children while greeting to each other and the center staff (2008, pp. 9–10).

Figure 33

Development Timeline Evolution



Note. The figure was created based on the work of different authors (de Souza Silva, 2008; Nussbaum & Sen, 2009; Ordoñez Tovar, 2014; Picazzo Palencia et al., 2011; Porter, 1995).

During the 40s, the modern theory of economic development linked production of goods and services growth with poverty reduction, therefore under these condition people's wellbeing increased too. For these reasons, during many decades' human development was linked to macroeconomic indicators until 1980, when Amartya Sen proposed the capability approach to be considered while analyzing human development (Griffin, 2001).

What we know today as development economics began in the 1930s and 1940s with Keynes postulates together with a world context in which the main target was to contain communism spread, achieve international stability, and address the phenomena occurring with the emergence of new nations. Thus, the analysis of full employment and unemployment was based on a more dynamic vision of the macroeconomy. The modernization theory linked economic development with growth, linked to the increase in income as a way to raise the living standard (Bustelo, 1991).

This utilitarian premise understood that production generated income, and that higher income generated, in turn, greater utility or economic well-being. Since then, development was measured through income and the main indicator was GDP growth per capita (Griffin, 2001). Consequently, other relevant aspects that affect the well-being of people and the conditions in which they are developing are left aside. Income, its calculation, and other macroeconomic aspects do not measure aspects related to human beings and their development within that society.

At the beginning of the 1970s, international institutions such as the International Labor Organization (ILO) and World Bank (WB) promoted a marginal redistribution of income in the face of the alarming social gaps that developing countries continued to experience. However, "basic needs" continued to be addressed from a development perspective focused on the production of consumer goods, which aimed solely at ensuring that a greater share of the benefits derived from increased production reached lower income groups (de Souza Silva, 2008).

In the 1980s, regions such as Latin America and much of Africa faced deep crises, making it clear that growth could not be taken for granted. Then, development plans focused mainly on stabilization and structural adjustment, which in turn led to economic stagnation and worsened the conditions of the countries in terms of inequality and poverty (Picazzo Palencia et al., 2011). Facing this situation, the United Nations Children's Fund (UNICEF) promoted an "adjustment with a human face" to design adjustment programs that protect the poor from the serious deterioration of income and preserve basic health, food, child protection and educational services from cuts in public spending (Griffin, 2001).

From the 1980s, development is being understood from a holistic approach centered on what is known as the capabilities approach [see chapter 2, section 0], based on people's capabilities and the effective use of these to satisfy their needs. Nowadays, the concept is linked to economic growth and the well-being of people, understood as a process of progressive evolution that improves living conditions (Moranchel-Bustos & Carbajal Suárez, 2019). Considering the common good as a starting point, development is a transversal and constant process, not the only and last goal.

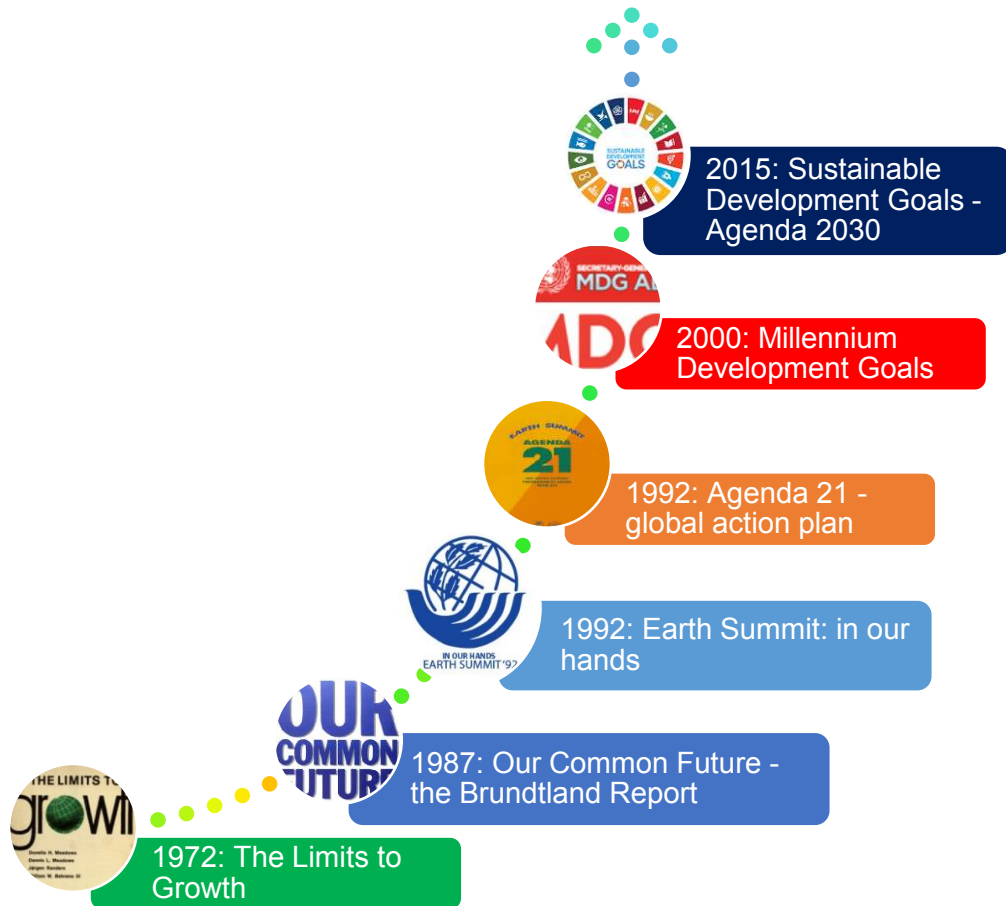
During this decade, institutions began to play an important role in terms of development with this comprehensive perspective and later in 1987, in an official international document "Our common Future", sustainability was published as a priority for the agendas for development and preservation of the environment together with the protection of natural resources to avoid compromising the future of the following generations (Picazzo Palencia et al., 2011). This is how the concept of human development replaced the national product as the first and main indicator of a country's development. It questions the assumption that the road to achieve development is physical capital accumulation through investment in industrial facilities and capital goods (Griffin, 2001).

This incorporation of the environment [figure 34] was the initial step for the convergence between human development and sustainable development. Both share the vision of having economic, social, political, institutional, and cultural resources for the development of life and the full use of the freedoms of human beings, based on the principle of sustainability. To achieve this, it is important to have a scenario that empowers society's capabilities and opportunities, which in turn advances towards equitable development, with social integration, governance, social justice, care for the environment and responsible use of common pool resources (Picazzo Palencia et al., 2011).

In this sense, it is important to consider the difference between the means and the goals of development. The first one implies the access to opportunities that human beings must have to achieve their development, meanwhile human being represents the end of all activities, the goal. There are many differences in needs, they depend on many factors, from geographical, weather conditions, prices in the region, to family members, income, among others. Therefore, the investment in human capital is linked to human development. Measuring group performances by simple averages leaves aside valuable information and individual circumstances, therefore it is required relevant information to actually know about a person's well-being (Anand & Sen, 1994).

Figure 34

International actions towards development



Note. (Meadows et al., 1972; UN, n.d.-b, n.d.-a; UNDP, 1987; United Nations Division for Sustainable Development, 1992).

The new postulates, which prioritize the accumulation of human capital as a path to development, promoted from different sectors, have had far-reaching implications for the global development strategy. This implies a significant investment in education, research, and development [I+D+I], Spanish acronym⁴⁶, spending on the provision of basic health services, on food programs and on the provision of family planning services. For example, institutions such as the Organization for Economic Cooperation and Development (OECD)

⁴⁶ Research, development, and innovation is also identified by the Spanish acronym I+D+I, it is a new concept adapted to studies related to technological and research progress focused on the progress of society. Information and communication technologies are one of the main tools for the generation of new knowledge and new technologies. The level of power in I+D+I in a country is usually measured by the ratio between the investment made in I+D+I and GDP, separating public and private investment in this area (OECD, 2015).

have generated various inputs and tools related to research and experimental development [I+D] to carry out measurements between countries and regions (2015).

This conceptual framework has been reoriented towards the social and environment considering the human being as the main addressee of all policies, plans, programs, or projects. Amartya Sen⁴⁷ is one of the main authors who contributed to the foundations of the theory of human development from a different conception focused on being and doing of the human being -well-being and capacities-. For the author, development is a process in which the real freedoms of individuals expand, and they become capable of being and acting in different social, political, economic, cultural, and environmental environments (Sen, 2003). Later the capability approach will be deepened on section 0 of this chapter.

Human development is based on four pillars: equality, sustainability, productivity, and empowerment [figure 35]. It is a more comprehensive conception of development, including economics as one of its components, and considers that:

- Human being is at the center of its concern.
- The purpose is to expand all human options, not just the income.
- Invest in people for the development of human capabilities.
- Fully use of those human capabilities through a framework that allows growth, employment, access to services.
- Economic growth is important, but quality and distribution are key aspects to be considered.
- Long-term sustainability.
- Analyzes more sensible options to achieve development purposes.

HD is aware that economic growth is not the end of economic development, is a mean that contributes to it. Around the world there are many countries that have been able to manage economic growth in order to improve living conditions of citizens which includes economic growth, social investment, empowerment, provision of basic needs and social security, political and cultural freedoms, human rights. In this sense, ways to measure the development and well-being of people have emerged throughout time. The first attempted was the Physical Quality of Life Index (PQLI), followed by the Human Development Index (HDI) and many others from international to local organizations.

⁴⁷ Amartya Sen was born in Santiniketan, Bengal, in India. Nobel Prize winner in 1998. His main study concerns about fundamental resources in a community and how should be managed. Researching how individuals' values can be considered in collective decision-making and how welfare and poverty can be measured. His efforts stem from his interest in questions of distribution and on society's poorest member (NobelPrize.org, 2022, paras. 62–63).

Figure 35

Human development pillars



1.1. Physical Quality of Life Index (PQLI) as a criticism to the GDP as a development index

In the 1970s, M.D. Morris developed the Physical Quality of Life Index (PQLI) for the Overseas Development Council (ODC)⁴⁸. It is one of the simplest indices that was developed to measure the welfare of a country. It sought to measure directly and indirectly well-being or "quality of life" by adding the global product of goods and services and dividing the total by the size of the population. It was based on three variables: basic literacy rate, infant mortality, and life expectancy at age one, which were also rated on a scale from 1 to 100, where 0 represents the worst performance and 100 the best (Indian Economy Net, 2017).

For Morris (1979), the objective was to provide information on the potential development of countries, share advantages and make decisions so indicators should: (i) avoid assumption

⁴⁸Nowadays is the Overseas Cooperative Development Council (OCDC). "It brings together ten organizations committed to building a more prosperous world through cooperatives. Its mission is to champion, advocate and promote effective international cooperative development. [Its] members' international activities are powered by grants from the Cooperative Development Program of USAID [... to] promote sustainability and self-reliance through local ownership" (OCDC, 2023, para. 1)

that there is only one pattern of development; (ii) does not reflect the values of specific cultures; (iii) reflect results not inputs, (iv) be able to reflect the distribution of social results, (v) be simple to construct and easy to understand; and, (vi) lend themselves to international comparison (Abaya et al., 1994, p. 23)

He never succeeded in enthusing development researchers and failed to dislodge the GNP as a benchmark for development. Also, he had a problem trying to measure development in a quantitative way. It was two decades later with the acceptance of the Human Development Index that other indicators related to development began to be considered.

1.2. Human Development Index (HDI): a human centered measure

Since its creation, the UNDP works on programs to address poverty, governance, rule of law promotion, inclusive institutions in underdeveloped countries, building a better life for people start to become an important issue on the international and national agenda of countries. With the purpose of contributing to the new theoretical assumptions on development, convened Amartya Sen, together with a group of economists including Mahbub UI-Haq, Paul Streeten, Meghnad Desai, Gustav Ranis, and Keith Griffin to draw a new proposal for measuring the development of the countries (Anand & Sen, 1994).

The result of the work concluded in a significant contribution: the Human Development Index (HDI), whose publication since 1990 was intended to generate a new measurement in the international context through social nature indicators that show the average quality of life in different countries based on three essential aspects: health, education, and income. Since then, it has been a recipient-focused measure that promoted an international trend to encourage countries to start concerning on creating the structural, institutional, social, and cultural conditions for individuals to have the freedom to fulfill their life aspirations, having on the horizon progress towards social equity (UNDP, 1990).

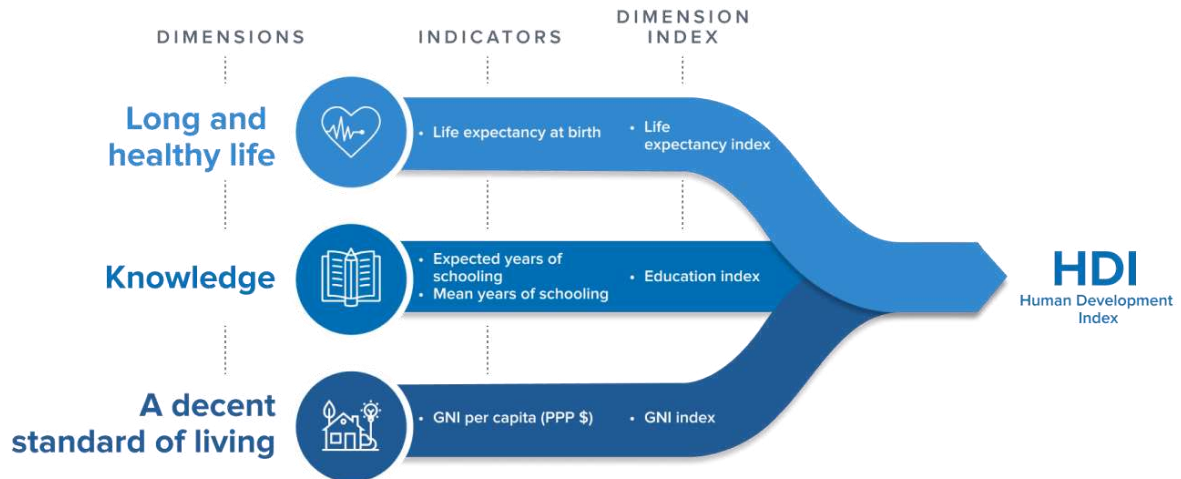
Conditions represent a key factor because they allow the creation of a favorable environment for human beings to enjoy a long, healthy, and creative life, access to education and quality of life. These conditions are linked to several human rights to assure an alternative indicator to GDP. HDI measure three key dimensions of human development [figure 36]:

- Life expectancy: meaning the number of years a newborn is expected to live. Se enfoca principalmente en el área de salud. Es un indicador que tiene relación con situaciones o beneficios indirectos, como los niveles de alimentación, salud y seguridad.

- Educational attainments: level of education attained by someone. El indicador utilizado es el alfabetismo y la tasa de matriculación combinada.
- Standard of living: real gross national income per capita.

Figure 36

HDI Dimensions and Indicators



Note. Reprinted from “Human Development Index. Human Development Reports”, by UNDP, 2022, parra.7., retrieved from <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>. Copyright 2023, by United Nations Development Programme.

Although the HDI has generated criticisms due to the wide divergences that exist within the various social groups as they do not have the same levels of longevity, knowledge and standard of living between men and women; between low, medium, and upper social classes, the index can be used to understand the reasons why some countries with the same GNI per capita different HD outcomes so governments can review policy priorities in their agendas.

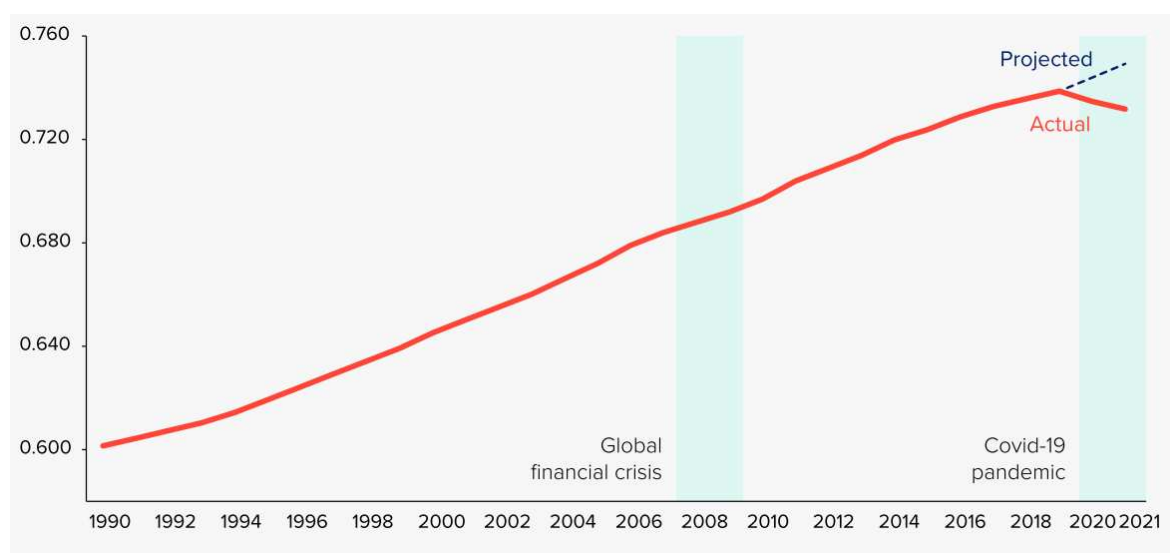
The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc. The HDRO provides other composite indices as broader proxy on some of the key issues of human development, inequality, gender disparity and poverty (UNDP, 2022a, para. 5).

UNDP published a special report in the 2010 edition as it tests various hypotheses against many empirical analyses, showing that there is no single path to sustainable development and that significant progress has been made without high levels of economic growth

(Ordoñez Tovar, 2014). After the covid-19 pandemic, for the first time in 10 years [figure 37] the world has faced a setback in terms of development in 9 out of 10 countries, generating insecurity, unsafety and untrusty environments, that together with the global health crises undermines HD (UNDP, 2022).

Figure 37

HDI period 1990-2021



Note. Reprinted from “Human Development Report 2021/2022: Uncertain time, unsettled lives, shaping our future in a transforming world”, by UNDP., 2022, p. 4. Copyright 2022, by United Nations Development Programme.

The Three I’s policies are proposed as a response to the challenges we are facing: (i) investment, From renewable energy to pandemics or extreme natural hazards, can help to ease planetary pressures while preparing societies to cope with global shocks; (ii) insurance, as contingencies help in an uncertain world so as to investments in universal basic services such as health and education with an insurance function; and (iii) innovation, as a response to challenges -technological, economic, cultural-. Government is a key actor on creating policy incentives [figure 38; figure 39] (UNDP, 2022b).

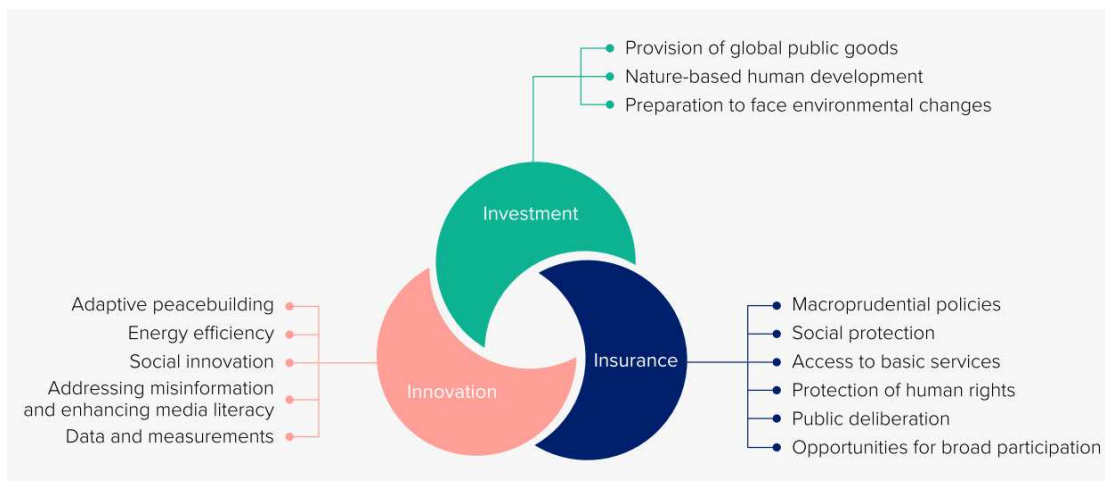
To summarize, UNDP reports conclude that there is no single way to achieve human development, it is a flexible concept that must gradually incorporate the challenges that arise and arise. Annual reports help to better understand the global, regional, and individual outlook. It explains the setbacks presented in some countries due to armed conflicts, diseases, political management; and in the last decade it has incorporated the index of

gender inequality and multidimensional poverty. One of the calls made by the 2022 report is the importance of investing in capabilities that help people face uncertainty.

In addition, living in a VUCA world⁴⁹, facing from economic crises through natural disasters, to pandemics and general financial instability because societies are more exposed to adverse events. Consequently, the most valuable resource a country owns, is its people, their human potential that can bring real development to the economy and progress to the countries.

Figure 38

The Three I's Policies

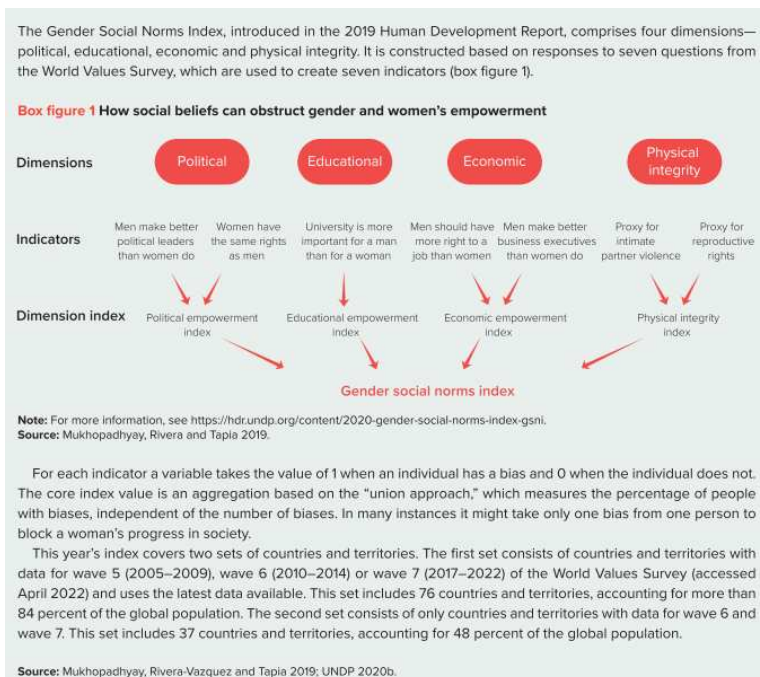


Note. Reprinted from “Human Development Report 2021/2022: Uncertain time, unsettled lives, shaping our future in a transforming world”, by UNDP., 2022, p. 18. Copyright 2022, by United Nations Development Programme.

⁴⁹ VUCA world will be further developed in section 0, subsection 0 of the present chapter.

Figure 39

Gender Social Norms Index Four Dimensions



Note. Reprinted from “Human Development Report 2021/2022: Uncertain time, unsettled lives, shaping our future in a transforming world”, by UNDP., 2022, p. 206. Copyright 2022, by United Nations Development Programme.

1.3. Full development though the care of our common home from a catholic perspective

“LAUDATO SI’, mi’ Signore” – “Praise be to you, my Lord”. In the words of this beautiful canticle, Saint Francis of Assisi reminds us that our common home is like a sister with whom we share our life and a beautiful mother who opens her arms to embrace us. “Praise be to you, my Lord, through our Sister, Mother Earth, who sustains and governs us, and who produces various fruit with coloured flowers and herbs” (Papa Francisco, 2015).

The Catholic Social Teaching has incorporated full development⁵⁰ as an assertive path for sustainable development. Laudato Si, caring for our common home is the second Encyclical

⁵⁰ According to UNESCO Thesaurus it is also use integral, comprehensive, or holistic development (UNESCO, 2017).

written by Pope Francis and published in 2015. It shows the social commitment that the Christian experience has when caring for the life of the human being through a vital balance from nature. It is an encyclical that evokes responsibility with relations with nature, ecology, social and environmental responsibility. Is a call to action to care for resources and think about the world we want to leave to future generations (Arboleda Mora & Pompilio Gutiérrez, 2017).

The encyclical letter is a call to take care of planet Earth -our common home- due to the environmental situation and deterioration of the quality of life because of climate change, ecological damage, and planetary degradation. It invites us to reflect on the meaning of the economy and in the last chapter on the important role of education to address this matter (Coronado Padilla, 2016). It encourages for a deep and respectful dialogue with science to have a global conversation that generates a real change towards ecological conversion.

Laudato Si describes how the sense of humanity has lost its relationship with the environment and makes visible the socioeconomic, political, cultural, and environmental concerns of today's world. Contains six chapters that address different themes: (I) What is happening to our common home, (II) The gospel of creation, (III) The human roots of the ecological crisis, (IV) Integral ecology, (V) lines of approach and action, (VI) Ecological education and spirituality [figure 40].

Within this broad conceptual framework, the social and environmental aspects are key points, contributing a new vision of the world that replaces the attention placed on economic growth and productivity -as the center of work in society- towards the notion of development, its recipients and the environment, which is our common home. Laudato Sí has served as inspiration for the creation of several global initiatives to contribute to the care of our common home.

The Catholic University of Costa Rica (UCAT, Spanish acronym), in its twenty-fifth anniversary, hosted the VII International Symposium of the Joseph Ratzinger-Benedict XVI Vatican Foundation that was held from November 29 to December 1, 2017, with the topic "Laudato Si': Caring for the Common Home, a necessary conversion to human ecology" (UCAT, 2021b).

Figure 40

Laudato Si Content

Chapter I What is happening to our common home	• It is a reflection on the situation that the world is currently facing and how faith can contribute, motivate and demand a change. It criticise the consumer economy that has eroded natural resources and technological progress that must be more responsible and aware of the environment
Chapter II The gospel of creation	• Starting from the idea that science and religion can provide different approaches to reality and engage into a productive dialogue. He mentions that religions can offer for an integral ecology and for a full development of humanity, from Genesis the motivation to till and take care of the garden of the world to guarantee its fertility for future generations.
Chapter III The human roots of the ecological crisis	• The human being and his action in the world has produced an ecological crisis, it is necessary to go back to the roots to understand life. It is necessary to rethink the lifestyles and functioning of society in all its dimensions.
Chapter IV Integral ecology	• We must address the world crisis taking into account all the factors that have caused it, in this way, integral ecology can contemplate the human and social dimensions. It calls for a more comprehensive and integrating vision of knowledge to generate a way of interrelating with others.
Chapter V Lines of approach and action	• Dialogue is the starting point to get out of the spiral of self-destruction that the world is plunging into. We live in an interdependent world that encourage us to think about a common project, intelligence tha was used for technological development must be used to find efficient forms of management that require joint actions, not isolated ones.
Chapter VI Ecological education and spirituality	• Thinking of a common future will allow us to face the current situation and generate a basic awareness that, from the educational field can contribute with new proposals. Seek for a healthy relationship with the creation as an integral dimension of the person. Learn from the past to change from within.

Note. (Cotter, 2021)

As a result of this meeting, the Laudato Sí Observatory⁵¹ (OLS, Spanish acronym) [figure 41] was created and in charge of the development of the Integral Humanist Ecology Index (IEIH, Spanish acronym) together with experts from UCAT, INCAE Business School, the Latin American Center for Competitiveness and Sustainable Development (CLACDS), VIVA Trust, Social Progress Imperative (SPI), among others. IHEI carries out a study every two years and the first measurement by the IEIH was in 2017, with the participation of 127 countries and 119 in 2019. The results reflect the severity of the socio-environmental crisis and the negative evolution of the problem in those two years (UCAT, 2021b).

⁵¹ OLS is part of the Network of Observatories of the Organization of Catholic Universities of Latin America and the Caribbean (ODUCAL, Spanish Acronym), and also works under the auspices of the International Federation of Catholic Universities (FIUC, Spanish Acronym).

Figure 41

Laudato Si Observatory -Mission and Vision



Note. Based on (UCAT, 2021b, paras. 6–7)

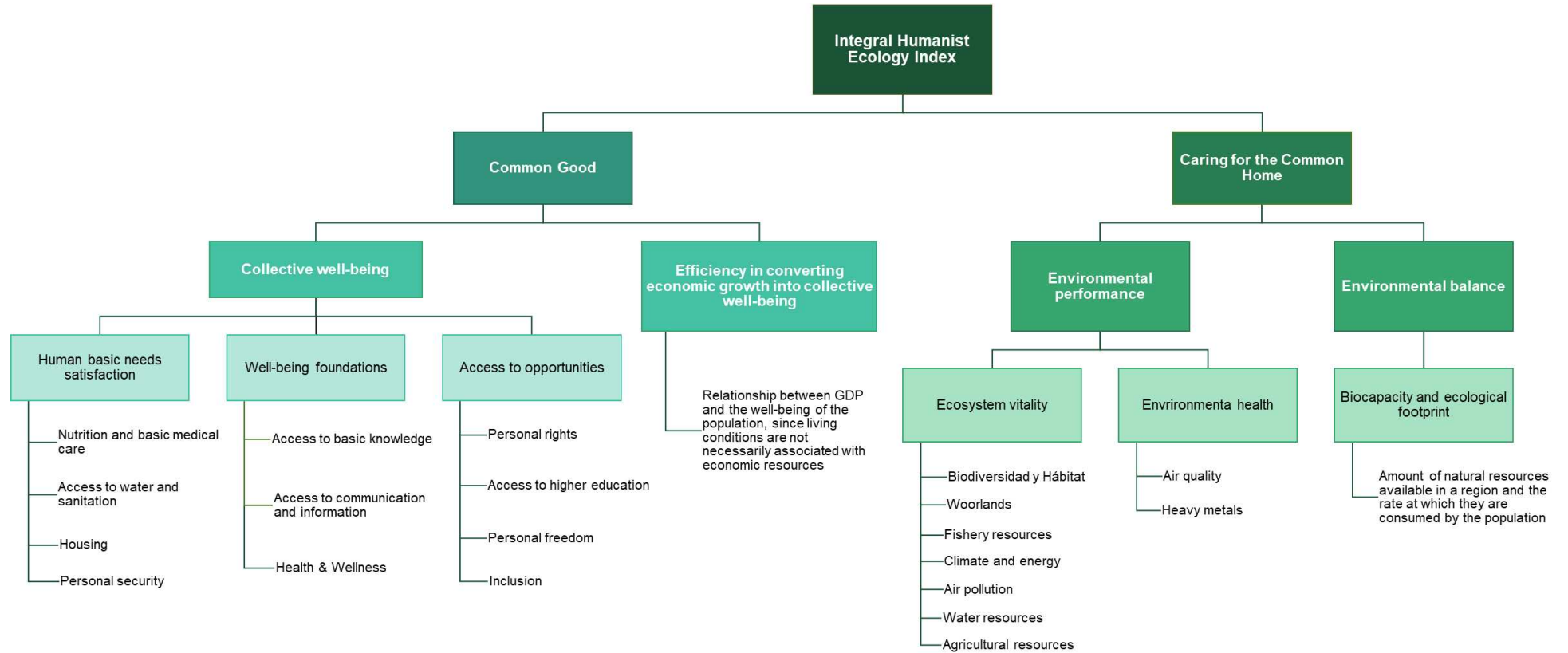
The index is a tool that seeks to objectively measure the human and environmental development of nations through two fundamental pillars: the common good and the Care of the Common Home. It oversees measuring common well-being and ecology integral. Each of these variables is made up of two dimensions: collective well-being and the efficiency in converting economic growth into collective well-being (UCAT, 2021a)

The first one, collective well-being is analyzed from three basic categories (i) basic human need satisfaction, (ii) well-being foundations and (iii) access to opportunities. Each of them with their respective indicators. The second one, the Efficiency in Converting Economic Growth into Collective Well-being, starts from the relationship between GDP and the well-being of the population, since living conditions are not necessarily associated with economic resources [figure 42].

Two measurements of the IEIH have been applied to 127 countries in 2017 and 2019 respectively [table 9], and 2022 report takes a retrospective from 2011 and includes 148 countries. It makes visible the effects that the global pandemic of COVID-19 has had in terms of social, economic, and ecological development, making visible the seriousness of the socio-environmental crisis facing humanity and the planet in general [figure 43].

Figure 42

Integral Humanist Ecology Index Dimensions



Note. (UCAT, 2021a)

Table 9

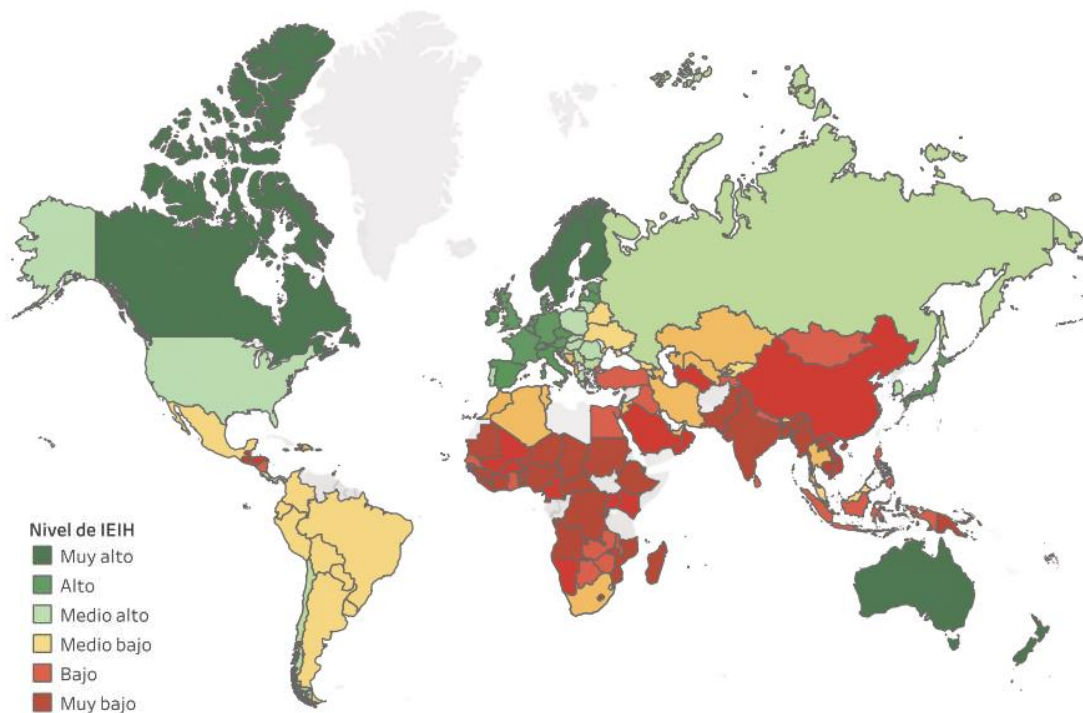
IEIH Comparisons 2017-2019

	2017	2019
Acceptable living conditions (high or very high)	14.8%	19.3%
Minimum living conditions (medium-high and medium-low medium)	28.6%	50.8%
Unacceptable living conditions	56.6%	29.9%

Note. Increasing minimum living conditions in 2019 is due to China’s entry in this category. Despite 2019 report shows better results, it still means that 5.6 billion people around 85 countries lives under unacceptable living conditions. From “Índice de Ecología Integral Humanista (IEIH) 2021: Laudato Sí en retrospectiva 2011-2021 – Informe 2021”, by Universidad Católica de Costa Rica, p.8-9, Costa Rica: UCAT Editorial.

Figure 43

Map Result of IHEI 2021



Note. Based on (UCAT, 2022, p. 13).

As a result, development models do not find a balance between economic growth, people's well-being, and ecological sustainability. The countries with the highest performance are in

Europe and within the British community, where population density is lower, and income is higher. Developing countries have a double challenge of overcoming the social and environmental vulnerability along with the poor government administration of the last decades. The planet is a complex, unique, and integrated system, if its deterioration progresses the impact on life will be devastating and irreversible, without room for any type of development: economic, human, social. The global climate crisis is one of the greatest challenges.

2. Sumak Kawsay: a Kichwa neologism for a “Buen Vivir”, a modern approach

“Wawakunaka yurakunashna wiñan, alli wakichikpika alli wiñan, mana alli wakichikpika mana alli wiñankachu - It is often said that people grow like plants: if they have and adequate care, their growth and fruits are good; if they do not, then the fruits will not be satisfactory either] (Kowii, 2018, p. 442).

Sumak Kawsay⁵² or Buen Vivir⁵³ is an ancestral Andean conception of life that has remained in force in many indigenous communities until today. Sumak means ideal, beautiful, good, the fulfillment; and kawsay is life, referring to a dignified life, in harmony and balance with the universe and the human being. In short, the Sumak Kawsay means the fullness of life (Kowii, 2018). It represents a way of life based on the experiences of indigenous communities that live in harmony with nature -*Pachamama*-. This practice is nourished by daily practices, learnings, and the various ways of producing knowledge by these communities. It represents a worldview that has the community as the starting point and is based on coexistence in diversity (Acosta, 2012). To understand this concept, it is important to consider the importance of duality, places, nature, the universe, its knowledge regarding its energetic virtues, its cycles which are fundamental in the Andean people.

The conception that nature has life and that many of its elements are considered as the major gods of ancestral peoples, gave rise to nature being seen as sacred. In this dimension, development actions were restricted under the mandate to take from nature only what is needed and not abuse it. The Sumak Kawsay represents the actions and values of the Kichwa community [table 10] together with the principles that govern them and on which

⁵² In Aymara is known as *suma qamaña* and in Spanish *Vivir Bien*. Similar ideas (but not identically) exist within other indigenous peoples, e.g. the Mapuches (Chile), the Guarani (Bolivia and Paraguay), the Kuna (Panama), and the Achuar (Ecuadorian Amazon), but also in the Mayan tradition (Guatemala), in Chiapas (Mexico), among others (Acosta, 2018) (Acosta, 2018).

⁵³ *Buen Vivir* is an approach that has been roughly translated as ‘living in plenitude’, ‘living well’, ‘living fine’ or ‘good living’. For this research purposes the original Kichwa or Spanish word will be maintained.

all their work activities are carried out [figure 44]. Balance in its old form was essential to guarantee the integral well-being of the individual, the family, and the community (Kowii, 2018).

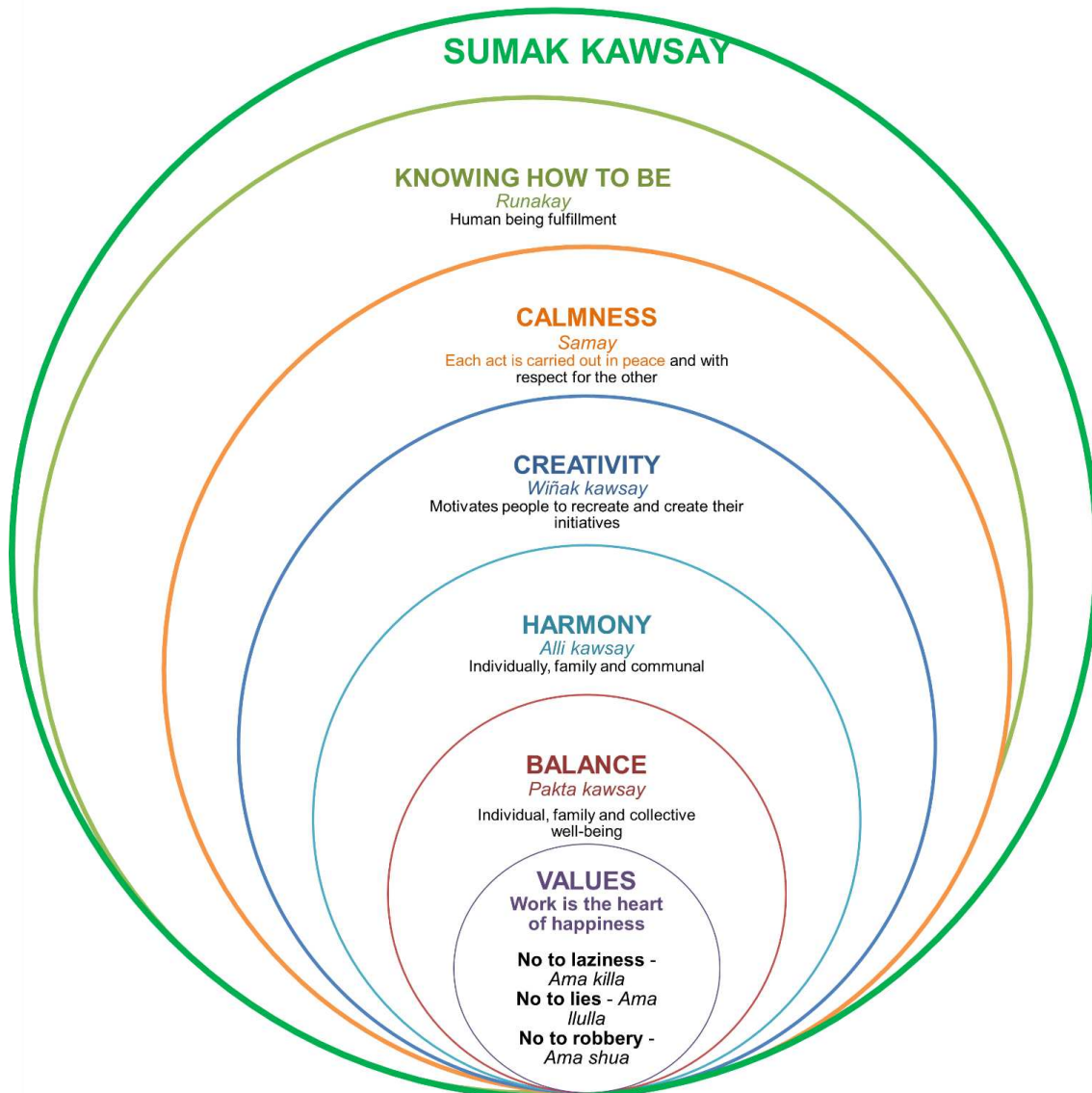
Table 10

Actions and values within Andean communities

KICHWA WORD	MEANING
Minka	It is the obligatory work that each ayllu must do to contribute to the communitarian interests and has a collective nature work. For example, the construction of an irrigation canal, a road, or a sacred building that benefits several communities.
Ayni	It is characterized by a sense of solidarity of the family and the community, consisting of specific tasks among the ayllus or among the members of the community. These tasks do not require long periods of time, e.g., a house roof, planting corn, etc. The ayni is governed by the principle of reciprocity – maki purarina.
Maki purarina	Maki-mano, purarina-to shake hands, is equivalent to reciprocity. It refers to the sense of solidarity that the members of an ayllu must express with their families and with the neighbors of the community. This principle helps to maintain the levels of communication and the interrelationship of the members of the community. This practice contributes to getting to know and recognize each other, so that people help each other or, know who lives around them.
Yanaparina	Solidarity as a fundamental value. The historical situation of the communities has motivated that under certain circumstances, they unite and strengthen the bonds of unit allowing the ayllus and its members to support each other and to overcome difficulties, achieve specific goals and benefit the whole community.

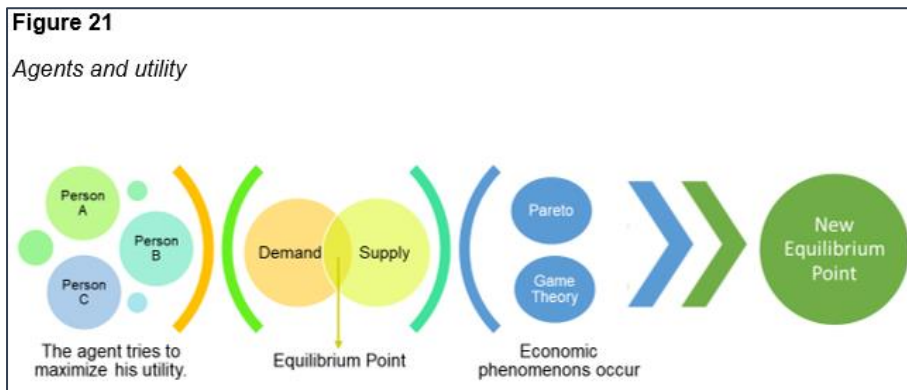
Note. Based on “EL SUMAK KAWSAY”, by Kowii, A., 2018, p.441, in “Antología del pensamiento crítico ecuatoriano contemporáneo”, CLACSO. Copyright 2018, by Consejo Latinoamericano de Ciencias Sociales.

Figure 44



Note. Principles were built according the studies developed by (Acosta, 2012, 2018; Kowii, 2018; Pilataxi & Ortiz, 2014).

Sumak Kawsay is not a new practice, many other philosophical approaches have been developed throughout time in other parts of the world like Ubuntu in Africa, Apargrama in India or even Aristotle good life idea. As mentioned on Chapter 1, current function of the contemporary world system is “under-developing”, as it is a system based on efficiency that tries to maximize results, reduce costs, and achieve capital accumulation (Tortosa, 2011, p. 54) [Figure 21, Chapter 1, section 1.2]. Thus, global crisis affecting the planet with disastrous consequences in social, environmental, and economic terms.



Dependency theory was the starting point to start questioning development and the worldwide effects on societies and at late 90s criticisms arise with more power. Within post-development debates, the efforts to rebuild and overcome the conceptual base, practices, institutions, and discourses of development multiplied. On one hand, are critics of development, and on the other, the search for alternatives to development such as the Sumak Kawsay or Buen Vivir [table 11] (Acosta, 2018). As a new approach it gains power at the beginning of XXI century within Andean countries as a new way to conceive development.

Sumak Kawsay was born from the life philosophy of indigenous societies; it seeks a different perspective from conventional development [common good as a starting point]. Ancestral and community knowledge represents the basis for the construction of an alternative path for societies to find harmony with nature, of which being human is a part and depends on it. This harmony does not imply a paradise without conflicts, since in human societies there will always be contradictions and tensions, even in their relationship with the natural environment (Villalba, 2013).

Sumak Kawsay continues to be a way of life in many indigenous communities that have not been fully absorbed by the current capitalist system. For this reason, it is conceived as an under-construction alternative that implies a richer, more complex vision that contemplates new forms of life. It is a holistic approach that seeks to understand the diversity of elements to which human actions -that promote Buen Vivir- are conditioned, such as knowledge, ethical and spiritual codes of conduct in relation to the environment, human values, vision of the future, among others (Vázquez, 2012).

Table 11

Modern Dualism and Sumak Kawsay Alternatives

Modernity Dualisms		Sumak Kawsay Alternatives	
Science	Ethics	Social Justice Recognition Redistribution	Recognize that people are diverse, with different moral, religious, and philosophical doctrines, situated in different socioeconomic conditions, and with unequal natural endowments. Incorporation of new subjects of rights.
Science	Other knowledge and myths	Cognitive Justice Ecology of knowledge	Social and ecological injustices, in addition to being interconnected, are linked to cognitive injustice. The dialogue of knowledge and the constituent power of the peoples proposes new horizons.
Human Being	Nature	Justice Territory Mother Earth	The biocentric perspective of justice that requires balanced and cooperative coexistence in the cosmic community unfolds. That is, an ecological balance.
Reasoning	Emotion	Culture of care	Harmony with nature, which implies emotional intelligence to act individually, within the community and in peace with the environment and nature.
Individual	Communal	Community Cooperative self-fulfillment Fraternity Remembrance Identity	Cooperation as the social essence of humanity. The principles of solidarity, reciprocity, plurality and complementarity between human beings and between them and nature.
Development	Underdevelopment	Decolonization Autonomy Sovereignty Post development	Sumak Kawsay as an alternative considering common good as the starting point.

Note. Table was build based on the work of (Gudynas, 2011; Gudynas & Acosta, 2011; Nova Laverde, 2018; Nussbaum, 2007).

Acosta (2018) present various economical aspects to be consider so that Sumak Kawsay can be applied in society: (i) economic growth cannot be the objective of an economy, (ii)

the decommodification of Nature -including CPR- as part of a conscious reunion with the environment, (iii) decentralization, (iv) equitable distribution of income and redistribution of wealth, and (v) democratization of the economy. This would allow the collective construction of an economy that allows Sumak Kawsay to infuse society.

This approach was incorporated into the political constitutions of Bolivia and Ecuador through the Rights of Nature as an opportunity to collectively generate new ways of life due to the negative effects that development has had in Latin America. One of the main objectives of this new relationship between the State and society this implied the construction of a new polycentric and horizontal institutionalality, which reconsiders in this transitional stage the role of state and community structures in the provision and management of community resources (Acosta, 2012).

Development is anthropocentric while Sumak Kawsay is cosmocentric. It invites us to rethink several concepts assumed as indisputable, starting with the traditional concept of progress and development, allowing us to imagine a different future, which can nourish global debates and create a different way of relating to each other and with nature.

3. The capability approach as a way to empower people.

[...] people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone” (UNDP, 2018, para. 8). “[Nowadays] Capabilities face more volatile futures while becoming ever more important for helping people navigate the systemic uncertainties of a new epoch (UNDP, 2022, p. 11).

During the past decade, new approaches that seek to measure people's well-being from a multidimensional view, beyond the economy, the market and production have emerged. One of them is the human development approach described in section 00, chapter 00; its main goal is human beings' freedoms and people's dignity. Freedom is linked to the maximum development of the individual potential which in turn will affect community and social issues. The human development approach is “of the people, for the people and through people” and aims to enhance what people is capable of doing and being, including their freedom.

Freedoms represent the way through the person chooses their purpose based on their own personal values and not through material goods or resources at their disposal. People are agents who must be actively involved in building their lives, not just be recipients of policies, benefits, or programs. That is when the concept of capacity arises, as a type of freedom

that, through different combinations, allows the person to develop despite the different existing lifestyles. (Picazzo Palencia et al., 2011).

The instrumental role of freedom refers to the way in which different types of rights and opportunities contribute to expanding the freedom of a human being, therefore, to foster development. The effectiveness of freedom as an instrument resides in the fact that the different types of freedom are interrelated, and one type of freedom can contribute extraordinarily to increase others (Sen, 2000, para. 56). Therefore, we must consider what it is intrinsically valuable for people not what it instrumentally valuable.

On one hand, the constitutive freedoms represent the basic individual freedom related to human life, the main goal of human development. These allow human beings to achieve a full life with quality. This implies that any development program must ensure the acquisition and expansion of freedoms, basic, social, and cultural capacities, and avoid basic deprivations that limit people's development. On the other hand, instrumental freedoms are opportunities and rights within the framework of economic, social, or political systems that depend on constitutive freedoms.

It is important to consider that when talking about options, these depend on relationships with other people, on the performance of the State and on institutions in general. In other words, the diverse conditions that the human being faces must seek access to opportunities influenced from social circumstances to public policies (Drèze & Sen, 2002). Sen's (2022) fundamental concern is that individuals can be able to live the kind of life they want. The essential criterion is freedom of choice and overcoming the obstacles that prevent the deployment of freedoms. For example, from having access to a quality education, decent employment to living all of this in a safe and peaceful environment⁵⁴.

A new theoretical idea beyond the accumulation of material assets/resources was introduced by Amartya Sen in 1979 to address inequality issues: the capability approach (CA)⁵⁵ “an intellectual discipline that gives a central role to the evaluation of a person’s achievements and freedoms in terms of his or her actual ability to do the different things a person has reason to value doing or being” (2009, p. 16). Later, in the report of the Commission on the Measurement of Economic Performance and Social Progress, Stiglitz, Sen and Fitoussi mentions:

⁵⁴ Cross reference: The last one is an aspect that has been highlighted in the latest HD report due to the psychosocial effects that the pandemic has had worldwide. See chapter 2, section 0, subsection 1.2.

⁵⁵ Do not confuse the terms with capability theory or capability application.

“Some of these capabilities may be quite elementary, such as being adequately nourished and escaping premature mortality, while others may be more complex, such as having the literacy required to participate actively in political life. The foundations of the capability approach, which has strong roots in philosophical notions of social justice, reflect a focus on human ends and on respecting the individual’s ability to pursue and realize the goals that he or she values; a rejection of the economic model of individuals acting to maximize their self-interest heedless of relationships and emotions; an emphasis on the complementarities between various capabilities; and a recognition of human diversity, which draws attention to the role played by ethical principles in the design of the good society” (2008, p. 42).

The concept not only implies the capability of the people in matters of health, education, work, among others, but also the real freedom each human being has in order to do all those things that are directly related to their wellbeing [figure 45] (Robeyns, 2018). Therefore, it is related to human development because it focuses on aspects about the quality of life of people including public health, environmental protection, sustainability, education, welfare, public policies, among others.

CA “is generally understood as a conceptual framework for a range of evaluative exercises, including most prominently the following: (i) the assessment of individual levels of achieved wellbeing and wellbeing freedom; (ii) the evaluation and assessment of social arrangements or institutions; and (iii) the design of policies and other forms of social change in society” (Robeyns, 2017, pp. 23–24). The CA has shown several advantages:

- Focuses on different dimensions of human development to know their overall satisfaction with their lives.
- Considers not only what people can enjoy but also what people can do.
- Cares about people’s real freedom.
- It can be an alternative for other approaches like happiness approach, resource-based theories of justice.
- Application in other fields such as public health, development ethics, environmental protection, among others.
- Gives a new way to evaluate individuals and societies lives.
- Considers many disciplines perspectives and create an interdisciplinary common language for scholars.
- Can give policy makers a broaden view on how human beings are interacting in society, within their communities and governmental support.

Figure 45

Capability Approach key concepts



Note. Capabilities as freedoms means that the real exercising of freedom is the standpoint to understand all social dynamics including economics, development, well-being. This means individuals choosing freely from traditions to aspects such as their lifestyle. In relation to the justice, this notion helps to the creation of conditions -social, economic, political- that will allow to exercise their freedom, including aspects such as healthcare systems, access to education, social security, work, among other. Open impartiality makes reference to the sense of identity that crosses national borders, because actions taken place in a country can affect other countries seriously (Conili, 2013).

As mentioned in section 1 above, the classical ranking of countries based on the GDP is quite different from the one based on the functioning's, therefore higher GNP per capita is no equal to higher living standards. This means that income-based metrics do not provide deep information on people's life and wellbeing. For example, India's GDP compared to China's is low, but for example in terms of higher education has a better performance than China (Robeyns, 2017). Dréze and Sen (2002, 2013) studied development policies in India

using the capability approach and in one section made a comparison of the world's sixteen poorest countries outside Sub-Saharan Africa [table 12].

For instance, the CA has been very helpful while analyzing gender inequalities, giving important information that is not provided income-based metric does not consider. However, it does not ignore the importance of having data collected based on GDP, it highlights the importance of considering other elements that affect the human development and allow a deeper understanding of the situation inside countries and among countries.

As mentioned on the present chapter 2, section 1.2, the HD Report 2020-2021 pointed out the psychological effects of the world pandemic. As a result, mental distress can constitute an obstacle to human development and calls on governments and institutions to pay special attention to this issue and take actions to prevent this situation to build psychological resilience within society [figure 46].

Table 12*World's sixteen poorest countries outside Sub-Saharan Africa*

	India	Average for others poorest countries	India's rank among 16 poorest countries
GDP per capita, 2011 (PPP Constant 2005 international \$)	3,203	2,112	1
Life expectancy at birth, 2011 (years)	65	67	9
Infant mortality rate, 2011 (per 1,000 live births)	47	45	10
Under-5 mortality rate, 2011 (per 1,000 live births)	61	56	10
Total fertility rate, 2011 (children per woman)	2.6	2.9	7
Access to improved sanitation, 2010 (%)	34	57	13
Mean years of schooling, age 25+, 2011	4.4	5.0	11
Literacy rate, age 14–15 years, 2010 (%)			
Male	74	79	11
Female	88	85	9

Chapter 2: the Common Good as a starting point

Proportion of children below 5 years who are undernourished 2006–2010 (%)

Underweight	43	30	15
Stunted	48	41	13

Child immunization rates, 2011 (%)

DPT [now DTaP]	72	88	213
Measles	74	87	11

Note. Reprinted from “An uncertain glory: India and its contradictions”, by Drèze, J. & Sen, A., 2013, p. 47, New Jersey: Princeton University Press.

Figure 46

Capabilities for people and policymakers



Note. Based on the information provided in the “Human Development Report 2021/2022: Uncertain time, unsettled lives, shaping our future in a transforming world”, by UNDP, 2022, p.196-197, New York: United Nations Development Programme. Copyright 2022 by the United Nations Development Programme.

3.1. Tracing the capability approach and understanding its roots

Authors and scholar across social sciences and humanities have put special attention to the idea of justice, humans' development, and their well-being [table 13]. To achieve this last one people enjoying their freedom are able to do and to be, building the kind of life they can lead.

All authors and their schools of thought were committed to freedom with effective guarantees – capabilities as freedom [see Figure 46 above]. Capability Approach's connection with Aristotle refers to the human good which implies making sure that all men can function. Aristotle numbers a list of functionings that contribute to human good living and talks about *dynamis* a Greek work that can be interpreted as the “capability of existing

or acting”. CA highlights the importance of substantive freedoms and the effective power a person must decide, in other words, being able to dispose. So it is not only about choosing the life someone wants, but also *dynamis* (Conili, 2013, p. 663). Therefore, functionings in Sen’s approach have roots on Aristotle theory.

Table 13

Tracing aspects of the capability approach

AUTHOR	APPROACH
Aristotle	Good Life or eudaimonia, the idea that humans want to have a happy, meaningful, fulfilling, and worth existence. For Aristotle this means to behave ethical in every action; nurture mind body, and the spirit; be coherent with values and moral beliefs. Every aspect is interconnected so each person is responsible for building their Good Life.
Thomas Aquinas	Associated happiness with human flourishing. Happiness was considered the perfect virtue, characteristic of the human being in a complete life. Wisdom came from the divine perspective, as given by God. When living in society, justice [commutative and distributive] and truthfulness is essential as they generate trust and foster peace, harmony, and healthy environments to life in.
Salamanca School	Natural equal liberty among all people, intended to be universal in scope and contribute with people’s dignity. This implied a set of human rights that later was deepened with the <i>ius gentium</i> or rights of people which some authors argue that includes free movement of people and freedom of trade and commerce.
David Hume	Proposes a system where natural liberty is present within individuals’ interactions. Their motivations and desires to have a better life condition and achieve their goals is what generates the labor division and commercial market.
Adam Smith	Men [human beings] seek for wealth, honor, and according to their preferences will work as hard as possible, giving every effort and putting all his energy to accomplish that. But it is not admissible a violation of fair play. He believed that humans were self-interested and self-centered but

at the same time not destined to that. Social interaction and human nature create virtues, all of them part of a system that has its own laws.

Immanuel Kant	Human development and human history are a story with no end, nevertheless achieving freedom is a never-ending process. Culture and arts are result of nature, both helps to build rights and freedoms between the people.
Karl Marx	From each according to his ability, to each according to his needs as a defense of positive freedom. The exercise of liberty should not harm anyone else. Societies should encourage human flourishing -development-, for example “in a communist society, there are no painters but those who engage in painting among other activities” (Corlett, 2013, p. 469).
Fridolin Utz	Economic main goal is to provide the material well-being for individuals part of a society. It should be measure based on the essential ends of man, considering basic economic principle of resources scarcity and the importance of a sustainable relation with the environment.
Rawls	Equal liberty for everyone
Martha Nussbaum	The Theory of Social Justice

Note. Thomas Aquinas uses the word flourish in reference to human development and well-being. Information from several authors (Álvarez Londoño, 2006; Aristotle, 2004; Luetge, 2013).

Development as Freedom is considered as Sen’s (2001) economic thoughts with other theories. With Adam Smith, the CA is linked to the idea that people need basic abilities to appear in public and participate in community activities. Karl Marx and the issues on real needs and conditions of life. From a Kantian perspective [Immanuel Kant] the importance of intrinsic value and effective power -freedoms-.

John Rawls theory of the social primary goods have been criticized by Sen because it does not consider human’s diversity, so the scope and theoretical aims are not the same. Capability metric is a general metric of well-being and freedom, whereas the social primary goods metric emerges as one element of an integral and complex theory of institutional

justice (Robeyns, 2018, p. 116) . Sen (2002) believes that people despite having different cultural backgrounds share common values as a baseline for common commitments [figure 47].

Figure 47

The main modes of capability analysis

Epistemic goal	Methodology/discipline	Role of functionings and capabilities	Examples
Normative theories (of particular values), e.g. theories of justice, human rights, wellbeing, sustainability, efficiency, etc.	Philosophy, in particular ethics and normative political philosophy.	The metric/currency in the interpersonal comparisons of advantage that are entailed in the value that is being analysed.	Sen 1993b; Anand and Sen 1994; Crabtree 2012, 2013; Lessmann and Rauschmayer 2013; Robeyns 2016c; Nussbaum 1992, 1997; Nussbaum 2000; Nussbaum 2006b; Wolff and De-Shalit 2007.
Normative applied analysis, including policy design.	Applied ethics (e.g. medical ethics, bio-ethics, economic ethics, development ethics etc.) and normative strands in the social sciences.	A metric of individual advantage that is part of the applied normative analysis.	Alkire 2002; Robeyns 2003; Canoy, Lerais and Schokkaert 2010; Holland 2014; Ibrahim 2017.
Welfare/quality of life measurement.	Quantitative empirical strands within various social sciences.	Social indicators.	Kynch and Sen 1983; Sen 1985a; Kuklys 2005; Alkire and Foster 2011; Alkire et al. 2015; Chiappero-Martinetti 2000.
Thick description/descriptive analysis.	Qualitative empirical strands within various humanities and social sciences.	Elements of a narrative.	Unterhalter 2003b; Conradie 2013.
Understanding the nature of certain ideas, practices, notions (other than the values in the normative theories).	Conceptual analysis.	Used as part of the conceptualisation of the idea or notion.	Sen 1993b; Robeyns 2006c; Wigley and Akkoyunlu-Wigley 2006; van Hees 2013.
[Other goals?]	[Other methods?]	[Other roles?]	[Other studies may be available/ are needed.]

Note. Reprinted from “Wellbeing, Freedom and Social Justice: The Capability Approach Re-Examined”, by Robeyns, I., 2017, p. 32. Cambridge: OpenBook Publishers. Copyright 2017, by Ingrid Robeyns.

Sen with the CA also propose the rationality of freedom, where human behaviors and judgements -to do and to be- questions Economic Rationality⁵⁶ [see chapter 1, section 1.3] and overcomes the utilitarian approach giving space to evaluate plurality and diversity, which are essential elements of interpersonal and social relationships within societies.

⁵⁶ Agents make decisions based on rationality, but it does not considers “the decisive importance of information bases of the different types of evaluative rationality which come into play in the different approaches: for example, in the egalitarian one (focusing on the lack of income), the utilitarian one (focusing on measuring pleasure), and that of the quality of life (focusing on the types of life that each of the three persons can lead) (Luetge, 2013, p. 672).

Capability approach has spread worldwide and have been applied by many authors giving roles to capabilities and functioning. Many worldwide initiatives use the capability approach, for example, the UNDP with the HDI; the Better Life Initiative by OECD; French Government Commission on the Measurement of Economic Performance and Social Progress; Multidimensional Poverty Index lead by Sabina Alkire and James Foster; Higher Education Capability (HEC) in Australia and New Zealand; among others (Alkire & Deneulin, 2009; Minniti, 2012; Stephenson, 1998; Stiglitz et al., 2008; UNDP, 2018).

In outline, the capability approach has given way to a new economic and social paradigm. The key lies in the development of people's capacities through highly valued activities that contribute to their well-being [functioning], the freedom to carry out these activities [capability] and the ability to achieve goals and be agents of action and change in their environments [agency] (Nussbaum & Sen, 2009, p. 31).

3.2. Nussbaum's Capabilities: list and types

Martha's Nussbaum work is situated in continuity with the classical approaches of Aristotle. She elaborates a political theory connected to ethics with a special emphasis on human capacities to better understand the notion of what it means to live well. She focuses on the notion of individual human dignity and shows through the research a series of capacities or functions that occur in all cultures and can be used to define our common humanity. This set of characteristics assumes that human life has certain central defining features (Nussbaum, 2012). As she mentions:

"The approach takes each person as a goal, asking not just about the total or average well-being but about the opportunities available to each person. It is focused on choice or freedom, holding that the crucial good societies should be promoting for their people is a set of opportunities, or substantial freedoms, which people then may or may not exercise in action: the choice is theirs. It thus commits itself to respect for people's power of self-definition" (Nussbaum, 2011, p. 18).

Nussbaum together with Sen have worked closely in the capability approach. One of their main works is the book *Quality of Life*. In contrast to Nussbaum, Sen refuses to list capabilities as he notes that communities should freely define by themselves without a particular conception of the good life as it responds to the context, culture, and other factors⁵⁷ (Robeyns & Byskov, 2021). The existence of basic capacities not only requires a

⁵⁷ The commons will be address on the following section, were one of the patterns is creating together. See section 0 of this chapter.

basic regulatory framework of law that provides a common language, since as human beings we live in society and community; but also implies rights and responsibilities:

- Belonging to any social group imposes duties or obligations.
- Ascribing duties to a person presuppose that he is capable of performing them.
- The attribution of a duty entails that the holder of the same has the right to the satisfaction of the need required to allow him to assume this same duty. It is not coherent for a social group to impose responsibilities on a person without ensuring that he has the resources and competencies to fulfill these responsibilities.
- When the social group is large, this entails similar obligations for foreigners, whose needs we are not direct witnesses, nor are capable of individually satisfying them. For this reason, support measures are required to ensure that the needs of foreigners are met. For Nussbaum, only the State can guarantee solid rights of this type, although this does not require that it directly supply the satisfying elements (Gough, 2007, pp. 181–182).

Nussbaum affirms that listing capabilities [table 14]. respond to human dignity and for research matters they will be presented for a better understanding of the CA and makes a diction between three types of capabilities for its applicability [figure 48].

Table 14

Nussbaum's List of Essential Capabilities

CAPABILITY	DESCRIPTION
Life.	Being able to live a human life of normal length, which means not dying prematurely or before life is reduced to something not worth living.
Bodily health.	Being able to enjoy good health, including reproductive health, be adequately nourished, and have adequate housing.
Bodily integrity	Being able to move freely from one place to another including being able to be safe from assaults, such as sexual violence, child sexual abuse and gender violence; having opportunities to enjoy sexual satisfaction and reproductive choice
Senses, imagination and thought	(i) Being able to use the senses, to imagine, think and reason; to be able to do these things in a truly human way: informed and cultivated thanks to an adequate education which includes -but is not limited to- literacy, basic mathematical and scientific training. (ii) Being

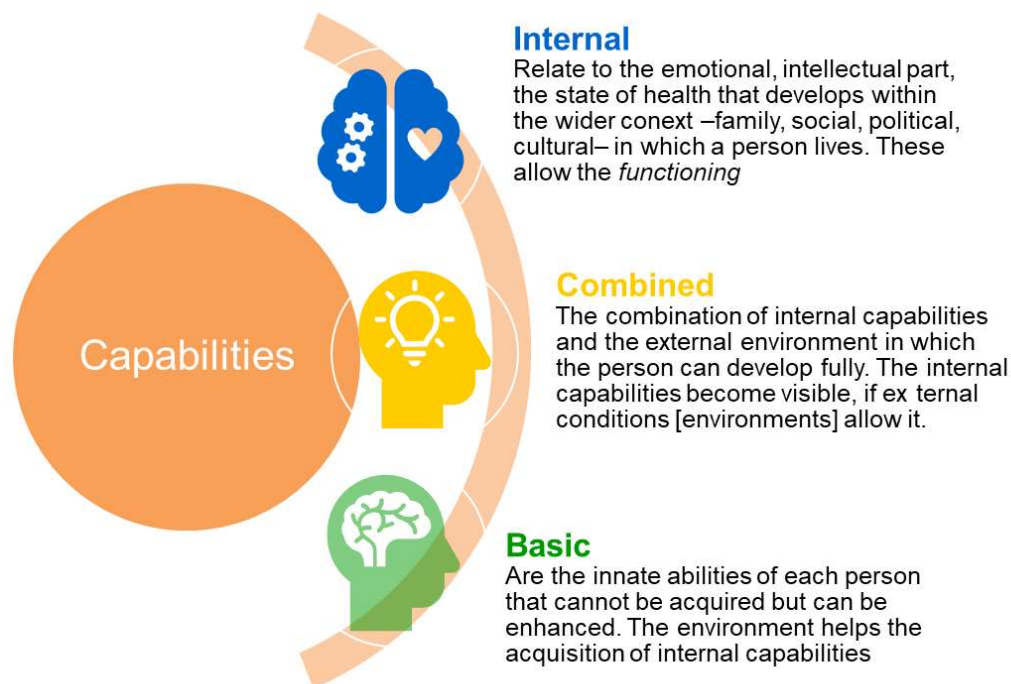
	able to make use of imagination and thought to be able to experiment and produce self-expressive works, in addition to participating in personally chosen events, whether religious, literary, musical, among others. (iii) Being able to use the mind in accordance with the guarantees of freedom of expression, with respect to political, artistic, and religious expression. Being able to search for the meaning of life individually. Being able to enjoy pleasurable experiences and avoid unnecessary harm.
Emotions.	Being able to have affective ties with things and people outside of ourselves; to love those who love and care for us and feel sorry for their absence. In general, loving, feeling sorry, longing, grateful and experiencing justified anger. Being able to develop emotionally without being hampered by overwhelming fears and anxieties, or by traumatic cases of abuse or neglect. This promotes forms of human association that may be demonstrably essential to their development
Practical reason	Being able to form a concept of the good and initiate a critical reflection regarding the planning of life. This implies the protection of freedom of thought.
Membership.	(i) Being able to live with others and turn towards others, recognize, and show interest in other human beings and engage in various forms of social interaction. Being able to imagine the situation of the other and have compassion towards this situation; have the capacity for both justice and friendship. This implies protecting the institutions that constitute and nurture such forms of affiliation, as well as the freedom of assembly and political speech. (ii) Having the social bases of self-love and non-humiliation, being able to be treated as dignified beings whose value is identical to that of others. This implies, at a minimum, protection against discrimination based on race, sex, sexual orientation, religion, caste, ethnicity, or national origin.
Other species	Being able to live interested in and in relationship with animals, plants, and the world of nature.
Play	Being able to laugh, play and enjoy leisure activities.
Control over one's environment.	(i) Political: Being able to participate effectively in the political decisions that govern our lives; have the right to political participation along with the protection of

freedom of expression and association. (ii) Material: Being able to own property -both land and personal property- not only in a formal way, but in terms of a real opportunity; have property rights on an equal basis with others; have the right to seek employment under conditions

Note. Table was build based on “Creating Capabilities: The Human Development Approach” by Nussbaum, M., 2011, pp. 78-80., The Belknap Press of Harvard University Press. Capabilities will be further developed on section 0 of this chapter together with the patterns for the commons section 0.

Figure 48

Nussbaum´s Types of capabilities



Note. Bases on “Creare capacità. Liberarsi dalla dittatura del Pil”, by Nussbaum, M., 2012, pp. 18-31, Il Mulino.

3.3. Navigating a VUCA world through capabilities

As a brief introduction, the term VUCA was first mentioned in 1987, after Cold War ended, by Warren Bennis and Burt Nanus, lecturers at the United States Army War College. The world was facing a new geopolitical situation passing from a bipolar world order where the

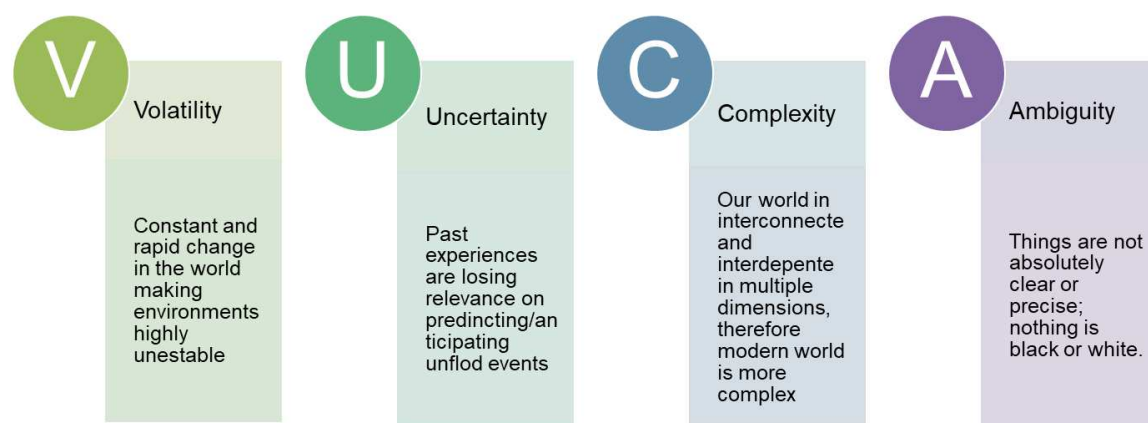
United States of America (USA) identify the Union of Soviet Socialist Republics (USSR) as the enemy and its disappearance caused a disorientation and the multilateral world become more complex (Deepti & Sinha, 2020).

In 2022 the term was developed in a more detail and precise way, introducing new ideas linked to strategic leadership, business, problem-solving approaches and how to manage them in everyday life. Challenges are faced in every situation, institution and level, therefore mental models and capabilities are needed to face the challenging world we live on (Bolman & Deal, 2015).

VUCA is the acronym use for “V” Volatile, “U” Uncertain, “C” Complex and “A” Ambiguous [figure 49; table 15]

Figure 49

VUCA for Volatile, Uncertain, Complex and Ambiguous



Note. Based on the information form Sinha & Sinha, 2020: p.18.

3.3.1. Volatility

“The quality or state of being likely to change suddenly, especially by becoming worse” (Cambridge University Press, 2022). Rapid and sudden changes make our environment highly unstable. Changes occur every day, everywhere and in all spheres and fields, ones can be predicted, others not so it has become difficult to be prepare under so many scenarios and possibilities. Therefore, volatility is a phenomenon occurring more frequently than in the past because the magnitude, speed, effect, and nature of events do not have a pattern that can be predicted. Plus, if digitalization, global competition, connectivity, and other drivers are added, turbulent scenarios are more likely to occur and its impact is not

Table 15

VUCA elements summary

	WHAT IT IS	AN EXAMPLE	RISK	HOW TO EFFECTIVELY ADDRESS IT
Volatility	Relatively unstable change; information is available and the situation is understandable, but change is frequent and sometimes unpredictable	Commodity pricing is often quite volatile; jet fuel costs, for instance, have been quite volatile in the 21st century.	<ul style="list-style-type: none"> - Outdated information - Too slow responses - Risk-aversion 	Agility is key to coping with volatility. Resources should be aggressively directed toward building slack and creating the potential for future flexibility.
Uncertainty	A lack of knowledge as to whether an event will have meaningful ramifications; cause and effect are understood, but it is unknown if an event will create significant change	Anti-terrorism initiatives are generally plagued with uncertainty; we understand many causes of terrorism, but not exactly when and how they could spur attacks.	<ul style="list-style-type: none"> - Incomplete information - Resort to what worked in the past 	Information is critical to reducing uncertainty. Firms should move beyond existing information sources to both gather new data and consider it from new perspectives
Complexity	Many interconnected parts forming an elaborate network of information and procedures; often multiform and convoluted, but not necessarily involving change.	Moving into foreign markets is frequently complex; doing business in new countries often involves navigating a complex web of tariffs,	<ul style="list-style-type: none"> - Analysis Paralysis - Address symptoms - Resort to short-term fixes and quick-wins 	Restructuring internal company operations to match the external complexity is the most effective and efficient way to address it. Firms should attempt to 'match' their own operations and processes

Ambiguity	A lack of knowledge as to ‘the basic rules of the game’; cause and effect are not understood and there is no precedent for making predictions as to what to expect.	laws, regulations, and logistics issues The transition from print to digital media has been very ambiguous; companies are still learning how customers will access and experience data and entertainment given new technologies	- Failure to understand the significance of events - Not taking appropriate actions - Misinterpretation	to mirror environmental complexities Experimentation is necessary for reducing ambiguity. Only through intelligent experimentation can firm leaders determine what strategies are and are not beneficial in situations where the former rules of business no longer apply.
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Note. Summary of the VUCA elements, conceptualization, risks and how to address them. Adapted from “What a difference a word makes: Understanding threats to performance in a VUCA world” by Bennett, N., & Lemoine, G. J., 2014, *Business Horizons*, 57(3), p. 313 (<https://doi.org/10.1016/j.bushor.2014.01.001>). Copyright 2014, by Kelley School of Business, Indiana University; and “Managing in a VUCA World: Possibilities and Pitfalls” by Deepti, S., & Sinha, S., 2020, *Journal of Technology Management for Growing Economies*, 11(1), p. 19. Published with open access at <https://tmg.chitkara.edu.in>. ISSN No.: 2456-3226.

only economic but also social, political, and cultural (Deepti & Sinha, 2020; Lawrence, 2013).

3.3.2. Uncertainty

“A situation in which something is not known, or something that is not known or certain” (Cambridge University Press, 2022). Uncertainty is more likely to happen on unstable environments and despite being in communication and information age, is complicated and complex to predict or anticipate events, scenarios or situations based on previous outcomes. As a result, rapid changing world is full of uncertainty and decision-making process is even more challenging (Deepti & Sinha, 2020).

3.3.3. Complexity

“The state of having many parts and being difficult to understand or find an answer to” (Cambridge University Press, 2022). Interdependence, interactions, and interconnectivity occurs in multiple dimensions, causing the modern world to become more complex every day. Various parameters and variables can interfere with events, situations, and scenarios, causing reaction and counter-reaction that did not occur in the past. So, any situation is complex by itself as it involves many causes, factors, actor, circumstances, if volatility and uncertainty is added to this, the situation is even more complex (Bennett & Lemoine, 2014).

3.3.4. Ambiguity

“[...] the fact of something having more than one possible meaning and therefore possibly causing confusion” (Cambridge University Press, 2022). In other words, is the lack of clarity about the causes, actors involved, reason, and how an event happen; the answers are unclear and ambiguous. Within the VUCA context, ambiguity makes it hard to conceptualize opportunities and threats, making difficult to accomplish goals for individuals, organizations, corporations, and many more actor in society (Korsakova, 2020).

People need to know how to act and enhance life skills to perform better under the VUCA world, personal, professional, and academic capabilities are needed and highly demanded. Times are unpredictable and the most recent example is the world pandemic that started on 2020 and established a new normal, making more visible VUCA’s meaning and undeniable presence. As a result, these changes promote the emergence of new technology and models that help people, institutions, and governments to face those challenges (Bennett & Lemoine, 2014).

Whenever civilization has gone through one of these disruptive, dislocating technical revolutions [...] the whole world has changed in profound way. [...] But there is something different about the flattening of the world that is going to be

qualitatively different from other such profound changes: the speed and breadth with which it is taking hold. This flattening process is happening at warp speed and directly or indirectly touching a lot more people on the planet at once. The faster and broader this transition to a new era, the more likely is the potential of disruption. Thomas Friedman on (Lawrence, 2013, p. 2).

VUCA has also been perceived as an opportunity in different fields to discover, reimagine, and be creative to respond to present challenges. Consequently, changing world, modern societies and new normal requires leadership agility, adaptability and thinking skills. In these means, many organizations, and corporations around the world [figure 50] have been working to promote capabilities and skills within their leaders, coworkers, and employees to have better results and be aware of external and internal situations to perform better in VUCA environments.

Figure 50

Unilever and VUCA's principles application example

Company Spotlight: Unilever

In 2010, Unilever, one of the world's largest consumer goods companies, pledged to double the size of their business in the next 10 years while reducing its environmental footprint and increasing its social impact. Sustainability became a central component of their new business model, one based on VUCA principles. When asked by *Forbes* contributor Avi Dan why they changed their business model, Keith Weed, chief marketing and communication officer for Unilever, responded:

"We look at the world through a lens, which we call VUCA, which stands for 'Volatile, Unstable, Complex, and Ambiguous.' So you can say, 'It's a very tough world,' or you can say, 'It's a world that's changing fast, and we can help consumers navigate through it.' Two-and-a-half billion more people will be added to the planet between now and 2050, of which 2 billion will be added in developing countries. The digital revolution, the shift in consumer spending, all this suggests that companies have to reinvent the way they do business." (Dan, 2012.)

To meet that VUCA challenge, Unilever has also changed its leadership development model.



Source: Sullivan, 2012 January.

Note. Example of a multinational company that has incorporated VUCA principles in their strategy. Reprinted from “Developing Leaders in a Business”, by Lawrence, K., 2013, p.15, *UNC Executive Development*. Copyright 2013, by UNC Executive Development.

Change and diverse impact surrounds organizations and many other environments. As a consequence, constantly more challenges are faced which requires not only a faster response but also and effective one. Organizational Culture is a key aspect to perform in a VUCA world, in this context, rewards for agile employees is a strategy that has been use within organizations to motivate individuals to develop skills and abilities -capabilities- [figure 51]. Rewards can be from perks, additional compensation, promotions, preferred work assignments and many other depending on the organization and the needs (Horney et al., 2010; Lawrence, 2013) (Horney et al., 2010; Lawrence, 2013). This requires dynamic and flexible environment so people can develop and enhance their capabilities to respond to VUCA world challenges.

Figure 51

Leadership skills



Note. Based on “Developing Leaders in a Business”, by Lawrence, K., 2013, p.6-7, *UNC Executive Development*. Copyright 2013, by UNC Executive Development.

4. The development from the common perspective⁵⁸

Rationality and culture are two of the main characteristics that differentiate the human being from any other species. In the previous chapter, the impact of these practices in the economic sphere was addressed through the assumption of the rationality of individuals. However, they have also influenced other areas such as Law because custom is a source of International Law (Álvarez Londoño, 2006), which has adopted these historical cultural practices in the relations between territories and civilizations, adapting them to the current context.

For research purposes, it is important to understand the concepts on which the common is built; from understanding it as a living social system, where human beings address common problems in a self-managed manner. Emphasis is placed through a focus on relationships and systems, not just isolated concepts that are concerned with the individual and objects [table 16].

Table 16

Common concepts and meaning

TERMS	CONCEPT
Common goods	In neoclassical economy, it is used to refer a type of good that is nonexcludable; therefore, difficult to fence off, and to use because it generates rivalry. This means common goods have been studied as suitable or not for market valuation or trade.
Common-pool resources (CPRs)	Under the theory developed by Ostrom, CPRs are considered shared resources -such as fishing grounds, grazing areas, groundwater- and how people can use and manage them without exploitation.
Common property	Is the law system that grants formal rights to the access or use of resources and regulates how it will be used. It is a common property regime.
The Common[s]	In one hand, traditionalist use the term the common to refer to shared land or water. On the other, theorists like Negri and Hardt (2009) refer to social processes where people cooperate, differing from just a physical resource;

⁵⁸ The following section 4 from chapter 2 is based on the work developed by Silke Helfrich and David Bollier

	similarly to the word “commoning” used by Helfrich and Bollier (2015).
The common good	<p>It has been used since ancient Greece to refer to positive results for all the people in society. Since then, one of the functions of the State is to produce the greatest benefit for all. For the Andeans, farm and grazing land, water, among others, were managed as common goods.</p> <p>From the social doctrine of the Church, it is “the sum of those conditions of social life which allow social groups and their individual members relatively thorough and ready access to their own fulfillment; today, it takes on an increasingly universal complexion and consequently involves rights and duties with respect to the whole human race. Every social group must take account of the needs and legitimate aspirations of other groups, and even of the general welfare of the entire human family” (Pope Paul VI, 1965, para. 26).</p>
Community	Is considered a group of people that share common characteristics that could be culture, identity, territory, interests, goals. For many authors is a “meaningful form of social and moral association” (Murray G., 1995, p. 4)
Commune	The central foundations of the commune are around the resource management and the organization of power. Economic management and political management are the center of community interests, and the logic is not profit, but service.
Public good	A public good, from the legal point of view, is one that belongs to or is provided by the state through all those organizations that are part of the public sector. In the economic discipline, it is understood as a good that is available to all and whose use by one person does not subtract from the use of others (E. Ostrom, 2011).

Notes. Table was built based on the work of several authors (Bollier & Helfrich, 2012; Hardt & Negri, 2009; Murray G., 1995; E. Ostrom, 2011; Patzi Paco, 2009).

From the first traces of human settlements until present time, communities invent artifacts and behavioral practices that allow them to inhabit that environment. With the passing of time, these practices are improved, and new generations are learning a perfected version. Along with this, the human being creates social institutions guided by norms and rules. These are mutually recognized by human beings and sanctions are applied for non-compliance. For example, populations that live in extreme climatic conditions like the Arctic, the indigenous people build igloos, hunt whales in kayaks and continue to use the bow and arrow. There are the two fundamental characteristics of culture artifacts and institutions.

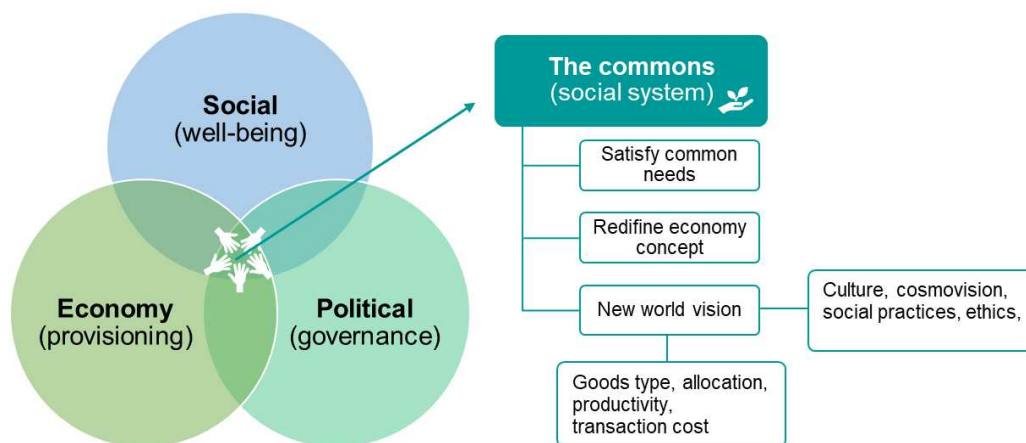
Culture is a bond that through identity, make people cooperate and contribute to common goals. For this reason, many theorists consider that cooperative abilities and motivations are exclusive characteristics of human beings; such as the theory of shared intentionality that describes the ability to generate joint intentions and commitments with other people (Bratman, 1992; Gilbert, 1992; Searle, 1995). For example, historically, teaching has been one of the ways by which an individual donates her information for use by others.

Many theorists in different fields, including economics, have paid special attention to cooperative behavior. Rousseau and his postulate that human beings are helpful by nature and then society corrupts them. Also, the inverse of Hobbes, who said that individuals are selfish, but in society they are prosecuted by seeking what is common. Regardless of the moment, they agree that human beings can experience cooperation by nature or with a common goal within life in society (Helfrich & Bollier, 2020).

In this sense, the common good as a starting point implies remembering the power of cooperation, the search for collective well-being through organized action, paying attention to living social systems, and the value of resources [figure 52].

Figure 52

The commons as a social system



4.1. Social life and wellbeing in the common's society

It has been mentioned that human beings are social by nature, for this reason the social life and well-being of people are analyzed within the relationships between them. By analyzing hundreds of cases around the world, Helfrich and Bollier (2015) identified patterns that allow a better understanding of this phenomenon, developing new ways of living, sustaining and governing. The ability to change towards the common implies specific ways of sharing, cooperating, and interrelating with others. Faced with a capitalist model that starts from the assumption that human beings are selfish, individualistic, and utilitarian by nature -homo economicus-, new patterns of behavior towards the common are proposed [figure 53]

Figure 53

Patterns for “the social” emergence



Note. Based on “Libres, dignos, vivos” by Helfrich, S. & Bollier, D., 2020, p. 121. Barcelona: Icaria Editorial. Copyright 2020, by David Bollier & Silke Helfrich

4.1.1. Cultivate shared purposes and values

They arise when there is a connection between people based on enthusiasm and commitment. Purposes and values are derived after a process of aligning the diversity that exists. Values are not imposed or proclaimed, but built organically, through collective reflection, participation, traditions. Mutual commitments are reinforced, and it is a process that takes time so the question is: what can be done with what we have now? Later in chapter 4, StartUPS project at Politecnica Salesiana University will be analyzed.

4.1.2. Ritualize Togetherness

Rituals must be woven into everyday life as they involve meeting frequently, sharing profound experiences, celebrating achievements, admitting failures, etc. It is a daily action impregnated in the community. Hackathons are a good example of rituals because people gather to program for hours in a row. See chapter 4, section 0 examples of this activities will be shown in a university environment.

4.1.3. Contribute Freely

Its' essence lies in sharing and distributing, because people give without expecting a retribution; and receive without that impulse to reciprocate directly. The motivations are diverse and stem from the sense of belonging to that community. Like everything, it depends on the circumstances and does not imply giving unconditionally and perpetually. Contributions are voluntary and consensual, depending on different factors such as socioeconomic status, custom, commitment, trust, level of participation, among others. However, in essence, it is not coercive, but rather free and voluntary. Within university environments, there are many students' that volunteer in events and activities even though they are busy during weekends [see chapter 4, section 0].

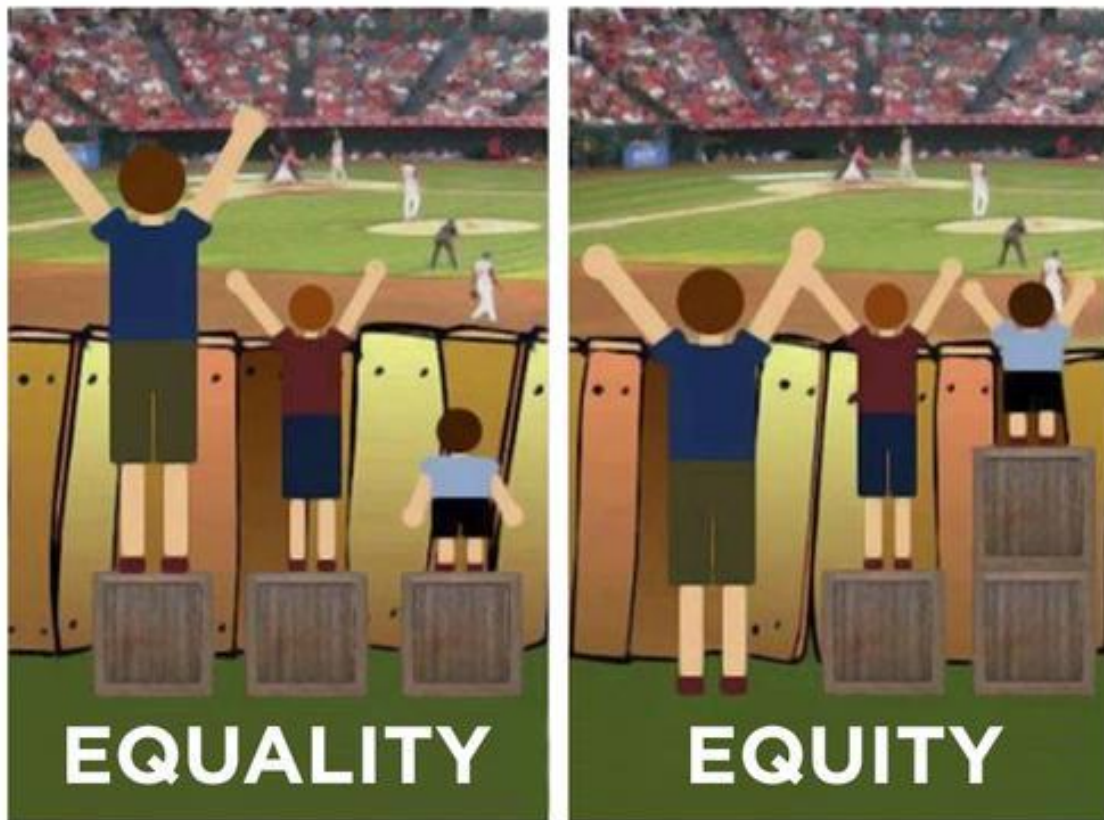
4.1.4. Practice Gentle Reciprocity

In the market economy, individuals negotiate to obtain the maximum personal benefit in each exchange relationship. The commons practice a social exchange based on the reciprocity of people. It is based on equity, since it is sought that all needs have been met and covered, considering the rights of all participants and an equivalent contribution without coercion [figure 54].

Later, chapter 5, section 0 will describe how entrepreneurs at UPS practice gentle reciprocity when they help each other to expand their businesses without expecting anything in return, only offering their talents to service others.

Figure 54

Equality vs Equity



Note. This Photo by Unknown Author is licensed under CC BY-NC⁵⁹

4.1.5. Trust Situated Knowing

Part of the tacit knowledge, which is neither conscious nor cognitive, constitute new forms of knowledge -such as intuition, feelings, knowledge, the unconscious, historical experience, the body-. It is a form of collective consciousness that is achieved through experience. This is the result of action and experience (Polanyi, 2015) because people know more than what they can express. Example: knowledge management at the university.

4.1.6. Deepen Communion with Nature

“Our connection with nature is so deep and existential that both our feelings and our inner life bear the imprint of the outside world. Organisms perceive

⁵⁹ Source: <https://www.philippinesbasiceducation.us/2016/02/equality-equity-and-reality.html> under the licence <https://creativecommons.org/licenses/by-nc/3.0/>

themselves as physical matter through their emotions, which are largely the drama of bio poetic relationships between living beings” (Helfrich & Bollier, 2020, p. 131).

The world we inhabit has a natural bio wealth, so we must live in communion with nature, know the natural systems, health, or danger fins. It is necessary to establish an active relationship with nature, interact responsibly, work for conservation and restoration. This does not necessarily imply sustainable policies, but rather, that we be conscious users in our way of interrelating with nature.

4.1.7. Preserve Relationships in Addressing Conflicts

Being social beings and living in society, conflict is inevitable as a result from coexistence, power relations and behaviors. Having clear rules and regulations through gradual sanctions allows the conflict to be addressed in a context of trust and honesty. Everyone should have the right to be heard, testify, and to propose changes. The final goal is to recognize, rectify and respect the dignity of the affected person. This promotes a collective morale and an honest environment.

4.1.8. Reflect on Your Peer Governance

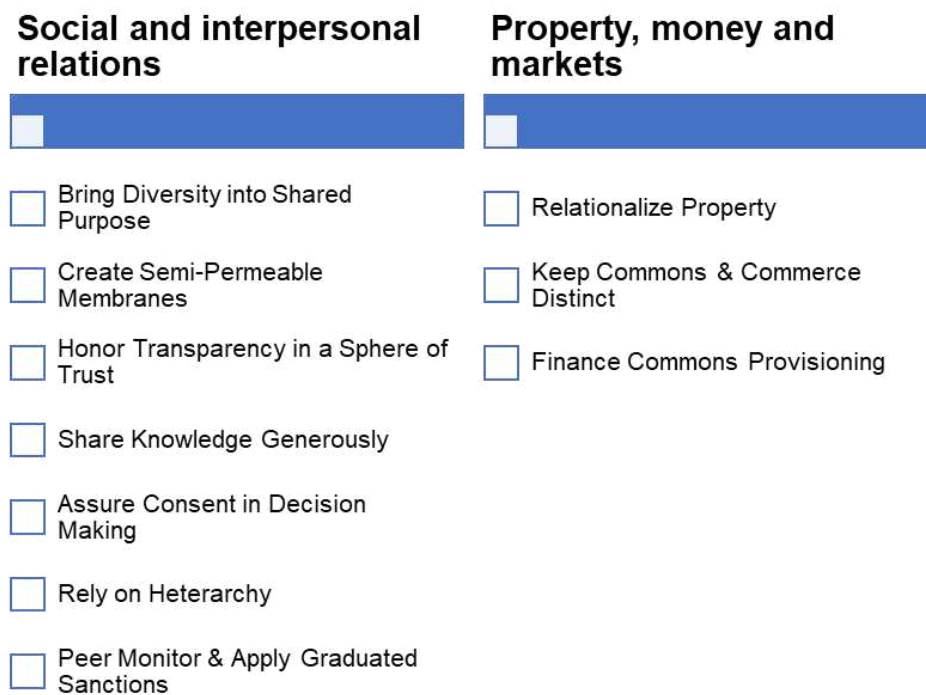
Invites to a conscious and permanent dialogue about the common, social dynamics, values, in order to protect the integrity of the commons. Governance makes it possible to generate solid structures, the foundations of law, common policies, infrastructure, and associations with social and interpersonal relationships as their starting point. This concept will be deepened in the following section 1.2.

4.2. Governance within the commons

Governance relates to the idea that collective interests prevail over individual freedom, in a process in which individual needs are understood and addressed within collective needs. It implies that the relationship between authority, power, and responsibility, are developed in a constant dialogue, coordination, and self-management. The authors have identified ten patterns that help understand governance; considering that it is necessary to respond in a flexible way since we live in dynamic systems. The first seven have to do with social and interpersonal relationships, while the last three cover property, money, and the market [figure 55]. Governance, social practices, and culture, play an essential and permanent role in any system.

Figure 55

Patterns to understand governance



Note. Based on “Libres, dignos, vivos” by Helfrich, S. & Bollier, D., 2020, p. 121. Barcelona: Icaria Editorial. Copyright 2020, by David Bollier & Silkie Helfrich

4.2.1. Bring Diversity into Shared Purpose

Reality is diverse because human beings are part of a community and have their own ideas, motivations and personalities that can converge and generate social ties over time. It is an environment where individuality is respected while an ethic of solidarity is forged. Diversity enriches the group, and the process is easier when people live in a shared space. For instance, Coworking spaces at Politecnica Salesiana University, chapter 4.

4.2.2. Create Semi-Permeable Membranes

The analogy of the blood-brain barrier and the function it fulfills within the body helps to illustrate this pattern. It separates the blood from the cerebrospinal fluid of the central nervous system, allowing water, some gases, and fat-soluble molecules to pass. Also, it selectively transports molecules such as glucose or amino acids that are essential for neural function and blocks the passage of possible neurotoxins to the brain. In the same way, when talking about the commons, the semi-permeable membrane refers to the importance of limits setting, restrictions delineating to the resources system, membership, and social system protection from external threats. It does not deny the external and its importance but seeks to protect it.

4.2.3. Honor Transparency in a Sphere of Trust

Real transparency involves being vulnerable and sharing genuine feelings; it should feel, not just organize. It implies that there are roles, formal rules and legal norms in an environment of solid trust, with an open attitude from its members.

4.2.4. Share Knowledge Generously

Sharing knowledge is one of the most important patterns when talking about the commons, since it is a generative process that gives rise to social systems. Sharing can be considered a natural condition of human life and occurs in places such as assemblies or meetings where bonds are strengthened, and knowledge is exchanged. For this reason, it is important to meet, share information and decisions, encourage work, and promote responsibility.

4.2.5. Assure Consent in Decision Making

The rules must be developed in common and those involved can actively participate in modifying them. The methods adopted can be diverse but need to promote collaborative proposals. Consent and common criteria are required within the decision-making processes, so that individual decisions are delegated to common criteria. This opens the doors to flexibility and trust, empowering individuals to draw their own conclusions in any given situation.

4.2.6. Rely on Heterarchy

Heterarchies allow the commons to work dynamically. Each person decides their way of interacting, which generates a more flexible and adaptable system. Horizontal relationships of power and authority allow for multiple role configurations within the system, so it can flow dynamically across nodes. Heterarchies separate and unite groups based on a series of concerns that emerge or disappear depending on perspective. Basically, any way of dividing a heterarchy implies a totalizing an integral vision of the system; each division is clearly partial and can give rise to exploring new ways of dividing things.

Figure 56

Heterarchies and the commons



Note. Reprinted from “Libres, dignos, vivos” by Helfrich, S. & Bollier, D., 2020, p. 165. Barcelona: Icaria Editorial. Copyright 2020, by David Bollier & Silkie Helfrich

4.2.7. Peer Monitor & Apply Graduated Sanctions

The rules that have been agreed upon in a common way imply sanctions associated with opportunistic behaviors that do not agree with the subsistence of the common. These sanctions can be given progressively and gradually. The possibility of sanction is a deterrent so that people do not break the rules.

4.2.8. Relationalize Property

Discussions about property have revolved around the possession and use of it. For this reason, the relational dimensions of having, imply a new concept of property that recognizes that social relations are an intrinsic part of any environment. These relationships are recognized and respected in the commons.

4.2.9. Keep Commons & Commerce Distinct

The commons market dynamics in which we live today are predatory. As consequence, there is a tendency to guarantee access to resources for the survival of individuals. The goal is to stop the dependence on money through projects, initiatives, infrastructure, and platforms. This does not mean that the presence of the market is denied or isolated from it. On the contrary, it seeks a way not to lose values and interactions based on the principles of the commons.

4.2.10. Finance Commons Provisioning

To finance commons provisioning, the questions answered are two: (i) the type of relationship between the economy and (ii) the monetary culture.

Three methods are proposed:

- (i) Monetary frugality: collaborative financing, sharing, distributing, mutualizing. Frugality is considered as a social and ethical practice that aims to get people to focus on their true needs and not on consumerism.
- (ii) Collaborative financing: implies the collection of money by individuals and the community to finance the commons based on a collective retribution. In other words, everyone can benefit and at the same time provide, since it does not seek accumulation, but rather creation and sustainability.
- (iii) New financial circuits to support the common: one of the roles of the State is to use resources consciously and efficiently. Such as taxation, for example,

that can also contribute to the common systems. As a starting point, one of the strategies could be to invest in common areas that can provide diverse services/programs through financing for housing, Fab Labs, Cosmo local production, among others.

4.3. Provision and livelihood in the commons

Dogfooding is one of the most effective methods that exists to ensure that something works correctly. Social self-management and constant learning are promoted, allowing people to support themselves through the common goal, putting their interests, motivations and will, in favor of it. 10 patterns are proposed to produce the common [figure 57].

Figure 57

Patterns for provision and livelihood in the commons



4.3.1. Make & Use Together

It is an ancient ancestral technique that seeks to cover common needs by reducing costs and optimizing results. Promotes co-creation, sharing access, information, knowledge, workspaces, tools, and infrastructure. It is a generative process that not only focuses on the use, but on its creative creation process. “Do it together” instead of “do it yourself.”

4.3.2. Support Care & Decommodified Work

Care and commitment as a shared project mean rescuing a new organizational logic for the economy. Instead of maximizing work, by deco-modifying it, develops healthier relationships and puts the human being at the center. Care is the main engine of the commons. Social energy makes care motivated as it applies contribution without coercion, sharing, distributing, or practicing reciprocity. This motivates individuals to do their best and fosters social confidence. For example, in the concept of the Oikos [see chapter 1, section 0], home is the heart of the economy, where emotional support, affection and unity of its are provided. It is about understanding the economy as an oikonomia -economy that cares-

4.3.3. Share the Risks of Provisioning

This occurs when there are many contributions to make a collective investment and the risks are considered small compared to the potential collective benefit, exceeding the market economy. The contributions are diverse, and the results are distributed equitably. Four modes of contribution and allocation are proposed by the authors [table 17].

Table 17

Four modes of contribution and allocation

		Rivalrous – Used Up	Non rivalrous – cannot be used up
Reciprocal	Commons	Mutualize or trade with price sovereignty	Reciprocal exchange of no rivalrous resources makes no sense
	Capitalist market	Trade according to market price	Propertied and privatize, then trade according to market
Nonreciprocal	Commons	Divide up	Share
	Capitalist market	This is a blind sport in standards economics because, caring, helping, sharing, and dividing up are not considered to be part of the economy.	

- *Contribute & Share*: people contribute diverse resources and talents to create a common that benefits everyone. What is co-produced is shared, it is a contribution that feeds the common.

- *Pool, Cap & Divide Up*: it is associated with the use of resources through a governance process that guarantees their use and sustainability to avoid overexploitation.
- *Pool, Cap & Mutualize*: It is used for resources that are limited and do not want to be divided. It is essentially used in social security and health systems. “Mutualize is that it preserves a shared intentionality among the user group” (Helfrich & Bollier, 2020, p. 201).
- *Trade with Price Sovereignty*: this implies that the terms of trade and exchange are selected by the people. This allows more accessible products and services to be provided at fair prices. In addition, systems become less vulnerable to prices and market volatility.

4.3.4. Use Convivial Tools

In open-ended systems people can use equally, adapt them, and determine how they are going to use it. Beyond technologic use, these tools are open, accessible, modifiable, and shareable. This means that individual freedom is promoted at interdependence and at the time human relationships are enriched.

4.3.5. Rely on Distributed Structures

Structures and infrastructures must promote peers, teams, and local nodes to interconnect, so spheres with self-provisioning and governance are formed. Each part can operate semi-autonomously considering the rules and situation, coordinating with its peers. It is similar to the neural/liquid network⁶⁰ without a central node, but in this case, they distribute according to the dynamics of the context.

4.3.6. Creatively Adapt & Renew

The commons have been considered a premodern system, and therefore, not innovative. However this far away from reality. The system is very adaptative and flexible. It has shown creativity throughout the years because innovation is not only linked to boosting market sales. This one of the reasons why creativity, resilience and renewal are important.

5. Citizens and commons management

All the mentioned above seek to generate value. There are many examples around the world of local initiatives that apply this common principles and patterns. Some, as part of

⁶⁰ Cross-reference: chapter 3, section 0.

their worldview and cultural practices that have gained relevance; and others, from a local community's vision that has led to the creation of successful and positive projects for the environment.

The examples that will be shown below come from different contexts and continents. The first one is the Ubuntu philosophy in Africa. The second one is Teikei, the associative movement in Japan. Finally, and the third one about Kichwa people in Ecuador.

Ubuntu philosophy - 'being human through other people,' which can be "reflected in the phrase I am because of who we all are". The word Ubuntu has its origin in the local dialects of southern Africa. It comes from the Bantu language, which is the linguistic unit of different African languages and expresses the idea that a person becomes human through other people. (Mugumbate & Nyanguru, 2013, p. 83)

This African worldview refers to the fact that people are interconnected and therefore, each human being occupies a position of vital importance. It represents a way of life that embodies various values such as generosity, warmth, inclusion and solidarity in the community. These values "shift the dominant Western-Eurocentric gaze from an over-reliance on positivism, Eurocentrism, classism and individualism to a more human-centered and holistic approach that recognizes the interdependences within the ecosystem of people, planet and place" (Oviawe, 2016, p. 5).

In this sense, the way of relating to each other is present when seeking community and living in harmony. The family extends to other distant members, providing a sense of protection and belonging that fosters a sense of community and common good. People's sense of security derives from the sense of belonging to a greater whole, which is common and involves: nature, animals, the environment, ancestors and human beings with whom the person lives and interacts. For this reason, Ubuntu conceptualizes the world in which we live as a complex and interdependent system. It promotes a humanism that can also be extrapolated to various fields: business, education, leadership, among others (Lázaro Herrero, 2019).

The universe is a network of interdependent systems embedded within micro systems⁶¹, just as the human body comprises a multiplicity of organs, each connected to a group of cells, molecules, and atoms. Communities are networks of relationships both biological and social that exist within a given ecosystem. It is clear that humans and nature are intertwined and have a

⁶¹ Cross-reference. Chapter 1, section 2. The Andean worldview. Chapter 3, section 0, 1. University as a complex eco-systemic organization.

relationship of reciprocity whereby one depends on the other to survive. Indeed, the collective ethos is not limited to human communities only but rather they are connected to their environment. Systems theory provides a model that helps to explain how nature works and how the parts make up the whole. This view encompasses both finite and infinite relationships of dependency and intertwined communities. Like ubuntu, systems thinking provides a roadmap for viewing the world in a more holistic and ecologically sound manner, revealing the processes behind the connections and patterns that crystallize seemingly separate parts into a unified whole (Oviawe, 2016, p. 5).

Ubuntu represents a collective approach opposed to individualistic ones. It has gained power in the past years and world leaders such as Nelson Mandela and Desmond Tutu have worked towards Ubuntu worldview to articulate inclusiveness and equalities.

The second example is the Teikei movement. This movement appeared in Japan in the early 1970s to promote a new form of distribution of organic agricultural products through consumers' and producers' associations. Its founders organized a business model as a socio-economic alternative to the capitalist market economy. At the beginning, it started locally with consumers supporting the organic or -natural- agriculture in each area. Here, interactions between producers and consumers consisted on visiting the farms and both sharing information for the "enlightenment of consumers members" (Nemoto, 2021, p. 108)

This relationship between consumers and producers aims to not only generate an alternative way to market economy, but also, to restore ecological landscapes of the farms and their surroundings. Teikei works with ten principles that were built upon practices and dialogue in its first years: "(i) engaging in mutual assistance; (ii) carrying out crop planning together; (iii) accepting all produce by consumers; (iv) setting prices in the spirit of mutual benefit; (v) striving for mutual understanding, respect, and trust; (vi) managing self-delivery in order to promote interaction between farmers and consumers; (vii) engaging in democratic management; (viii) emphasizing learning; (ix) sustaining a workable size to stay in organic practice and maintain viable management; and (x) making steady progress toward the ultimate goals of Teikei" (Kondoh, 2015, p. 146).

Teikei is a Japanese word that means partnership and cooperation. It can be studied in the Organic Village, located in a suburb of Tokyo, but it has also inspired the creation of many alternative and sustainable food systems around the world such as: the community supported agriculture (CSA) (M. R. Ostrom, 2007), Association for the maintenance of

peasant agriculture (AMAP, French acronym), alternative food networks (AFNs), Chokubai-job farmers market, among others. These have brought several benefits:

- Localization: as it reduces food miles, brings endogenous benefits, and encourages the improvement of self or co-regulation of food system.
- Diversification: enabling rural economic resilience for some producers.
- Quality: improving health and other ethical concerns may be met through such distribution channels.
- Desirable food: as a relational good (producer and consumer); community based, tool for social and cultural capital.
- Radical and subversive – the alternative and breaking away from oppressive or unethical system of food production/consumption.
- Community of production: as it is, a collective effort.
- Communities of consumption: involves the buying power for niche and alternative groups of consumers (Parker, 2014, pp. 4–5).

Finally, Kichwa people in Ecuador live based on the Andean world view [see chapter 1, section 2] and the Sumak Kawsay [see chapter 2, section 0]. Historically, Kichwa people have considered themselves as Nature's Guardians because of their bond with the biodiversity of the territory in which they inhabit. It is an indissoluble union with the natural environment and its elements, including human beings (Durán, 2011).

Unity is a fundamental value that implies that nothing is excluded, since everything fulfills a key function and is constantly evolving. It is a conception of a communal and supportive world where exclusion is not practiced (Larrú Salazar & Viera Mendoza, 2022). As mentioned by Tránsito Amaguaña, Ecuadorian indigenous leader, "Unity is like the corn cob: if one grain goes, the row also goes, and if the row goes, the whole cob comes to an end".

Community has priority over the individual. It is based on the principles of reciprocity and solidarity⁶², following the idea that there is kinship between the members of each ayllu and within society. Additionally, redistribution and equity principles overcome the accumulation of goods and resources; so that all members of the community have access to the same levels of well-being (Churuchumbi, 2007). In this sense, there is no concept linked to the accumulation of wealth or the lack of it. Abundance is directly related to the harmonious

⁶² Cross-reference: chapter 1, section 2 and chapter 2, section 0, subsection 4.2, numeral 4.2.1.

relationship with the environment, respect for natural resources, and the well-being of the entire community (Durán, 2011).

CHAPTER 3: AN ECOYSTEMIC ORGANIZATION MANAGED FROM THE COMMON GOOD PERSPECTIVE. POLITECNICA SALESIANA UNIVERSITY CASE STUDY

“Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition [...] Knowledge is [...] for developing the capacities of citizens, sustaining culture, knowing the world, or envisioning and crafting different ways of life in common.”

Joan W. Scott

The oikos and the ayllus -with their own features- can be studied as an environment considered both, the way in which each person/family inhabit, and the way in which the conditions for habitation were created. Earlier it was discussed how the economic model has led to the logic of profit maximization. This generates an effect not only in the individual sphere of the human being and its development, but also, in the collective, in terms of the society and environment in which he develops. The proposal of this research is to look again towards the collective and common to face the challenges of the modern world, which are volatile, uncertain, complex, and ambiguous [VUCA world].

The reawakening of the sense of community has returned with force and is recognized in different places around the world. Here, possible ways of acting in common through daily practices are proposed. Not from imposed systems or from politics, but from thought and action, cooperation, and self-government at a local level. These practices do not come from imposed systems or from politics, but from thought, action, cooperation, and self-government at a local level.

All over the world more initiatives promote social transformation inspired in a humanistic and holistic approach to positively impact the life of people. In this matter, projects, activities, and programs must respect and promote life, nature, human dignity, equal rights, social justice, solidarity, and cultural diversity. In that sense, education must have a humanistic approach to meet all the challenges and to respond with innovative solutions to issues the world is facing.

In particular, higher education has shown a considerable expansion during the last decades; including a significant increase in the number of students around the world (half of which are women). However, income disparities, social marginalization, poverty and many other factors result in a low enrollment rate, in particular when it comes to minorities. High costs remain the main factor for exclusion and even though loans and scholarships have increased, they are not widespread (UNESCO, 2015).

For this reason, education and knowledge has been reconsidered as a common good within the new global context: it implies that the creation, acquisition, validation, and use of knowledge, which are common to all people as part of a collective societal [endeavor]. The notion of common good allows us to go beyond the influence of an individualistic socio- economic theory, inherent to the notion of 'public good'. It emphasizes a participatory process in defining what is a common good, considering a diversity of contexts, concepts of well-being and knowledge ecosystems (UNESCO, 2015, p. 11).

This also implies shared responsibility for a sustainable future and the care of our common home (see) by all actors and institutions within the ecosystem. Hence, Higher Education Institutions need to create a new management model that considers the university as CPR. The studies carried out by Ostrom [see] seek the creation of a formal system that allows the possibility of self-organization, self-government, and sustainability of a CPR. In the case of a university, this perspective implies the creation of -common- rules [see 00] that formalize the satisfaction of the interests of the members of the university community and of third parties related to the university. Under this perspective of the commons, this chapter addresses the case study of Politecnica Salesiana University (UPS) in a practical way. It includes the topics covered in chapter 1 and 2, considering that:

- Communal management looks for optimization rather than maximization.
- The ultimate goal of human development is the person.
- The person needs adequate environments for their development and well-being.
- The environment also implies human relation with nature and resources.
- Education is one of the basic human rights and contributes to their well-being.
- Higher education institutions are a key actor that has an impact on the person, enhance their capacities, promote their development; as well as have a positive impact on the environment.

In particular, for Higher Education Institutions, the use and application of new terms in university activities is implied. Terms such as: collaborative learning, co-working, entrepreneurship, academic clusters, assessment group, educational innovation, networking, shared, common and open knowledge, among others. These activities, together with common technological tools, contribute to the idea of CPR.

There are challenges regarding nature's CPR and the care of our common home. It constitutes a school of thought capable of promoting and inspiring new social organizational forms, with creative autonomy that favors university entrepreneurship and student's capabilities. The goal is that the research groups, students' associations, and the university community in general, develop and propose effective actions of coexistence with nature, and protect resources based on common interests. Not only resources outside the university, but also, the ones produced at the university like knowledge.

This requires the University to be innovative in its traditional management model. The objective should gear towards a social model that incorporates and recognizes its ultimate goal -the human being- as well as the interest of the university community. When drawing the analogy of a community that manages a CPR, it can ensure representative democracy and strengthen the university's institutional identity [figure 58].

The proposal is based on the work developed and published by Politecnica Salesiana University Common Good Research Group (GIUB, Spanish acronym) and the doctoral thesis of one of its members titled: *"Innovación organizativa para la puesta en valor de la investigación científica. El caso de la Universidad Politécnica Salesiana"*.⁶³

GIUB has been working to rethink the university's impact on society through the analysis of UPS as a CPR in the Ecuadorian context. Publications are based on Elinor Ostrom's contributions on the governance of common goods in collective institutions [see chapter 1, section 0, subsection 3.2]. The research areas are: (i) University and knowledge as a common good; (ii) citizenship, (iii) democracy and human rights as a common good, (iv) Don Bosco's preventive system and common good, and (v) Sumak Kawsay and common good (UPS - Reserarch Groups, 2023).

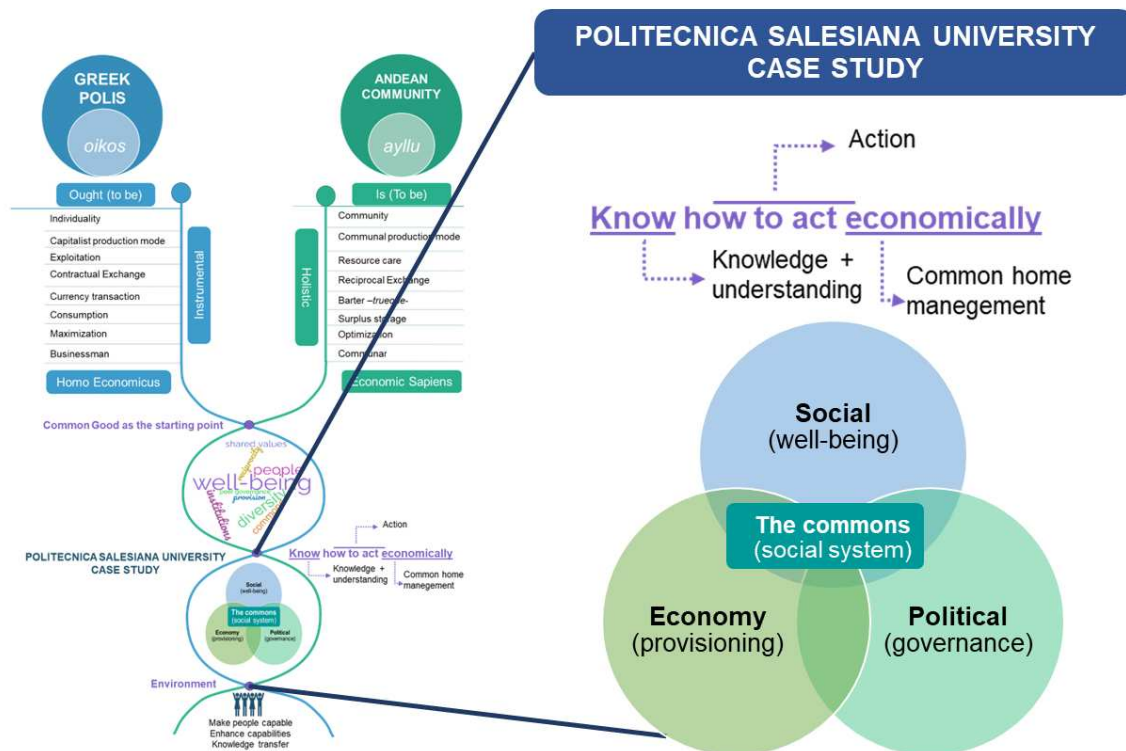
The GIUB author's vision encourages the development of intercultural education in Andean and Amazon communities with management structures derived from university autonomy. In 2018, GIUB published its first book, called "The University as a common pool resource: A set of resources, moral and cultural values from the Academic Community of Universidad

⁶³ Doctoral thesis published by Juan Pablo Salgado-Guerrero, 2018. Università degli Studi di Ferrara.

Politecnica Salesiana⁶⁴, as a result of its work to analyze UPS from the perspective of the common good. Later in 2019, the second book, “The University-Commune: The centrality of community action in the management model and practices of universities,”⁶⁵ was published; broadening the common good analysis.

Figure 58

Politecnica Salesiana University Case Study



1. The University as a development agent in the territory

The university has been forced to adopt a complementary mission in addition to the traditional ones of education and research. This is a result of the changes that have occurred in recent years in knowledge generation models and in university institutions. This new role implies that because of knowledge generation, the University needs to play a more active role and become entrepreneurial universities. This new approach began in the 1990s and established the bases of what has been called the University’s “third mission” of

⁶⁴ The book is licensed under a Creative Commons License at UPS <https://dspace.ups.edu.ec/handle/123456789/17106>

⁶⁵ The book is licensed under a Creative Commons License at UPS <https://dspace.ups.edu.ec/handle/123456789/19050>

community engagement as a knowledge transfer agent (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). To name an example, this approach has been assumed by the European Commission when it designed the new strategy of the European Union (EU) for the construction of the Europe of Knowledge 2020 (Torres et al., 2010)

Currently, universities are not only recognized for their role in education and research, but also for their impact on the economic development of the territory in which they are established. In addition to the positive impact on education, training, and research; they have an influence on competitiveness, economic growth, and social development. The studies have been based mainly on medium-sized cities or rural areas, since in metropolitan areas it has been more complex to apply these studies because intersectoral relationships are far more complex. However, there are more and more studies that make visible the role of universities in the local economy (R. Beck et al., 1995).

The external effects on the territory (Poma, 2000) can be direct or indirect [table 18], as well as technology and knowledge transfer; creating an effect of technological spillovers that also contributes to territorial development in broader terms. According to the studies that have been carried out, there are effects that are quantifiable and others that are not, but they undoubtedly influence competitiveness and economic growth (San Martín Echauri & Sanjurjo, 2006).

Table 18

University impacts within the territory

FIELD	EFFECT
Political	Changes in the political structure, citizen participation growth, improvements in the organization of political processes.
Demographic	Effects on the size, structure, and mobility of the population
Economic	Effects on regional income, the productive structure, the labor market, and labor mobility Creation of income, jobs, and spin-offs New business attraction, both industrial and service providers
Infrastructure	Effects on housing, traffic, medical services, commerce Science and Technology Parks ⁶⁶

⁶⁶ Science and technology parks were born in the fifties in California (USA) with the famous Silicon Valley and are originate from the concept of entrepreneurial university.

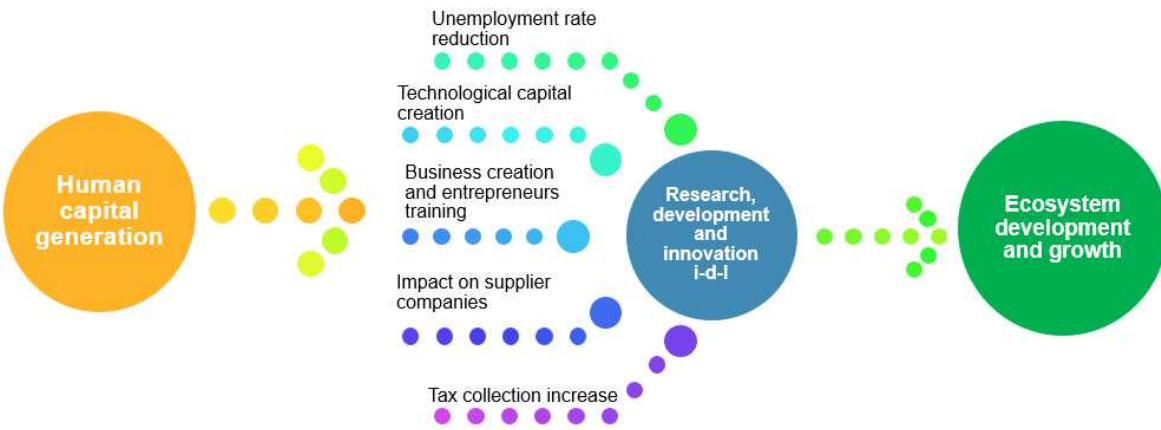
Cultural	Greater supply and demand of cultural products and services Influence on the cultural environment
Educational	Effects on the activity rate, changes in the quality of education
Social	Effects on the quality of life, the influence of students, influence on the image of the region and regional identity

Note. Based on “The University: A Regional Booster? Economic Impacts of Academic Knowledge Infrastructure”, by Florax, R., (1992), London: Avebury & “Knowledge Production, Organisation and Agglomeration Economies” by Lambooy, Jan G., (1997), *GeoJournal* 41(4):293–300.

In economic terms, the presence of a university also gives rise to an increase in population, employment, new products, and services that probably would not have existed if it wasn't for the university. The direct effects are related to the people associated with it -employees, professors, students, and visitors. The indirect effects are all those impacts that are generated outside of university activities and affect the territory in a more comprehensive manner. As a consequence, the University not only has impacts in the short and medium term, but also, in the long term [figure 59].

Figure 59

Long-term University contribution



Note. Based on “Evaluación de La Contribución Económica de La Escuela Superior Politécnica Del Litoral - ESPOL: Un Análisis de Corto y Largo Plazo”, by Castillo, J., Campuzano, J., Gómez, N. & Amaguay, A., (2020), retrieved from https://www.espol.edu.ec/sites/default/files/d9/Estudio_CIEC-BID.pdf.

The most relevant sectors are food, leisure and culture, transport, clothing, footwear, materials, residence, rental, among others:

- Food services
- Lodging and residence services
- Transport
- Bookstore services, academic supplies, stationery and other related
- Recreation and leisure services
- Visits and exchange of students and teachers
- Development of Congresses, Seminars, Workshops specific to the university activity and that implies internal and external mobilization.
- Family visits to students
- Tourism for the local, regional, and international recognition of some universities

In this context, the role of the university is of great importance to develop an innovative environment that allows the circulation of ideas and technological knowledge-technological spillovers- between the territory productive framework and the agents that generate knowledge (Poma & Ramaciotti, 2008). For this reason, the university is considered an economic agent; a productive unit that generates income and expenses that stimulate relations between the educational system and the economic system. In general, the results of the various studies carried out show that the economic effects derived from the existence of a university are positive; even qualifying them as an engine for the growth of a local economy (Chiriboga, 2017).

However, in a dynamic model compared university environment, the results have been called "triple helix." This grants the third mission to the university by linking the transfer of science and technology results to the company and to society in general. In this model, the three agents of the system converge and interact: universities and public research organizations, companies and administrations (Cai & Amaral, 2021).

2. The university and its key role in open ecosystems

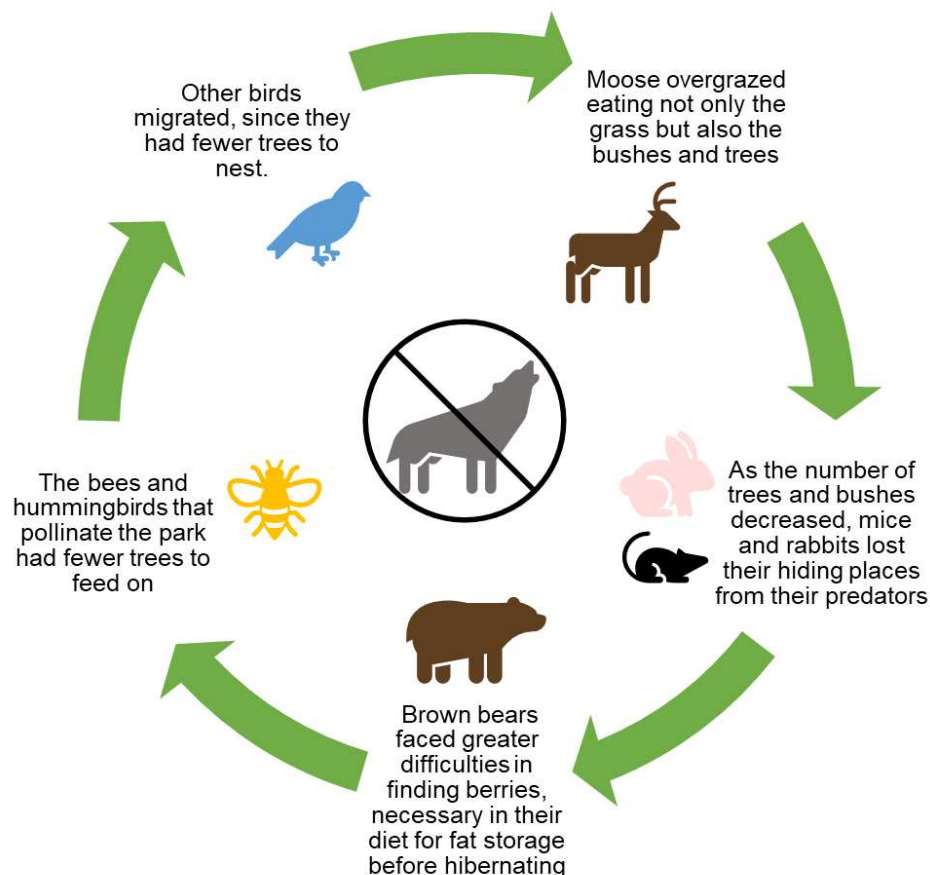
The following section presents the perspective of the ecosystems in which organizations operate. These ecosystems have positive impact that synergies, cooperative and collaborative work can generate together with the active participation of different actors. The result is the construction of environments that promote the development of the territories and therefore, the well-being of the people who inhabit them, given the University is one of the key actors within the territory.

Using the ecosystem metaphor is a practice that has gained strength in recent decades. The biological implications of using it to provide stakeholders with a new way of seeing and addressing challenges that mainly revolve around entrepreneurship and innovation within a territory as a development engine. In an ecosystem, the interactions are far from being predictable, systematic, and linear. On the contrary, like in nature, plant and animal species coexist without order, control and/or logic, establishing unpredictable relationships and unexpected results.

In nature, total control is impossible. For example, in 1995 in Yellowstone National Park, United States, 41 wolves were introduced to the environment. Wolves existed within the National Park before but were hunted to extermination as they were considered a threat to people and other wildlife. Their reinsertion had a profound impact on the physical geography of the area. While their removal produced a dramatic increase in the elk population, it ended up affecting the balance of the ecosystem [figure 60].

Figure 60

Effects of the wolf disappearance in Yellow Stone



The number of variables at play in the biological balances of a living ecosystem and their interactions do not allow predicting each of the results. The ecosystem is seen as a system

of relationships that determines the capacity of a specific territory or environment, such as a city (Mercier-Laurent, 2011). Historically, cities have been considered as a space in which goods, services, capital, ideas, exchanges, initiatives circulate more actively. All of these have a strong link with innovation and development that positively affect the economic growth of the country (Jacobs, 1984). There are more and more investigations that study the phenomenon of the link that exists between economic development and cities. In urban centers, greater economic activity, productivity, and income are generated. To explain the phenomenon, the term agglomeration economies (of companies and people) has been used to increase productivity (Polèse, 2001).

Capital cities are important connection points with the rest of the country and the world. For this reason, land, sea, and air road systems are built along with points for intraregional and international trade, infrastructure. These together with the presence of the headquarters of the national government administration, contribute to making economic activity more dynamic (De Mattos, 2001). For this reason, cities are considered as hotbeds on the subject of productivity, trade, and innovation. Cities generate spaces and environments that promote job creation, attract talent and generate competitiveness that allows important leaps in the respective areas of study or interest (Siddhartha Nandamuri, 2017).

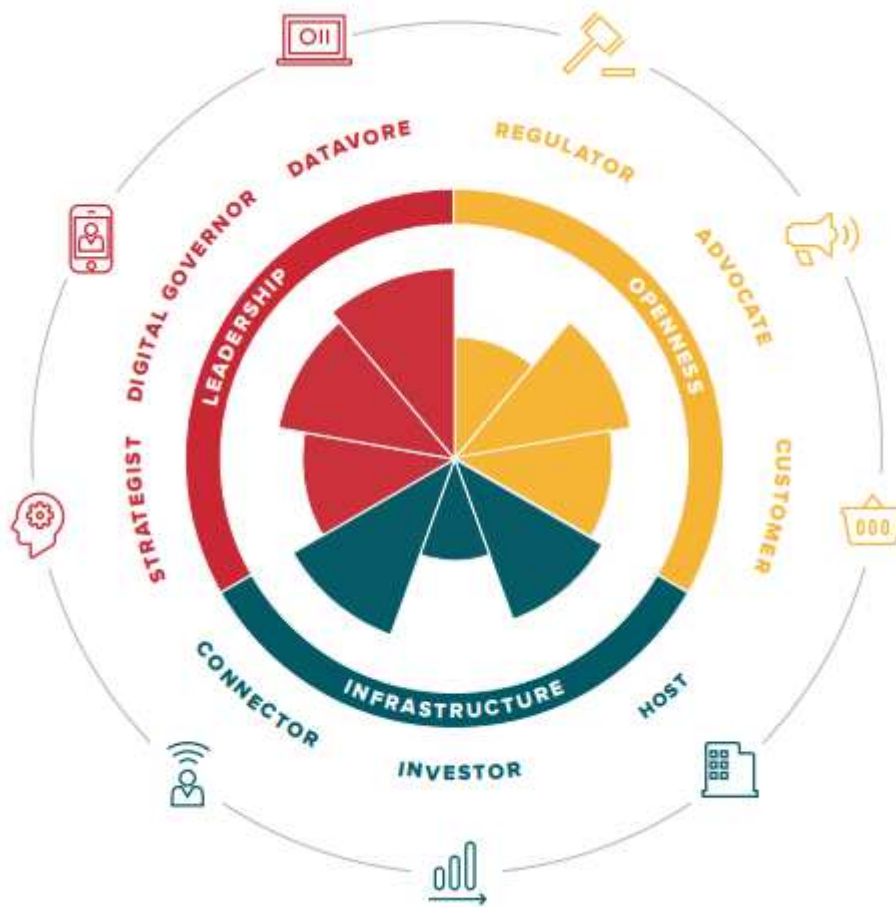
“The organizations that support entrepreneurs are incubators, angel investors, venture capital funds, universities and government agencies that promote and finance initiatives. Finally, private organizations and governments are in charge of guaranteeing knowledge, creating a culture of optimism and tolerance for failure, as well as self-confidence, legal certainty” (Revista Líderes, n.d., para. 7).

In this sense, cities are also a hotbed⁶⁷ for entrepreneurship and in recent years several authors have studied cities as key actors for innovation within the global economy (Cohen & Muñoz, 2016) Thus, in recent years, cities have been concerned with the promotion of entrepreneurship in their territories. For example, one of the initiatives that has emerged with the intention of helping policy makers support innovation and entrepreneurship processes in cities is called CITIES; for its acronym in English Cities Initiatives for technology, innovation and entrepreneurship [figure 61] (Altabev, 2015).

⁶⁷ The basic Hotbed concept is a term used to describe an environment (ecosystem) that promotes growth and development (Cambridge University Press, 2022). Currently, hotbeds are applied in different fields: innovation, entrepreneurship, research, development, agriculture, education, sports, etc.

Figure 61

CITIE Nine policy roles anchor



Note. Reprinted from “City Initiatives of Technology, Innovation and Entrepreneurship (CITIE)” by Altabev, D., 2015, p. 6. Available at.

https://ec.europa.eu/regional_policy/sources/conferences/cities-2015/nesta_citie_tool.pdf

Initiatives like this have been applied in different contexts in Europe, the United States, Asia, and in other developed countries and cities. The third world, developing countries and emerging economies face another reality. For this reason, considering the context and territorial reality, what is sought is an open ecosystem. An ecosystem that is consolidated and that allows connecting entrepreneurs, investors, clients, political actors, and promoters that generate [liquid/neuronal] networks that contribute to development and economic growth.

Innovation and entrepreneurship involve risks because investment in each project cannot guarantee a result. In the Latin American context, this has been one of the factors that limit

the flourishing and eventual acceleration of an ecosystem because it also implies political costs that governments -local and national- are not willing to assume. For this reason, it is important to define which part of the ecosystem and actors to work with, in order to achieve the political will among the stakeholders to take care of the common good in the long term.

The importance of promoting Innovation and Entrepreneurship Ecosystem (IEE) has been highlighted. Considering that IEE is not just similar to biological systems, they are biological systems with uncontrolled situations, disorder, and unexpected results but powerful for its ability to adapt, restore and keep growing (Hwang & Horowitz, 2012). However, one of the things that differentiate us from animals in the biological system is that "Only human beings have the possibility to coordinate when having common goals, making proposals, negotiating, asking for help, collaborating. Consequently, there is something that we will never find in a biological ecosystem, and that is essential in an IEE: political will" (Maldonado & Horowitz, 2016, p. 18).

2.1. Boosting ecosystems: Strategies with the context to empower key players.

Quito, the capital of Ecuador, has government agencies and a greater number of incubators, angel investors, universities and various organizations that promote entrepreneurship and innovation concentrated in the territory. In this sense, it can be considered as a hotbed that generates favorable environments to promote entrepreneurship and innovation together with people's skills. Daniel Coyle (2009) plans scenarios in which people can exploit their potential to the fullest. As a first strategy, design environments that contribute to education. The second is to reinforce said environment so that the members [of the university community] develop and foster their [entrepreneurial] skills. Finally, a competitive environment that has the person as the center of action, allows motivation and aspirations to be the motor to act and be managers of change.

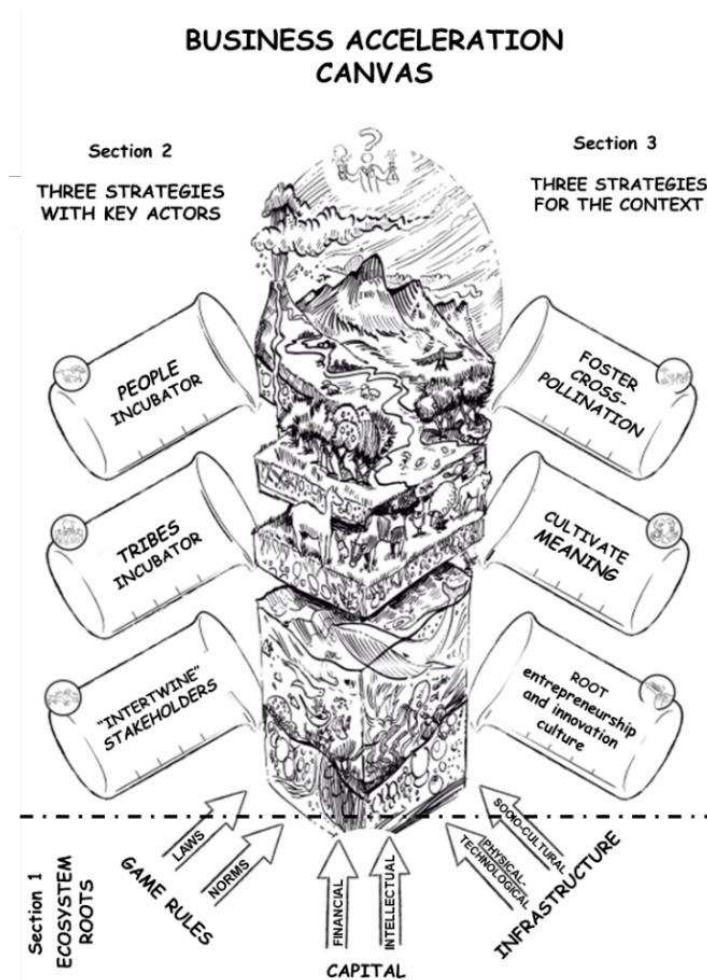
Leonardo Maldonado and Greg Horowitz (2016) developed a methodology with 6 strategies to accelerate the flowering of innovation and entrepreneurship in their book "Open Ecosystems" [figure 62], which collects real experiences in various territories of countries with emerging economies. Next, the methodology proposed by the authors will be presented. The same that has been in eight Latin American countries and currently in the city of Quito through the "Program for the Promotion of the DMQ Innovation Ecosystem"⁶⁸

⁶⁸ On July 21, 2022, the Program's Methodological Training and Transfer Space started. The sessions have been given by the consultancy agency Gulliver.

promoted by CONQUITO⁶⁹ and UNDP (United Nations Development Program) Ecuador. UPS is a member as a key actor and also a spokesperson for the working table “Sustainable Quito”.

Figure 62

Business Acceleration Canvas



Note. Adapted and translated to English from “Ecosistemas Abiertos: seis estrategias para acelerar el florecimiento de la innovación y el emprendimiento”, by Maldonado, & L., & Horowitz, G., 2016, p. 25. Santiago: Guliver. Copyright 2016, licensed by Creative Commons.

⁶⁹ The Corporation for Economic Promotion (CONQUITO, Spanish acronym) promotes the productive development of Quito and its area of influence. It is a private, non-profit organization that promotes the productivity and socioeconomic development of the Metropolitan District of Quito (DMQ, Spanish acronym), promoting policies based on territorial equality through the agreement of public and private actors, to encourage local, district and national production, competitiveness, sustainability and the application of scientific and technological knowledge. The programs, projects and services promote ventures generation, business development and market relations, through innovation, science and technology (CONQUITO, 2023).

The Ecosystem acceleration canvas to apply the methodology is divided into three sections. The first one [the arrows] is the ecosystem roots and consists of all the variables that have influence in the ecosystem that do not depend on one actor and provide the framework to later phases of designing and planning. The second section are strategies with key actors [left], meaning those that involves the people who are part of the ecosystem and will contribute to its acceleration. The last section are strategies for the context [right] so that it empowers the actors⁷⁰. All six are considered as ecosystem catalysts (Maldonado & Horowitz, 2016).

2.1.1. Incubating people

“It is people and their passions that needs to be incubated” (Maldonado & Horowitz, 2016, p. 37). Generally, in terms of entrepreneurship, project incubation has been developed as a strategy. The approach given in the book is to incubate people because it is people who build, move, work, and interact in ecosystems. Contributing with the learning process of entrepreneurs and innovators results in an active involvement and engagement of its actors. Despite challenges, they will create valuable human capital, committed to the ecosystem.

An ecosystem needs people of all types: entrepreneurs, innovators, scientists, angel investors, venture capital, mentors, etc. However, the book highlights that artists and cultural activists are also key players because "it is the artists who first capture in their works what technological and social changes will make us live in the future".

Another important agent to consider are “connectors”, the kind of people who can make things happen because they know many people and help spread ideas, activities, and initiatives (Gladwell, 2015). When talking about flourishing ecosystems, connectors activate networks by putting people who do not know each other but who may have common purposes in touch. Even though connectors are usually off the map of those who design public policies and define who to support to make the ecosystem flourish, they are still key pieces of the ecosystem.

Finally, leaders need to be visionary, innovative and understand not only their environment, but also, understand the world and the trends in order to push the ecosystem in the right direction [figure 63]. Incubation implies financial support, knowledge, and networks, together with enhancing people’s capabilities:

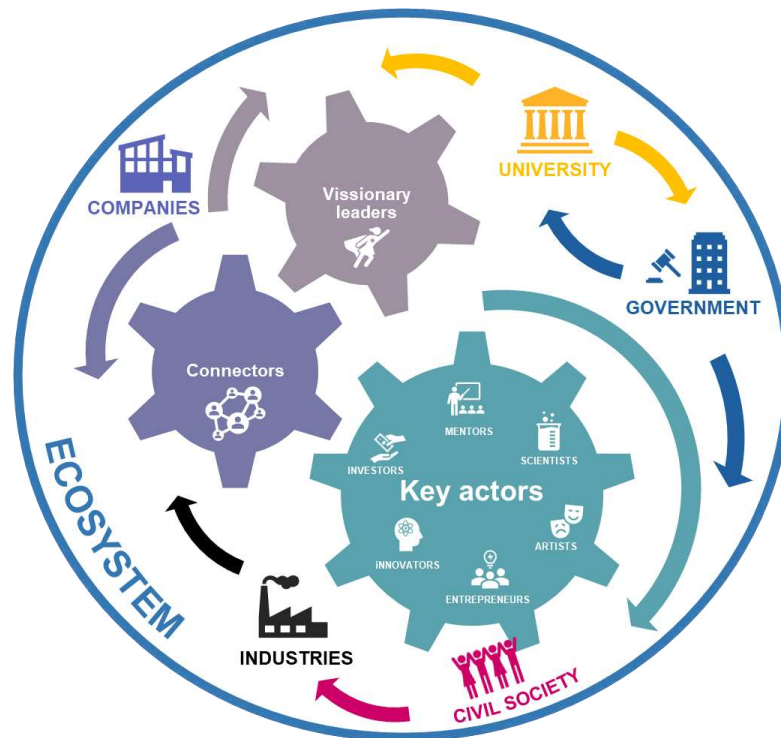
- Developing skills in entrepreneurs, considering that the project is an event in the life of the entrepreneur [UPS life project].

⁷⁰ Intervening in the context is another way to talk about environments that enhance people's capabilities, which will be addressed in the following chapters 4 and 5.

- It is important to consider the entrepreneur's life cycle and its development over time, aware that they include more failures than successful projects.
- Promote emotional skills [IDH resilience] that allow them to accept failures and difficulties as learning experiences.
- Strengthen networks as they impact in the long term.

Figure 63

Incubating people



2.1.2. Incubating tribes

Entrepreneurs and innovators do not emerge alone, nor in isolation. It was mentioned above that individuals are social beings by nature, so they belong to diverse networks -social, political, kinship, groups- in which they move and obtain resources, collaborations, inspiration, and business spaces [see chapter 1, section 0, subsection 1.2 and 1.3]. Nowadays, modern society and lifestyles has resulted in an individualistic behavior and a loss of the sense of belonging to a place, community, family, etc. As a consequence, “personal identity is usually disjointed, generating a sense of lack of purpose and transcendence, membership allows not only to continue learning and cultivating personal passion, but above all it helps to build a "we", and this "we" in turn, strengthens a collective commitment to the ecosystem” (Maldonado & Horowitz, 2016, p. 67).

Globalization, ICTs, and digital interconnection have generated various phenomena in the world. Now there is talk of being "citizens of the world", unlike past decades when it was common from generation to generation to live in the same place (U. Beck, 1998). This is another reason why in our time, the sense of identity is less solid, since a person born in country A, with parents born in a different country can move to another place and have a broader cultural background. Despite this, people are always linked to communities -tribes- with whom they share particular interests (Sánchez Parga, 1997b, 1997a).

"Tribes" refers to peer clubs [see chapter 2, section 4, subsection 4.1] that share common chores and styles. Tribes is an effective strategy to promote the flourishing of local talent and leadership. It is a group of people who believe they belong to something bigger than themselves and bound by a common passion to explore and learn. Incubating tribes implies helping them to organize themselves, to define their priorities, to generate those meeting places where the network is built and expanded [also mentioned in the section 4.1.1 incubating people]. The book proposes several elements to identify a tribe:

- What they pursue: an epic narrative that gives meaning and direction to the tribe.
- Heroes who embody that meaning represent the tribe's values and style. For example, free software community -tribe-.
- Ideologues that provide theoretical foundations to give coherence to the thinking/acting of the tribe.
- Identity: a set of symbols so members recognize each other.
- Sense of belonging that makes members proud. It is cultivated through celebratory rites, which allow to make public victories and important milestones.
- Membership models: rules are not written, they are built by the members [see chapter 2, section 0, subsection 4.2, 4.2.7].

The environment allows people -tribes- to explore, discover their passion and infect the rest of the community. The process of improving their skills and capabilities, together with practices that contribute with their identity and belonging, sets the gears in motion and promotes growth in the community.)

2.1.3. Intertwining Stakeholder

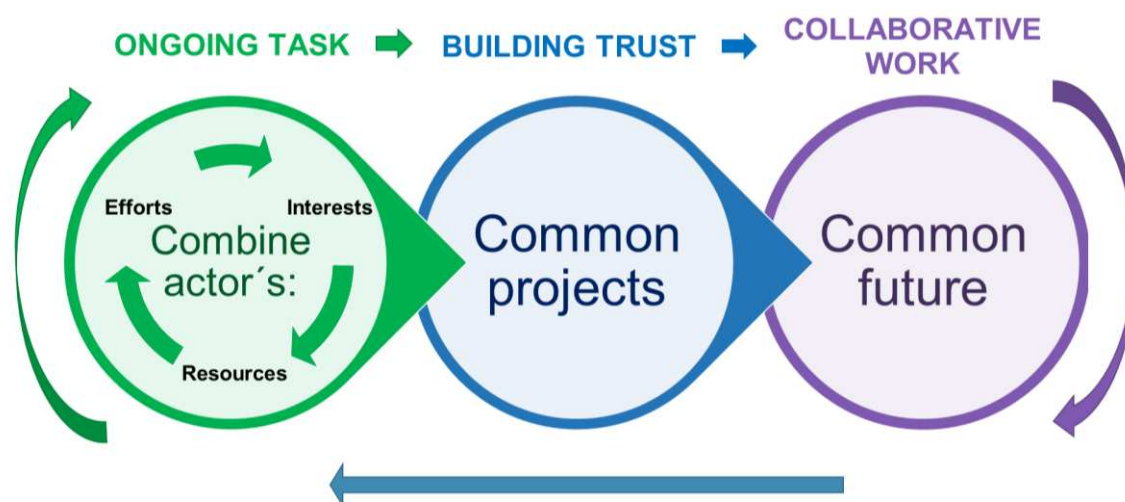
An ecosystem potential is determined by its ability to convene and engage the largest possible number of stakeholders and local leaders. Also, by its ability to achieve collaboration for both large transversal projects and small specific initiatives. For this reason, it is important to integrate them into ecosystem governance, cultivating synergies and common interests among them. As a result, it gives greater strength to the ecosystem.

In a territory, infinite number of relations and interrelations occur, therefore, interests can be affected by political, social, or other factors. This is why common goals can help overcome conflict and bring collaborative actions towards a greater result, rather than doing it individually. The aim of intertwining stakeholders is to foster collaboration and trust. From this perspective, actors feel part of something bigger and that what separates them becomes less relevant than what unites them. Especially, if on the long-term the goal is that ideas, talent, and capital flow freely.

The key is to find specific projects that can get stakeholders to collaborate. Pretending to create a common agenda in all areas is not real, and thus, not sustainable. It starts with two stakeholders who share common interests and begin to cooperate; more actors and eventually more projects are later added. In the methodology it is called the “architecture” of interests -of the actors- [figure 64].

Figure 64

Ecosystem architecture



For better comprehension of intertwining stakeholders, the metaphor of the construction of a fishing net can be used. For its manufacture, different factors -including environmental factors, type of fish, resistance, materials- must be consider so the actions, process and final result is useful to the context and meets those specific conditions required.

2.1.4. Fostering Cross-pollination

Innovation happens when different worlds meet. One of the main roles of those who seek to accelerate the growth of the ecosystem is to promote “serendipity”⁷¹, understand as

⁷¹ “Good luck that makes you find something interesting or valuable by chance” (Cambridge University Press, 2022, para. Serendipity).

fortunate and chance encounters. Ensuring that the different worlds within the ecosystem collide as frequently as possible and promoting among ecosystem actors the necessary capabilities⁷² to engage systematically and proactively with “the rest of the world”.

Therefore, cross-pollination is another metaphor that helps the ecosystem flourish and prevents knowledge from getting stuck in one small section of the ecosystem, rather than flowing to other parts of it, where it could trigger new ideas and be used in a different way. In nature, cross pollination is the transport of pollen from one plant to another and many varieties of fruit trees depend on this process; for example, bees are recognized as one of the main pollinators (Brent Edwards, 2010).

The "connectors" have an important role because they become those "bees" that help produce the link between different disciplines, personal experiences and points of view from which great ideas can emerge. A key aspect that makes cross-pollination visible is when the connections generated are in the personal sphere and no longer institutional, with a high degree of trust between the actors that are indeed part of institutions. Therefore, fostering cross-pollination is a permanent task.

2.1.5. Cultivating meaning and purpose

In order to convene and engage the largest number of stakeholders, it is necessary to be permanently building narratives about common futures that convene and engage the work of the actors. The construction of these collective dreams/ambitions is a permanent task and requires the participation of artists and cultural activists, usually ignored in this type of challenge. If an ecosystem does not have a narrative for the future, talent will end up migrating to better ecosystems. For this reason, gratitude, pride, and belonging are systematically cultivated.

In this sense, entrepreneurs, probably more than any other group of economic actors, can go wherever they want, and an ecosystem is only effective in attracting talent if it has a narrative that tells them that this is where the growth is going to happen, a more promising future. The narrative allows to articulate a sense of common purpose around which the “stakeholders” can unite, feel ownership, and pride, and collaborate to cultivate it.

Identity and a sense of belonging, because they share common futures, manage common goals and resources, so everyone can benefit from them. At the same time, it is contributing to sustainability.

⁷² Strategy one is about incubating people and enhancing their capabilities within certain environments. This has relation with the capabilities approach [chapter 2, section 0] and UPS environments [chapter 3, section 0].

2.1.6. Root entrepreneurship and innovation culture

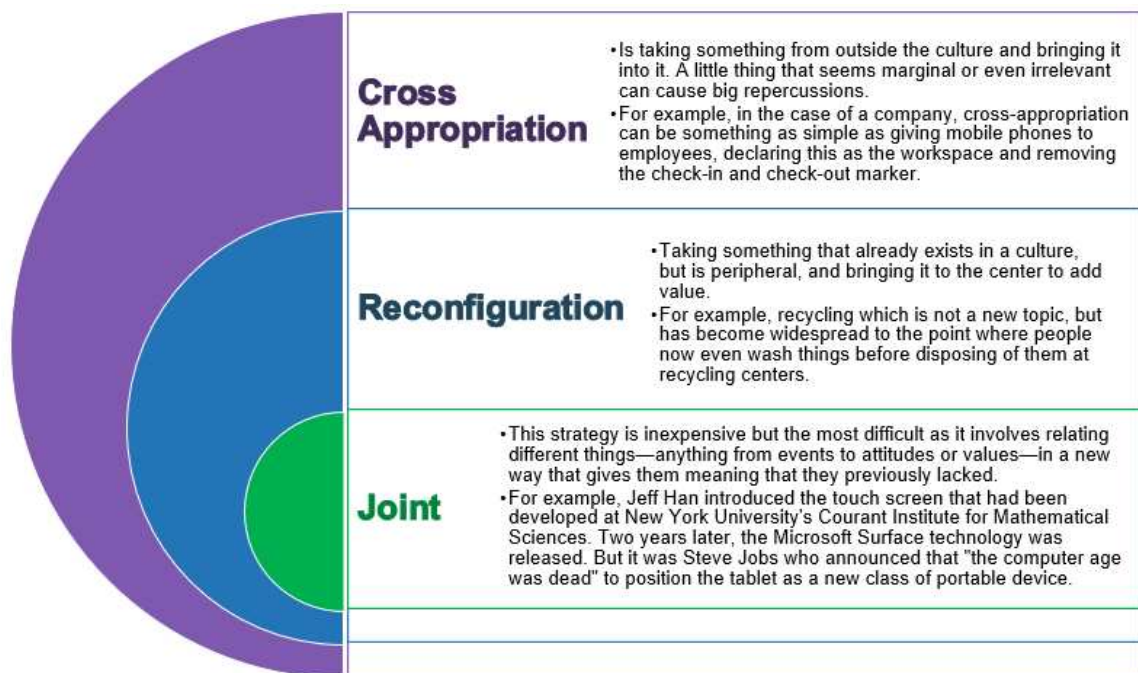
The living and sharing practices among entrepreneurs, together with the leadership that emerges in the tribes only make sense to the rest of the ecosystem with the existence of a dominant culture that values entrepreneurship and innovation. For this reason, it is key to spread and cultivate a culture of entrepreneurship and innovation within the ecosystem. A culture should be built on sensitivities, narratives, assessments, practices, and skills, which allows entrepreneurs and innovators to have support for their activities.

The idea of rooting the culture of entrepreneurship and innovation implies that everyone contributes to small bits and pieces, there is no visible face that is the spokesperson or public face. For this reason, more open, reflective leaderships are required to develop in this changing world [VUCA world]. For this reason, organizational culture plays a key role in achieving a base structure on which the ecosystem flourishes.

Achieving a change in culture requires, first, understanding how the existing culture works, and second, a deep understanding of how those practices arose. This contributes to a deeper understanding of the environment and allows designing strategies for change [figure 65].

Figure 65

Strategies for change



Note. From "Disclosing New Worlds: Entrepreneurship, Democratic Action, and the Cultivation of Solidarity", by Spinosa, C., Flores, F., & Dreyfus, H., (1999), MIT Press.

All six strategies have some things in common: they are bottom-up, not top-down; based on collaboration; and foster a new kind of leadership. And above all, people are at its center. These strategies differ from traditional approaches to accelerating an ecosystem in that instead of looking at what is wrong or missing, they focus on their strengths and try to build on them.

3. Not only a university, but a Catholic one

In the Apostolic Constitution *Ex Corde Ecclesiae*, the Catholic university is defined as "[...] an academic community which, in a rigorous and critical fashion, assists in the protection and advancement of human dignity and of a cultural heritage through research, education and various services offered to the local, national and international communities" (para. 12). It is conceived as a "disinterested service, namely of proclaiming the meaning of truth, that fundamental value without which freedom, justice and human dignity are extinguished" (John Paul II, 1990, para. 4).

Catholic universities respond to the mission of the Church and have no interests other than the purpose for it was created: serve society through education. From this perspective, even if they are private institutions- they can be considered as a resource for common use by its members - university community-. According to CPR meaning and scope [see chapter 0, section 0], it implies a responsible management of social goods, in order to ensure the existence, stability and sustainability of the resources. It also uses systems to guarantee equity of access, use and distribution for all human beings [university community] (Brand, 2008, p. 304).

The Catholic university can be considered as a good that responds to the interest and needs of a specific community: the university community. Therefore, it can be managed as a CPR in the category of systems. It has the ability to exclude users, define how many users, when and where to use it, and how they contribute to its sustainability. It is an exclusive good to which its users respond under certain rules and conditions. Consequently, it cannot be freely disposed of (Herrán Gómez, 2018).

Politecnica Salesiana University⁷³ (UPS, Spanish acronym) was created in 1994 in the midst of a complex political, social, and economic reality that Ecuador was facing. It was

⁷³ UPS is a private, non-profit Higher Education Institution, created by Law No. 63, issued by the National Congress of Ecuador and published in the Official Gazette No. 499 of August 5, 1994, with main address in the city of Cuenca and with competence to operate at the national level (UPS - Historical Review, 2023).

born from the need to train professionals from a comprehensive, scientific, practical, human, moral and ethical perspective; aware of the importance of connecting the university with society and that, through research, science, and technology. Some of solutions to major social problems provided:

- a) To educate underprivileged people, people with disabilities, indigenous people, and afro Ecuadorians⁷⁴.
- b) To encourage dialogue between different national cultures and develop projects that favor interculturality in the country.
- c) To apply processes that ensure co-government and gender equality in the university management system
- d) To promote pastoral education and encourage a relationship between reason, faith, and culture.
- e) To promote learning models based on Salesian principles and which focus on students
- f) To offer academic undergraduate and postgraduate programs approved by the Higher Education Council, continuing education courses, community engagement projects, research processes, cultural dissemination, and respect for the environment, with high quality standards to provide solutions to society's problems and needs.
- g) To guarantee academic freedom and freedom of thought, equal opportunities, and no discrimination
- h) To design academic curriculums which do not imply the incorporation of subjects aimed at religious indoctrination (UPS - Historical Review, 2023).

During its 29-year career, it has managed to insert itself into various social groups in order to respond to the needs of young people, especially the poorest. It provides quality education based on the Preventive System and inspired by the values of Gospel, from its Salesian mission to form "honest citizens and good Christians" [figure 66]. It has a presence in the three main cities of Ecuador: Cuenca, El Vecino campus where the headquarters are

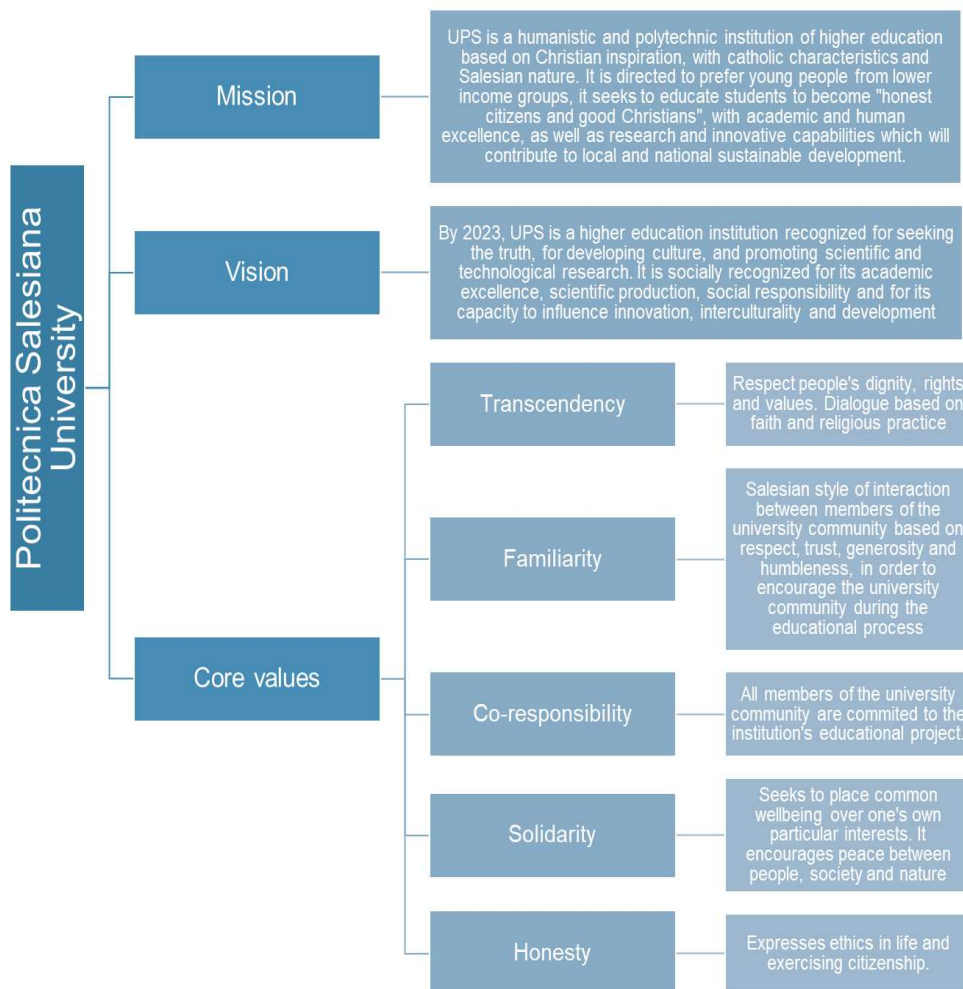
⁷⁴ The Political Constitution of the Republic of Ecuador (2008) establishes in its first article a plurinational and intercultural State, expanding the rights of indigenous populations and minorities contemplated in the 1998 constitution. This implies that citizens are recognized from their own ethnic, historical, or cultural condition. The term Afro-Ecuadorian refers to people who are Afro-descendants born in Ecuador.

located; Quito, Girón Campus, South Campus and Cayambe extension; and Guayaquil, Centenario Campus and Maria Auxiliadora Campus.

In 2012, UPS set a path "towards an academic community of researchers" based on a consultancy carried out by the GESPLAN⁷⁵ research group of the Polytechnic University of Madrid, Spain. The result was a conclusive document presented in September 2013 with a proposal for the structural bases for change at UPS with the aim of promoting a comprehensive change in the management of Education, Research and Community Engagement (Cazorla et al., 2017).

Figure 66

UPS Mission, Vision, and core values



Note. Based on "Historical review: history, university education, founding of UPS, objectives and IUS", by UPS, (2023).

⁷⁵ GESPLAN website: <https://www.ruraldevelopment.es/index.php/en/about-us/gesplan-group>

The methodology applied at UPS was Planning as Working with People (WWP)⁷⁶ developed by GESPLAN and involves three basic principles: (i) behavioral competencies, (ii) technical competencies and (iii) contextual competencies [figure 67]. The change implied a bottom-up strategy which meant a new way of conceiving the university, not only from the teaching and training perspective, but from the promotion of research as an intellectual engine. This nourishes the professor, provides feedback to the university chair, and has a positive impact on society:

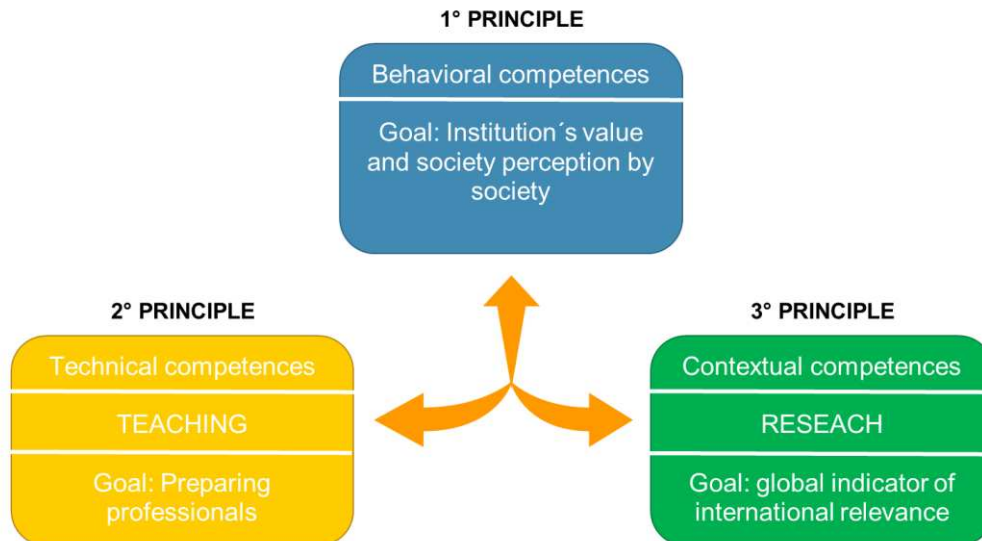
- (i) First principle – behavioral competences: within the internal component is the Value System of the institution; it is a way of acting, of teaching, of governing. It is the backbone of the University and is present in every process of change and the actors involved are managers, professors, students and administration and service personnel, they are the groups involved in this principle. The external component represents a graduate from UPS who internalized the values and projects them into his professional activity, and therefore, becomes present in the essence of society. In addition, the philosophy of the Institution and that of the people who have been educated there must be perceived by society —public and private institutions, companies, cooperatives— as relevant. That way, they come to UPS to generate links, projects, and synergies.
- (ii) Second principle – technical competences: this principle implies the preparation of students through two actions. The first is curricular teaching, which includes the concept of technical competence; that is, the academic offer of UPS through a wide range of business, social, environmental, and technical degrees. The second action is the extracurricular component, which is designed based on the first principle together with the tools that the curricular profile of a UPS graduate must complete. In this way, the professional and human profile is appreciated by society.
- (iii) Third principle – contextual competences: this principle has two components. On one hand, the investigation based on an internal perspective of the UPS, which is the base where plans are established to consider it as the engine of knowledge. This implies a culture of change since they must be promoted and executed by doctors. And on the other hand, research from a political-contextual perspective. Research that is not only reflected in high-impact publications and patents, but also,

⁷⁶ Working With People (WWP): is understood as a professional team practice that seeks to connect knowledge with action in a common project. It incorporates the value of the people involved and their participation during actions throughout the project. Planners, in addition to their technical and contextual skills, must possess strong social sensitivity and ethical standards (Cazorla et al., 2013).

it links with the territory. This contributes with the indicators that measure relevance to mark the positioning of UPS (Cazorla et al., 2014).

Figure 67

Planning as Working with People Methodology



Note. Translated and adapted from “Cuaderno de Reflexión universitaria 14 Hacia una comunidad académica que investiga”, by Cazorla, A., Herrán, J., De los Ríos, I., Jordana, J., Yague, J., & Salgado-Guerrero, J. P., 2014, p. 22. Abya Yala.

From this, the proposal raised two areas of intervention: Research and Education. The first involved the conception of the research project [I+D+i⁷⁷] as a catalyst for scientific activity. The research groups are the backbone, and the areas of knowledge, which contains research lines -work areas-, are a point of connection with society. With respect to Education, the following areas were proposed: the preparation/training of teachers, the UPS graduate profile, undergraduate education, postgraduate education, and the formation of Educational Innovation Groups. The introduction of these changes, together with the application of various strategies and policies, has allowed the growth and positioning of UPS [table 19 and table 20].

⁷⁷ See chapter 2 section 0, footnote 46.

Table 19*UPS Academic Offer*

	Knowledge areas	Undergraduate programs	Postgraduate programs
2014	Economics and business sciences	Business Administration, Accounting and auditing, Management and Leadership, Management for Sustainable Local Development.	University Specialization in Youth Cultures and School Context Master's Degree in Industrial Control and Automation
	Engineering	Environmental, Civil, Systems [Computing] Electrical, Biotechnology, Industrial Mechanics, Automotive mechanic.	Master's Degree in Local Development with a Mention in Formulation and Evaluation of Endogenous Development Projects Master's Degree in Youth Ministry
	Education	Bilingual Intercultural Education, Philosophy and Pedagogy, Psychology, Physical Culture, Work Psychology	Master's Degree in Social Policy for Children and Adolescents
	Social Science	Applied Anthropology, Social Communication	
	Veterinary Medicine	Veterinary Medicine	

2023	Administration and Economics	Business Administration, Accounting and Auditing Economics, Management and Leadership, Digital Business	MBA, Master's Degree in Foreign Trade and Logistics, Master's Degree in Management, Accounting and Auditing
	Science and Technology	Architecture, Biomedicine, Computer Science, Electronics and automatization, Electricity, Automotive engineering, Civil engineering, Industrial engineering, Mechanical engineering, Mechatronics Telecommunications	Master's Degree in: Research in Telematics, in Electronics and Automation, in Electricity, in Automotive Engineering with a mention in Business, in Mechanical Engineering, in Mathematical Methods and Numerical Simulation, in Industrial Production and Operations, in Information Security, Master's Degree in Software, in Information and Communication Technologies for Education in Professional Telematics, in Urban Hydraulic Supply Systems, in Integrated Solid Waste Management
	Social and behavioral science	Anthropology [online], Communication, Law, Local development [online], Multimedia Design, Philosophy, Psychology	Master's Degree in: Digital Strategic Communication; in Communication and Sports Journalism, in Philosophy, in Cultural Management, in Psychology Mention in Psychosocial and Community Intervention, in Psychology Mention in Human Talent Management, in Psychology Mention in Individual and Group Clinical Intervention, in Psychology Mention in Childhood Adolescence and Diversity, in Project Management, in Communication for

		Development and Social Change, in Cultural Management.
Education	Education, Basic Education Early Education, Bilingual Intercultural Education [online], Sport Pedagogy	Master's Degree in: Special Education; Bilingual Intercultural Education; Education Mention Thought Development; Innovation in Education
Life Sciences	Agriculture, Biotechnology, Nursing, Disaster and risk management, Environmental Engineering, Veterinary Medicine, Dental Medicine	Master's Degree: in Research of Natural Pharmaceutical Products, in Physical Activity, in Agroecology, in Water Resources, in Renewable Natural Resources.
Reason and Faith	Theology [online]	Master's Degree in Pedagogy of Religious Education

Note. Based on “Graduate and Undergraduate programs”, by UPS, (2023), retrieved from <https://www.ups.edu.ec/en/oferta-academica?35610=>

Table 20

Professors' Degree at UPS

	Master's Degree		Doctor's Degree - PhD.	
	2014	2021	2014	2021
Quito	329	336	26	63
Cuenca	206	201	9	77
Guayaquil	250	228	13	31
Total	785 = 61.6%	765 = 79.7%	48 = 3.7%	171 = 17.8%

Note. Information available at "UPS en cifras" by Annual reports published by UPS, (2015 &, 2022). Retrieved from

https://www.ups.edu.ec/transparencia?folderId=data_dIJwwopYyHIMrTaltEc34w%3D%3D

The two axes mentioned are in concordance with the relationship with society -community engagement- and the articulation of projects in different areas, establishing relationships with the business environment, consultancies, provision of services, attracting external resources, signing strategic agreements for the execution of Projects. In this way, it reflects how the UPS contributes to the social and economic development of its environment [see section 0 of this chapter].

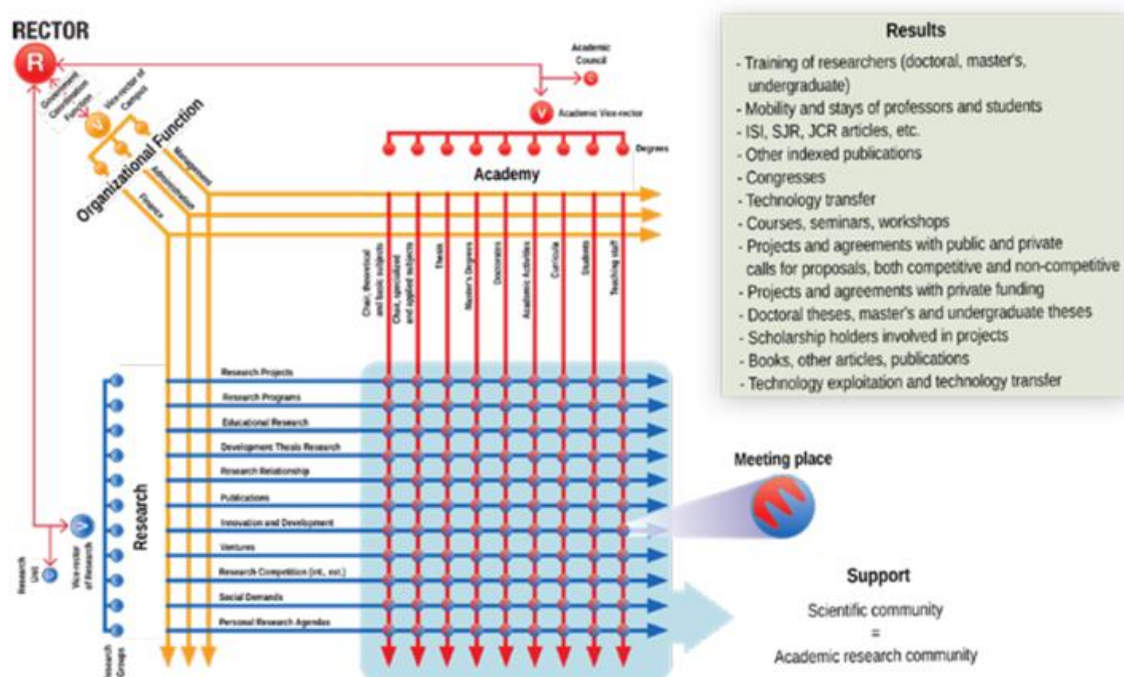
Later, in 2014 was published "University Reflection Notebook 14: Towards an academic community that research", UPS had gone from position 6610 in Webometrics Ranking to 3226, making visible the first positive results of the application of the strategy (Cazorla et al., 2014). However, it is important to mention that for UPS the rankings are not the ultimate goal, they represent an indicator that provides feedback on university management, its relevance and relevance to society; but the ultimate goal is the person.

The Academic Research Community's recognition that the dialogue between research results and society is an objective guarantee of its nature and *raison d'être* and is above any university rankings or any system for measuring quality or excellence. The university cannot entirely disregard such indicators for quality or excellence such as the rankings but can take them for what they are: necessary input for university management but not as an end in itself, which have to be the individual people. It is not the comparative indicator that provides feedback to what the university does, but the validation of its knowledge for society as significant and relevant (Salgado-Guerrero, 2021a, p. 261).

In addition to promoting an eco-systemic organization managed from the common, comprehensive planning from the base plays an essential role because it addresses teaching-research interactions in each node. It gives rise to complexity -typical of an ecosystem-, motivates a permanent dialogue and an accompaniment that generates unity and identity -key for the management of the CPR-. The meeting places⁷⁸ are the connection point -node- between teaching and research, where there is a plurality of values, human development, and reciprocity [figure 68] (Cazorla et al., 2014; Salgado, 2018).

Figure 68

UPS Teaching, Research and Community Engagement fabric



Source: Salgado-Guerrero, J. P. (Herrán Gómez et al., 2014)

Note. Reprinted from “An Ecosystem Called University”, by Salgado-Guerrero, J. P., 2021, p. 180, Abya-Yala. <http://dspace.ups.edu.ec/handle/123456789/20170>. Copyright 2021, by Juan Pablo Salgado-Guerrero, licensed under a Creative Commons License.

Later, in 2015, UPS, through Research Vice-Presidency, started to promote a culture of entrepreneurship and innovation in the university community (Carvalho et al., 2005) by the development of various initiatives that are aligned with the strategic vision: Coworking StartUPS and StartLabs. The central action in these environments revolves around the

⁷⁸ Meeting places is named along the thesis, as it has also a Salesian meaning, and it is a key component to later understand the environment that enhances capabilities.

person and their life project, a meeting place where capabilities are strengthened in a creative environment that invites them to be resilient in the face of situations that arise in the context. In this way, UPS promotes an academic community who research with responsibility, vision, and care for the common, positively impacting its environment and contributing in an integral way to its mission of "forming honest citizens and good Christians", while contributing to the IEE.⁷⁹

4. UPS: a complex (eco) systemic organization managed from the common perspective.

Currently, organization theory has become a rationalization of how to act organizationally, studying decisions and behavior. Organizational theorists have focused their efforts on building a discipline on the model of positive science, which contributes to the principles of maximization and efficiency of the economic model, leaving aside the social and political sense that an organization has (Ibarra Colado, 1987, 1993).

This has resulted in instrumental rationality and the bureaucratization, alienation, and dehumanization of work; as well as the effect that the rules have on the introjection of thought and action, giving rise to depersonalized and dehumanized behavior (Pauchant, 1995). Facing this reality and speaking of the common, it is necessary to reconstruct the organization in a different way, considering human nature, freedom practices, modifying individualistic consumer behavior for a more sustainable one.

As mentioned in section 0 of the methodology, Morin questions the organization that is incapable of grasping the complexity of reality. He starts from the concept of system which allows understanding complexity, a dynamic, alive, and interrelated organization, present within a context and environment that he calls ecosystem⁸⁰. In general terms, biology defines the ecosystem as a biological system made up of a community of living beings and the natural environment in which they live (Walker et al., 1999). The term is also used to refer to a social, professional or educational environment in which a group of people - community- evolves (Chelazzi & Santini, 2012). The term derives from the Greek oikos

⁷⁹ Cross-reference: Innovation and Entrepreneurship Ecosystem chapter 3, section 0.

⁸⁰ The term ecosystem was coined by Tansley in 1935 as a complex of organisms together with the physical factors of their environment in a given place. The author highlighted the idea of ecosystem as a "basic unit of nature" and years later identified its superior level of organization, which in systems theory means one more category among the physical systems that make up the universe, from the atom to the galaxies (Armenteras et al., 2016). From its initial conception, the ecosystem has been widely used for biology, organization theories, ecology and currently also for the promotion of innovation and entrepreneurship in a territory [see chapter 3, section 0].

[οἶκος]⁸¹ which means home, and system [σύ-στέ-μ(α) σύστημα] which means everything organized from several elements; denoting the interrelation within organisms and with their environment (Cortés Gabaudan, 2004).

Under this perspective, the University is a community of people, living beings, who interact, cooperate, exchange, and coexist, resulting in a complex system of relationships that has been called: University, a complex eco-system organization that has taken the initiative to manage its resources as common pool resources.

It is important to highlight that the examples around the world showed the feasibility of organizing in a way that is compatible with nature, where its resources are not exploited, nor maximization is the ultimate goal. On the contrary, the proposal seeks to explore a new form of organization and management, which contemplates the Sumak Kawsay [see chapter 1, section 2 & chapter 2, section 0], the relationships between human beings and the environment in which they live, and human development for the entire community.

Evidently, an ecosystem organization makes different analogies with nature and living systems to understand the Organization Theory [table 21]. It includes some peculiarities of the ecosystems, which are the result of centuries of evolution and adaptation. Its main contribution to the organization of the University approached from the perspective of a CPR is that it provides elements that facilitate monitoring and management of its projection from the knowledge management that the same organization produces. In this way, the order remains elsewhere, hidden in the personal and community development that sustain the common good, as well as all that interaction in a place that dialogues and cares for the environment where it develops.

By developing the analogy with the natural ecosystem, the UPS also has consumers, producers, and decomposers that make visible the energy-knowledge and matter-resource flows (Jackson, 2011). Consumers are all the actors who take advantage of energy and matter to develop and carry out their activities, only research groups, educational innovation, Salesian associations and entrepreneurship. Ecosystem dynamics favor not only the creation of groups but also trans and interdisciplinarity in them.

The producers of the ecosystem are responsible for developing the photosynthesis process so that the "plant" develops. In this sense in the UPS, they provide resources -biomass-physical, financial, management to consumers. Among them we can name within the UPS: Superior Advisor (Monitor Council), Academic Council, Economic Council, Research

⁸¹ Oikos was addressed in chapter 1, section 0: "The Oikos: mother cell of economic resources".

Council (Collective Action), Ecosystem Acceleration, Technology Transfer, Coworking StartUPS and StarLabs.

Table 21

Ecosystem's principles analogies with university

Ecosystem	Politecnica Salesiana University
Energy as a Source of Any Ecosystem Cycle	University exchanges energy with a macro ecosystem -social context- spontaneously or not spontaneously and uses the energy from those exchanges to produce more specific results.
Evolution and Adaptation	(i) Homeostasis: to generate an innovation and research culture where actors and groups have diversity and multiplicity of functions. (ii) Environments that enhance people's capabilities and (iii) Entropy within the organization
Locally Focused and Receptive	(i) Interactions favors evolution, depends on environmental conditions, and can also influence it. (ii) Gregarious - groups organized by affinities and interests, as a consequence of self-organizations. (iii) Common interests arise and on one hand, values are built bottom-up, and on the other permeate the university top-down.
Nonlinearity and Non-Equilibrium Equilibrium	(i) Knowledge built from actions: constant flow, creative limits, cross-pollination ⁸² , feedback cycles. (ii) Adaptation to the environment and creation of strategies to overcome crisis and challenges. (iii) Examples of the Andes worldview [chapter 2, section 0] and the commons [chapter 2, section 0].
Optimization rather than maximization	(i) Dynamics within university are also cyclical so as jobs and organizational functions. (ii) Concern about employee's well-being.
Development and growth integrated by self-organization	(i) Bottom-up action creates cooperation networks which end up producing interdependence within the actors. (ii) University community is self-organization. (iii) Groups choose their own organizational structures, when interactions and synergies increase, the group mutates and transforms giving way for rhizome cycle to begin.

⁸² Cross pollination will be addressed on the following section when talking about open ecosystems, chapter 3, section 0, subsection 2.1, strategy 2.1.4.

Note. Based on “An Ecosystem Called University”, by Salgado-Guerrero, J. P., 2021, p. 35-36, Abya Yala. <http://dspace.ups.edu.ec/handle/123456789/20170>. Copyright 2021, by Juan Pablo Salgado-Guerrero, licensed under a Creative Commons License.

Decomposers have the role of transforming organic matter such as information⁸³, financial statements, knowledge management, metrics, to transform it into inorganic matter as diagnostic and monitoring information for decision-making of the university-ecosystem. In the case of UPS, it is called CREAMINKA⁸⁴, a set of smart tools that analyzes the ecosystem at its micro and macro level, as well as the development of the actors -consumers- their internal and external interactions and synergies [table 22].

Table 22

CREAMINKA: services and functionalities

SERVICE	DESCRIPTION
Automatic search of scientific articles	Produced by UPS and published in Scopus, Web of Science, EB-SCO, SCIELO, Mendeley, CrossRef, and others.
Semantic analysis of research results	The fingerprint shows research concepts per unit and researcher, including research knowledge areas and indicators such as citations or h index, number and types of publications, contact details.
Information necessary for forming improbable pairs	Connects researchers who are unknowingly working on similar or complementary topics. The aim is to promote collaboration between universities -nationals and internationals-.
Inter-institutional cooperation	Helps to map collaborative networks with national and international institutions.
Research results visibility	Visualizes international networks by knowledge area or cooperation [at an international context].

⁸³ The information is the result of the transformation of energy -knowledge and biomass-resources, which comes from the activity of consumers.

⁸⁴ “Crea”, Spanish word for create; and minka, Kiwcha word for collaborative work [see Table 10]

Research results traceability	Tracks scientific articles, awards received, prototypes, participation in events, patents, among other scientific activities.
Web services	Access to the website ⁸⁵ for consultation on information regarding research at UPS
Public and private CVs	Through CREAMINKA, researchers can access to their profiles and built their CVs based on the available information.
Intelligent dashboards and reports	Generation of intelligent dashboards and reports on research data.
StartUPS Entrepreneurship Ecosystem Management and monitoring	Management and monitoring of activities, projects, events, and actors of the StartUPS community, showing the cooperation networks.
University resilience and entropic footprint	The footprint is based on an analysis of knowledge management indicators. “Measures the UPS’s capacity of resilience and adaptability to change based on the diversity of its scientific production” (p.437).
Scientific impact of researchers and groups	Measures the scientific impact of researchers and groups. The map shows the most relevant groups and largest number of citations. This helps to the development of communication strategies of knowledge generated in each research group, as well as exchange and socialization.
Actors’ traceability and mapping	Tracks the actors within the research and entrepreneurship ecosystem, mapping the activities in order to accompany the development process of both, initiatives and projects so key management and acceleration points can be identified.
Identify trends in entrepreneurships	StartUPS ecosystem projects are exposed to changes or pivots depending on many factors. This function helps to keep track community interests and

⁸⁵ Website: <https://www.investigacion.ups.edu.ec/investigacion/>

partnerships that happen over time in order to feedback mentoring, accompaniment and supports strategies.

Functioning traceability of StartUPS actors	Inspired by the capability approach and the importance on promoting training for individuals' development and well-being, actors need to be capable to [be and do] function in different contexts.
Semantic metadata repository	Metadata is obtained from indicators of knowledge production, the Eco systemic perspective, the centrality of the person and its supremacy with respect to evaluation mechanisms (p.443)
Index of researchers	This contributes to the social organization of work by optimizing work and workload type in the university. It balances teaching, research, and administrative hours in a more equitable way among all professors in the UPS.
Research lines and areas of knowledge	Research lines and areas of knowledge are establish as a result of the emergence of the research based on all the data, considering its relevance with society, and not simply imposed.

Based on "An Ecosystem Called University", by Salgado-Guerrero, J. P., 2021, p. 430-, Abya Yala. <http://dspace.ups.edu.ec/handle/123456789/20170>. Copyright 2021, by Juan Pablo Salgado-Guerrero, licensed under a Creative Commons License.

This is possible when the university community, as in other groups and communities, stays together for a common interest. So, the goal that motivate this community transcend the study programs, lectures, research projects, and become active actors who raise, propose, create, act, and give way to the construction of an emerging organization bottom-up [figure 69].

Figure 69

University-Ecosystem



Note. Based on "An Ecosystem Called University", by Salgado-Guerrero, J. P., 2021, p. 35-36, Abya Yala. <http://dspace.ups.edu.ec/handle/123456789/20170>. Copyright 2021, by Juan Pablo Salgado-Guerrero, licensed under a Creative Commons License.

As a result, an ecosystem is a community of communities, so when referring to a university-ecosystem, it is made up by social groups, for this reason, control mechanisms are

necessary, but can generate a negative effect by ceasing to understand it as a living whole, in which events, processes, cycles take place; a [human] organization dependent on the ecosystem where it [society] develops. In this sense, the need for a form of organization that allows the University to be managed as a CPR [table 23] is undeniable.

Table 23

The organization and the system: the ecosystem organization

	Niklas Luhmann	Jürgen Habermas	Common Good - Research Group UPS⁸⁶
Theory	The organization as a social system is an autopoietic (reproduces actions) and self-referential (capable of acting for itself) reality, different from biological systems.	The system is confronted in a dialectical reality with respect to life. Exposes the concepts related to the system and world of life in the two volumes of Theory of Communicative Action.	University ecosystem managed from the university community based on ground rules and co-responsibility ⁸⁷ principle.
Organization	It is a social system. With the selection of the system, the environment ends up adapting to the system not the other way.	The living world is formed by the material (instrumental operations, technology, domestication of nature); and the symbolic (communication through language).	Ecosystem organization, understood as autopoietic and self-referred social units.
System	It is self-referential and closed, communication is valid only within it. Outside there is no communication. It involves elements, relationships and must reduce complexity.	It works externally, contemplates society from the observer's point of view.	Groups of people who play in their decisions the viability of the CPR, therefore resources are managed collectively.

⁸⁶ For more information and research results visit <https://pure.ups.edu.ec/es/organisations/university-and-common-good-research-group-giub-2>

⁸⁷ Joint responsibility is another way to express the idea of reciprocal relations within a community.

Social systems	Organizations as systems do not seek to regulate access to common goods, but instead produce themselves by making restrictive decisions regarding their environment in order to reduce their causality as much as possible.	In the living world, communicative interactions are woven, and communicative action allows the conditions of validity and discursive rationality. The living world refers to the point of view of the subject who acts in society.	Biomimicry. Appropriation-provision
Society	It is a particular form of system endowed with the "capacity to establish relationships with itself, and to differentiate these relationships from relationships with its environment" (p.44).	Understanding societies simultaneously as a system and as a world of life.	Synergy, rhizome, network and interactions within community university and society.
Community	Make decisions based on reducing uncertainty and complexity.	Language and dialogue potential.	Institutionalized forms of collective action typical of Andean ⁸⁸ and rural communities, which must act and decide their continuity in their territory, along with the continuity and good use of their resources.
Comunication	Communicating means limiting, since it self-selectively reduces the possibilities. Agreements and consensus are not possible.	In order to solve problems, it is necessary a consensus, reached through a communicative rationality.	Forms of communication and collective decision-making from the ethics of responsibility to make possible the existence of vital resources and CPRs.
Decision-making process	Top-down.	Group solidarity is established.	Bottom-up (feasibility of common resources).
Social interactions	Problems and their solution	Through dialogue it is possible to solve the ethical problems of	Consensus and agreements for rules, monitoring, and control system.

⁸⁸ Cross-reference: See chapter 0, section 2.

		contemporary societies.	
Environments and the world	They are acting units and people are part of the environment.	Free, equal, and critical participation of individual	Co-responsibility among members in relation to the community and the environment,
Relationship with the environment	It is confusing and changeable. In order to be able to act in relation to it, one must selectively observe.	Subjects communicate their needs, interpret the world, negotiate their action through language.	Actors are not units of a system or subsystem but are responsible and deliberative subjects of their decisions, actions, and consequences.

Note. Based on “Bases para la organización de la Universidad-Bien común”, by Salgado-Guerrero, J. P., & Juncosa, J., 2018, p. 45-78., in “La universidad: un bien de uso común”, Quito: Abya Yala.

The critical goal of the organization lies in objectively combining the individuality, interest and development of people and the community to which they belong. Their interactions inside and outside the social group also includes the relationship with CPR. The theory of complexity helps us to understand the uniqueness of the system-organization, the antagonistic relationships that are produced and that make said system exist. The balance within an organization does not imply the absence of forces of repulsion or exclusion, it implies the generation of order and disorder to generate a new order and that the systemic balance is maintained [see Figure 7].

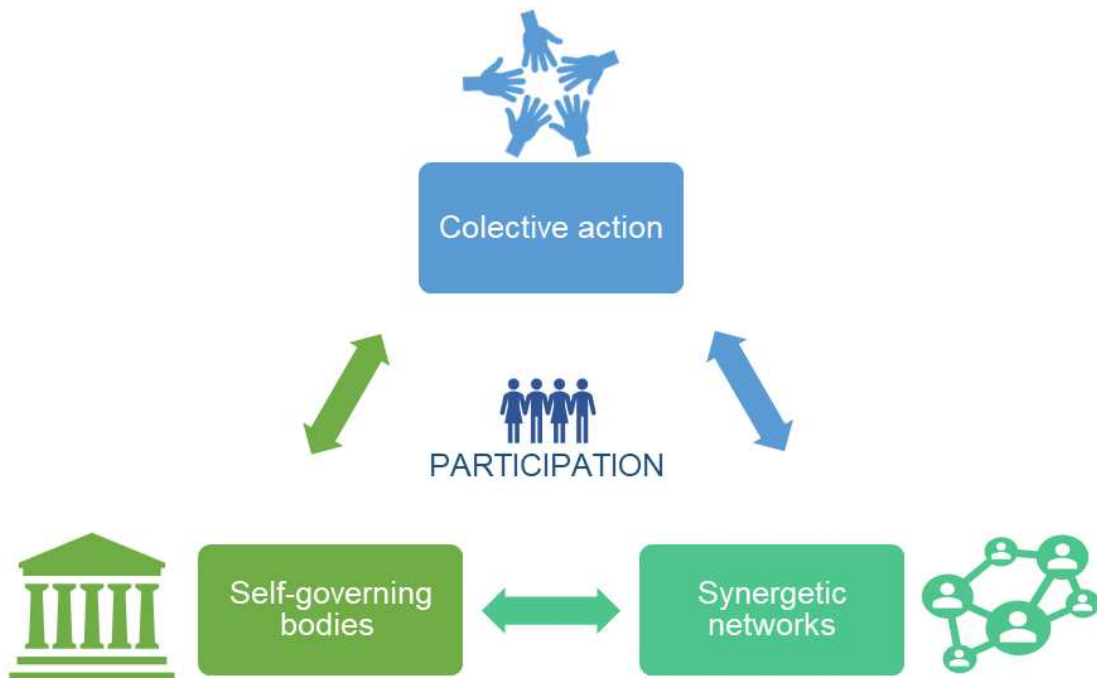
The key is to take be careful of imbalances within appropriation because it would force actors to survive in any production mode outside the current rules (Townsend & Wilson, 1987). The management of a common good is done from the organizational management of the economy and not from the economic management of the organization. In this sense, the University is a complex-system organization that shares common resources, and from this perspective it is understood as "a system of shared resources that includes goods and economic regimes and knowledge production" (Salgado-Guerrero & Juncosa, 2018, pp. 49–50).

The use, governance, and sustainability of the university's CPRs implies, on one hand, the relationship between community action and the internal groups that have ownership; and on the other, the internal logics of self-organization managed by the CPR. Although there

is no single way in which the commons are organized and managed, one can speak of the following patterns [figure 70]⁸⁹.

Figure 70

Governing from the common's perspective



- Collective action⁹⁰: occurs when the efforts of two or more individuals [organizations, countries, etc.] are required to achieve a common result (Sandler, 1992, 2015). In contrast to Adam Smith's invisible hand that establishes that in the market, individuals' self-interest [homo economicus] boosts collective wellbeing.

For a pure public good, one person's contribution automatically benefits other potential contributors owing to nonrivalry and non-excludability of benefits. Thus, one contributor is likely to reduce his or her contributions as others contribute more to the public good. Similar strategic interactions characterize

⁸⁹ The word patterns are used as a term coined by Helfrich & Bollier to talk about the commons. See chapter 2, section 0.

⁹⁰ The Logic of Collective Action was published in 1965 by Mancur Olson and had a big influence in public choice studies. The starting point was the question if large groups were capable of furthering their collective interest in a time where scholars argued that political agents not always foster collective welfare. His theory transcended economic fields and had influence on sociology, anthropology, political science, and public policy. The collective action failure is analyzed through the concern of public good, externalities and the commons.

generators of external benefits or costs, or exploiters in a commons with open access [Ostrom 1990] (Sandler, 2015, p. 196).

- Self-government mechanisms: is a result of shared knowledge, will and recognition within the framework of institutional provisions that are adequate and promote support for the members of the organization. For example, as mentioned in chapter 1, section 2, until present time, the indigenous, native and peasant communities from the Andes, had structures, mechanisms, and practices of self-government for the control and management of their territories; they have been historically constructed and reconstructed through agreements, tensions and conflicts within the territory, but also in constant negotiation with the State and society. These self-governing structures are diverse due to the geographical, social, and cultural particularities of the indigenous peoples, even with variations within each indigenous community.
- Synergistic networks⁹¹: created within the community, perceived as a social network where recognition, organization reciprocity, public opinion motivates and generates identity for people (Helfrich & Bollier, 2020). It is based on optimization rather than maximization to guarantee sustainability.

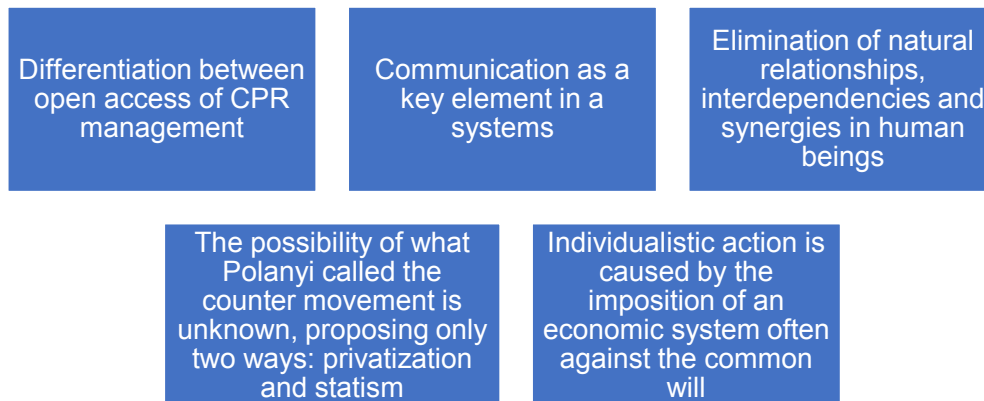
To motivate participation there must exist incentives, otherwise, collective action is unlikely to occur even though that group shares common interests. When the benefits/incentives are for the active participants, the parasitic consumer or free rider problem is avoided. Therefore, four aspects need to be consider: (i) group size and control structure where in a smaller group is easier to control the actions of individuals; (ii) punishment structure for the one who does not collaborate; (iii) prize structure [incentives] to motivate individuals participation; (iv) costs as acting is costly, but if the benefit structure is clearly defined, there will be more incentive to participate (Olson, 2002).

It is important to highlight that the studies carried out in this area do not consider some relevant factors [figure 71] and that the understanding of common goods implies that they are complex, dynamic and respond to various situations, so by their very nature and complexity the solutions must emerge from the community.

⁹¹ Synergistic is the adjective for synergy which means the “combined power, profits, etc. that can be achieved by two organizations or groups of people working together rather than separately”; and network is considered a large system consisting of many similar parts that are connected together to allow movement or communication between or along the parts, or between the parts and a control center” (Cambridge University Press, 2022, p. n.p).

Figure 71

CPR management within a university



Note. Most of the literature focuses primarily on the analysis of individualistic behavior, without considering that there are individuals or groups that work for common benefits and manage common resources when there are adequate conditions, appropriate rules and conflict resolution mechanisms (Feeny et al., 1990; Felber, 2012).

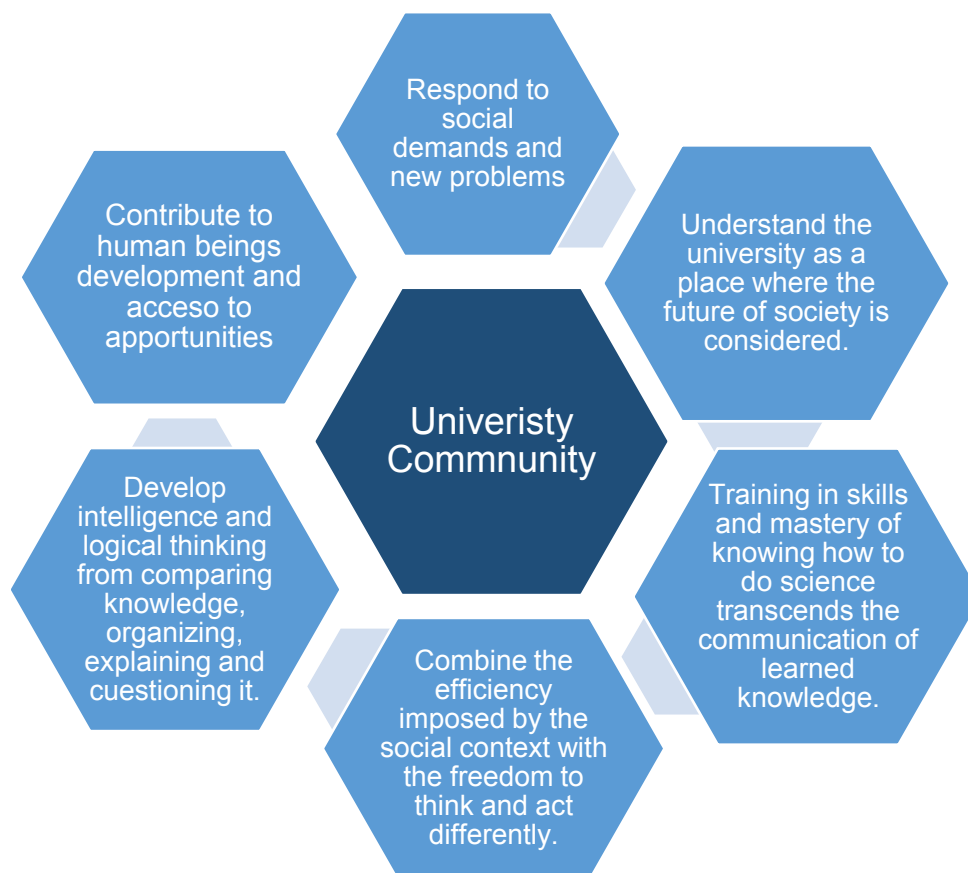
4.1. Governance and CPR management in the UPS: knowledge and action

In recent years, recognized universities -public and private- have applied various experiences of governance, not from the criteria of power balance and negotiation of interests, but from the mission and vision of the university (Vidal García & Vieira, 2014) (Vidal García & Vieira, 2014). This requires a university governance that integrates knowledge and action. This allows the university community to be involved, to develop research and innovation processes capable of generating cooperative learning ecosystems, capable of responding to the challenges of society [figure 72].

To consolidate governance in the UPS from this perspective, three fundamental axes are essential: (i) the student, as a human being, is also a researcher who questions paradigms and seeks to understand reality from new perspectives, thus developing critical reason that breaks with the instrumental tradition and rationalist. (ii) the scientific community, which permanently thinks and recreates through its common agenda that gives it identity and strengthens the values of the university; it is his search for the truth, he makes sense of reality by taking the context into account and transforming it. (iii) Communication for change, making positive experiences known, socializing good practices and penalizing those that are not, promoting communication and the generation of networks (Cazorla et al., 2014; Salgado-Guerrero, 2021b)

Figure 72

University governance and community participation



Note. Based on “La Universidad Católica: un recurso de uso común. Definiciones e implicaciones para la autonomía y toma de decisiones”, by Herrán Gómez, J., 2018, p.36-37, in *La universidad: un bien de uso común*, Quito: Abya Yala.

The meeting places represent a fundamental axis for the development of synergies between the members of the university community and the different activities that each one develops. In the meeting places, ideas, interests, thoughts that feed the academy and the university structure [theory] come together. They materialize in specific projects and programs [practice] that seek to positively impact the environment and put the results obtained at the service of society and in turn receive feedback from it.

As mentioned earlier, CPR have important characteristics that can be applied to the University and its different environments. They base their economic relations on cooperation and collaboration, and policies on democracy. Therefore, the organizational model raises the existence of rules and incentives that generate the right conditions to

achieve true human and social development. This encourages self-organization based on different objectives within the groups, with the University and with the context -society-.

Managing a university under the perspective of a company implies moving from commodities to capabilities in order to achieve true human development. This implies autonomy, meaning obligations regarding the generation of knowledge in an innovative way, which will impregnate in the University and in society.

- Shared responsibilities and benefits.
- Internal and external synergies and interrelations. The university has to be related to the context and transform it in a positive way.
- A motivated and committed academic community.
- Incorporation of an innovative organizational culture, rescuing good practices and generating new environments to enhance capabilities.
- Shared values, promotion of alternation and transparency, joint work from different environments to contribute to the sustainability of the major resource - the University.

To understand how a UPS is organized like a CPR, it has been approached from the theory of complexity based on the relationships that exist between the ecosystem organization [chapter 3, see section 1] and knowledge, as well as the management of common goods developed by Ostrom [see chapter 1, section 0, subsection 3.2].

The essence of the commons lies in appropriation and provision [see chapter 1, section 0, subsection 3.1]. This interaction can be defined as the game of detection and deterrence that helps to define the limits between an individual lesson and that of other actors so as not to affect the resource (Gardner et al., 1990). Salgado-Guerrero (2021a) in the proposal of UPS as a University-Ecosystem, poses that collective action is the engine that allows the construction, restoration and maintenance of CPRs. The government of the University must ensure the participation of the university community and leave behind the autarchic and endogamous forms through a dialogue between instrumental reason and critical sense⁹².

⁹² The university is the place par excellence where the -conflictive but fruitful- relationship between instrumental reason [the effective transformation of the world, nurtured, in this case, by science and guided by the search for efficiency and rationality], and the critical sense [sense, justification, questioning] is built (Salgado-Guerrero, 2021, p. 279). The first, focused on actions or processes that seek efficiency; and the second, in the questioning, the justification. However, both are important because society is built from personal experiences, cultural relationships, scientific knowledge, and communication. Therefore, by combining critical and instrumental reason, the knowledge generated in this ecosystem must lead to satisfying social needs and demands.

This represents an antagonistic way of which Morin [see II methodology] uses to explain complex systems, in this case applied to the University as an ecosystem organization.

Moreover, University governance systems must include representative collegiate bodies and gregarious bodies -groups- outside of representative democracy. In this way, personal interests are regulated by common interests in an environment that promotes positive synergies, calling for individual and community communication (J. P. Salgado & Herrán, 2017). Also this aspect is related to "The Social Life of Commoning, pattern Reflect on Your Peer Governance" [see chapter 2, section 0, subsection 4.1, subsection 4.1.8, Figure 55].

The problem of appropriation and its regulation have to do with the organization for supervision and control, which implies a modification of the organizational structures and its normalization within the entire university. It is essential to establish relationships of strategic behavior between appropriators and the monitoring councils (Herrán Gómez, 2018) [see chapter 2, section 0, subsection 4.2, numeral 4.2.7 - Peer Monitor & Apply Graduated Sanctions].

In one hand, a Monitor Council comes from the outside, State or Promoters to ensure that the shared agreements are fulfilled. On the other, a Collective Action Council establishes the rules, approved by consensus, for the use of resources (Salgado-Guerrero & Juncosa, 2018) to guarantee that individual actions and those of others do not compromise the sustainability of resources [table 24]. All the actors involved must be aware of this and, along with the collective identity and sense of belonging, they all appropriate and contribute to the sustainability of the CPR.

Flexibility in the rules of the game should not be confused with non-compliance with them. It must be remembered that the organization is complex, dynamic and Ostrom (2008) also refers to changing and flexible organizations suggesting some mechanisms for creating rules taking into account the process and the level of analysis. This is also based on the ecosystem principle of emergency [see Figure 8 methodology section 0], which acts from the bottom up based on experience and when consensus is reached, the monitoring council ensures compliance and permeates the community from top to bottom (Cazorla et al., 2013) (Cazorla et al., 2013) [table 25].

For this reason, when conceiving a University as a CPR, it is necessary the modification of the organizational structures, establishing relations of strategic behavior between appropriators and the monitoring councils. In this sense, the government of the University must ensure the participation of the community in the university and leave behind an endogamous or autarchic government of the university for the university.

Table 24

Monitor and collective action council

NAME	UNIVERSITY GOVERNANCE	ROLE
Monitor Council	Representative collegiate body	Comes from the State or Promoters, both for public and private universities respectively. Its mission is to ensure that shared agreements or established standards are complied with.
Collective action council	Gregarious ⁹³ organ - groups	They guarantee the dynamic between appropriation-provision, establishing rules for the use of resources, approved by consensus. The university community accepts that the council apply and supervise compliance with these.

Note. See chapter 2, section 4, subsection 4.2 to better understand the governance of the commons.

Table 25

Rules and level of analysis

Rules	Constitutions Monitoring Council (Promoters)	Collective Election Institutional government councils (Government collegiate bodies)	Operational Collective action council (Self-organization councils)
Level of analysis	Constitutionality	Collectivity	Operability
Processes	Formulation Management Adjudication Modification Macro monitoring	Policies design Administration Adjudication	Appropriation Provision Specific monitoring Imposition

⁹³ Is an analogy used from natural environments that refers to “animals living in flocks or loosely organized communities” (Cambridge University Press, 2022)

Note. Reprinted from the chapter “Bases for the organization of the University - Common Good” by Guerrero, J. & Juncosa, J., 2019, p.59, “The University as a Common Pool Resource: A set of resources, moral and cultural values from the Academic Community of Universidad Politécnica Salesiana”, Quito: Abya-Yala. Copyright 2019 by Fernando Solórzano (compiler).

Then, it is possible to rethink government systems by mixing representative collegiate bodies and gregarious bodies [groups], not subject to the political dynamics of representative democracy. In this way, personal interests are regulated by common interests, providing positive synergies that call for communication for change in an ecosystem that enhances capacities (Salgado et al., 2017) of the person and the community (Salgado & Herrán, 2017). Communication plays an important role because it transcends the logic of control and programmed organization without reducing itself to consensus. Communication implies that the actors are responsible subjects within the organization, who debate, deliberate, and make decisions based on what is common.

4.1.1. Appropriators and providers in the [Catholic] university: UPS

The university of the 21st century moves in very different terms to those of the last century, living in a permanent, constant change that occurs quickly, which requires a conceptual innovation (Mayorga, 1999). Living in a VUCA world [see chapter 2, section 0, subsection 0], UPS needed to innovate its management model in order to respond to the challenges described above, as well as to manage from the perspective of the common.

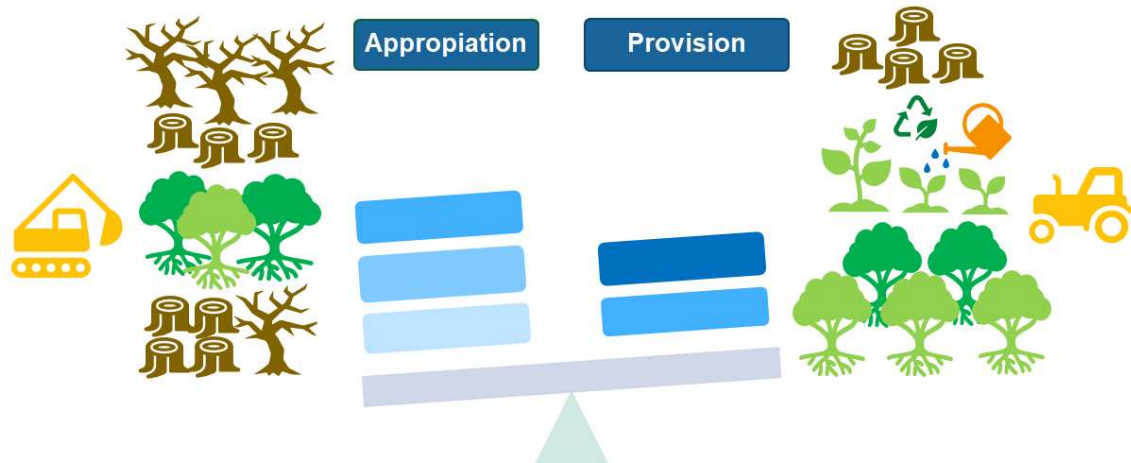
If the common good is the starting point, a system of university government -similar to that of a community that manages a CPR- is proposed, with self-government and self-organization capacity that are based on the appropriators-providers that are part of the university community (Herrán Gomez, 2018). In this sense, all members have an interest in appropriating something that the university offers, but also -based on co-responsibility- they must provide and contribute for its sustainability, which Ostrom calls the logic of appropriation and provision [figure 73]. The interaction between the actors contribute to the quality of education and its continuous improvement.

Each member of the university community is an appropriator and provider because the organization of appropriators for a collective action is, in general, an uncertain and complex task [...]. The decisions and actions of the appropriators [...] depend on the way in which they know, consider and evaluate the costs and benefits of their actions, as well as the perception of the shared identity (E. Ostrom, 2011, p. 82). For this reason it is important

that the appropriators know and generate an identity link with the institution in order to strengthen it [see pattern cultivate shared purposes and values, chapter 2, section 0, subsection 4.1, numeral 4.1.1].

Figure 73

Appropriation-Provision problems



Note. The logic between appropriation-provision implies the constant search for solutions to get out of the imbalances between the appropriation and resources availability. In the same way, it implies finding adequate ways to assign responsibilities to build, restore or maintain the CPR [see chapter 1, section 0, subsection 3.1, and chapter 2, section 0, subsection 4.3].

In this sense, if the CPR of the Catholic University -as the UPS- is managed under normal ethical conditions and with agreed administrative criteria, the usufruct of many university resources is extended indefinitely, since a positive feedback system is established in academic quality. that summons students and they ensure the interests of teachers, administrators, and service personnel, such as job stability and salary.

Positive and negative incentive systems, associated with actions and results, available information, and access to it, can stimulate the coordination of activities that contribute to the development and sustainability of the university. In addition, external authority is required to ensure the fulfillment of the mission and vision. For Ostrom they are the so-called delegates or boards of local organizations. Therefore, the community develops satisfactory agreements and regulations to cover individual interests in the management of the common, while the external authority acts as a regulator of private interests without affecting the CPR [see also see pattern preserve relationships in addressing conflicts, chapter 2, section 0, subsection 4.1, numeral 4.1.7].

Although the external context determines the regulations and rules that universities must follow in accordance with government policies [monitor council]. However, this does not prevent the conditions for sustainability and assurance of the institutional identity and its mission from being generated internally. The most frequent problems related to appropriation-provision [table 26] are the following:

Table 26

Alternatives to appropriation-provision problems

Problem	Alternative proposal
Imbalances occur when CPR is appropriated by too many actors or larger amounts because they have greater capacity to take advantage of it.	Allocation of the flow of resources to reduce the conflict around the allocation of rights and the atomization of resources.
Unlimited access to CPR	Rules and monitoring mechanisms
Temporary access to resources due to heterogeneity and uncertainty may benefit some more than others	Organization for supervision and control, which implies a modification of the organizational structures

From this perspective, the model of university governing bodies [see Table 23 above] must interact in an uncontrolled rhizome and, through action, undertake planning from below (Salgado & Herrán, 2017). In this way, the university community will regulate the collective interest as a movement of provision and sustainability of the university, and the individual interest of appropriation of what the University offers.

4.1.2. UPS Common Good: economic, political, and social action through a non-commercial perspective⁹⁴

The Common Good is the result of the interaction and exchange between economic, political, and social action. In chapter 1, section 1.2, was discussed how human -social- actions, within a context with political implications, are a way of doing economy. Various dynamics are developed at UPS where the complex interrelationship between economy, politics and society converges. By having the mission of "forming honest citizens and good

⁹⁴ This section was built based on the work by UPS GIUB research group, developed in the chapter 3 of the second book published "The University-Commune". Salgado-Guerrero, J. P., & Herrán Gómez, J. (2019). Non-commercial economic logic of the university-commune. In P. Carrera-Hidalgo & F. Solórzano (Eds.), *The University-Commune* (pp. 85–136). Abya-Yala.

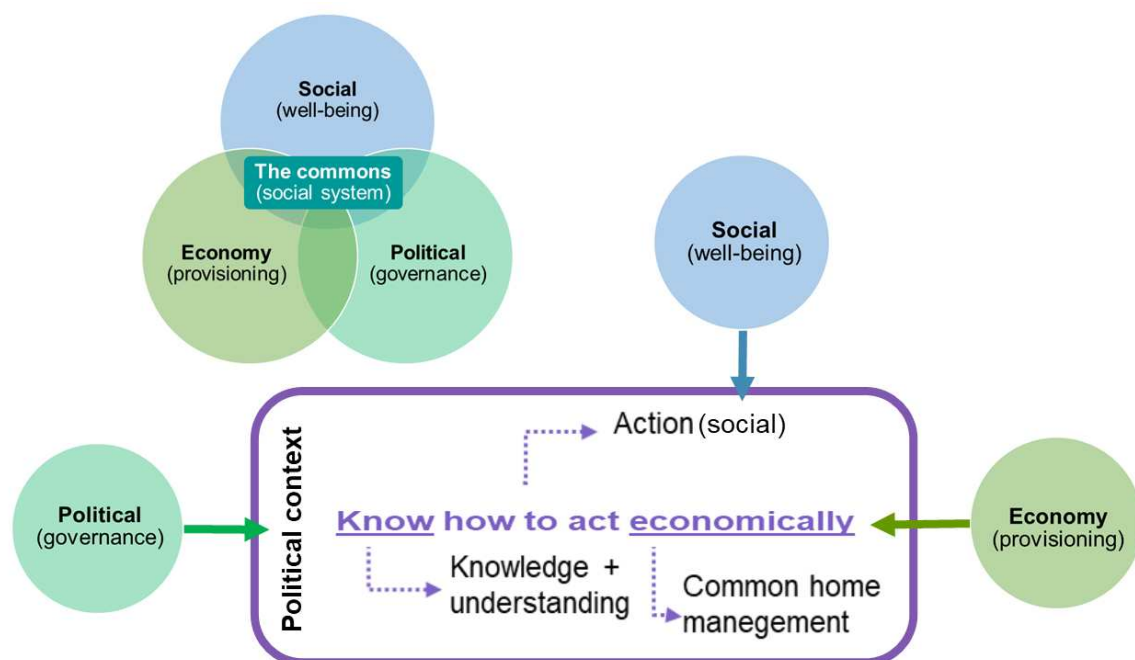
Christians", it is a matter of seeing that individual performance reflected in common performance.

The anthropological conception of homo economicus [see chapter 1, section, subsection] have reduced their actions to buying cheaper goods and selling themselves at the highest possible price. For this reason, a logic compatible with life is proposed, reasonable based on all the members of the community, where the three elements find a point of balance. Well, it is the community that evolves along with its management rules and institutional diversity⁹⁵.

Knowing how to act economically has been proposed from a perspective that starts from the experience and knowledge produced by the same experience, the discernment of opportunities, options, and possibilities. In this sense, practical action is capable of articulating scientific knowledge of economic activity, while knowing how to act economically on the one hand, is based on science and represents the application of that knowledge in an action [figure 74].

Figure 74

Know how to act economically



⁹⁵ Cross-reference: chapter 1, section 0. Chapter 2, section 0. Chapter 3, section 0, subsection 0.

Rather than a form of articulation or social structuring, the commune turns out to be a social-contractual model of systemic organization⁹⁶, which allows economic exchanges to be carried out in a non-commercial political dimension within the community. A mercantile university privileges the market value and promotes individualism that eliminates the possibility of acting economically [...] reduces the actors to simple taxpayers and consumers subject to the law of offer/demand (Salgado-Guerrero & Herrán Gómez, 2019, pp. 98–99).

In contrast to appropriation-provision of a CPR which considers essential the sustainability and self-sufficiency of the resources, using different strategies for production, management and social organization of the work, based on the common interest of the university community (Laval & Dardot, 2015). As a result, eight economic strategies were proposed for the university community [table 27].

Table 27

UPS Economic Strategies

Economic strategies	Description
Non-monetary production strategies: reciprocity ⁹⁷ and redistribution	<p><i>Redistribution</i> takes place in the consumption sphere. It comes from the concept of social justice and is understood as the social control that the UPS makes to avoid social differentiation within its members and strengthen equity. E.g., Differing tuition fees for students</p> <p>Reciprocity takes place in the production sphere. It is the correspondence between the members of the university community. E.g., Salaries are based on students' payment capacity; they do not promote enrichment, but a dignified life.</p> <p>Both are interrelated in terms of access to physical and economic resources and knowledge produced in the university.</p>
Managing diversity and redundancy: diversified production	<p>The diversity or diversification of the modes of production allows (i) optimizing mechanisms and taking advantage of opportunities, (ii) responding to external demands, (iii) fostering resilience and sustainability. E.g., The groups within the UPS are organized based on their interests, work through projects (PBL), enhance their capabilities</p>

⁹⁶ Systemic organization which implies system, interactions, and organization.

⁹⁷ Cross-reference: chapter 1, section 2, Figure 26, Table 10 and Table 11. Chapter 2, section 0, subsection 4.2, numeral 4.2.1.

	and strengthen community engagement. Diversity allows them to manage their own development cycles, specialize and produce knowledge.
Hierarchies and heterarchies management	Meaning a polycentric government, capable of self-organization, where hierarchical dynamics are subjected to group networks. The network allows a dynamic structure that gives rise to -autonomous- rhizomes, made up of lines that establish dimensions and flows that give rise the metamorphosis/transformation of the groups. This results in heterarchies(Cumming, 2016).
The relationship between comunards and the CPR	Part of the appropriation-provision relationships, which in turn have a direct impact on “know how to act economically, from the individual perspective and its impact on the community. Self-organization capacity guarantees that there can be regulation, structures and order.
The social and political organization	It is based on the existence of a council where all the agreements and regulations on access to the appropriation-provision of resources, the rules of coexistence and the assurance of compliance with all contracts and commitments are formulated [see Table 24 and Table 25].
Access to socio-productive resources	There are six strategies that come from the interactions and synergies between members and/or groups; they are based on reciprocity and redistribution relationships, exchange, barter, and other non-commercial strategies [see Table 8]. (i) <i>Aid/collaboration</i> : it is a job without direct compensation. E.g., student participation in a Research Group opens their prospects for the development of their knowledge and enhances their capabilities. (ii) <i>Assistantship</i> : implies a certain economic remuneration together with the most stable link in the group. E.g., Student participates and shares the achievements as well. (iii) <i>Minka</i> : it is related to the Kichwa concept [see Table 10] and is understood as the harvest of knowledge produced by community work, its indivisibility with the teaching activity and the economic result for UPS. E.g., CREAMINKA platform, for the Management of the forms of Knowledge production in the University-Ecosystem. (iv) <i>Alternative forms of money</i> : internal incentives for groups and external financing. For example, the economic incentives are not for the researcher but for the group, who reinvests according to their needs. (v) <i>Solidarity with intelligence</i> : the resources within the UPS are managed responsibly. E.g., Research groups help

	certain students in a specific situation of basic need: lodging, food, mobilization, the beneficiaries in turn help the group in a reciprocal way in the development of their activities. (vi) <i>Work paid back with work</i> allows groups to have a group workforce. E.g., In the absence of a member due to studies, congress or other situation, another member of the group replaces him in his teaching activity.
Knowledge management	Knowledge is a fundamental factor for the organization to become systemic and self-organized. It is not about data and information management, but about the production of knowledge that reduces the gap between university and society since it is a potential for human development and the engine of the transformation of the territory.
The social organization of work	Implies the dignity of the person, where the dimensions of life are combined. Therefore, human action reflects reciprocity and care for the common good, since the environment promotes not only social justice, but the awakening of that individual action as a reflection of the communal and vice versa.

Note. The groups within the university community of UPS refer to research groups, careers, educational innovation groups, academic cloisters, Salesian association groups, entrepreneurs. University as a development agent was addressed earlier in section 0 of the present chapter. The table was build based on “Non-commercial economic logic of the university-commune”, by Salgado-Guerrero, J. P., & Herrán Gómez, J., 2019, pp.100-127, In P. Carrera-Hidalgo & F. Solórzano (Eds.), *The University-Commune*. Abya-Yala.

The strategies are applied in an environment that has physical and structural conditions that characterize it. As a result, the conception of this University-Ecosystem motivates the creation of environments that can also enhance the capabilities of the members of the university community. These environments emerge from the basis of social, economic and political organization, promoted by a dynamic, flexible institution, in which the members generate awareness about the appropriation-provision logic and contribute from different spaces for the sustainability of the CPRs. Like the Andean communities, reciprocity and redistribution are key values on which economic and non-commercial relations are developed in the university community.

At UPS, science can only be learned by doing science and must promote the production of knowledge that is relevant, pertinent, and transformative. That can be seen reflected in the training of care that act in these social transformations. Where the territory, as an external

medium, is dynamized and there is a constant dialogue between the university and society, to achieve a positive transformation of the environment (Salgado-Guerrero & Herrán Gómez, 2019).

Finally, human action is where knowledge and action are combined. Members know how to act economically, is a responsible action that seeks the optimization, care, and sustainability of resources to promote the development of the entire university community. This is possible because the person, as the ultimate goal of the university, is at the center of all action.

4.1.3. Knowledge as a common good within the UPS

Nowadays, many universities dedicate most of their energy to the production of knowledge in research centers, which are under the control of large industrial firms that seek to sustain their commercial performance through patents. This can cause the research to be subject to demands for profit, which do not necessarily consider urgent social demands. However, the problem does not lie in profit or economic returns, but in not considering research in a comprehensive manner and community engagement as the third mission.

The challenge of the university of the knowledge society⁹⁸ lies in building a responsible autonomy, based on its own production of knowledge, in the articulation of a critical and reflective academic community, facing the common interests that we have as a society. The objective is not the transmission of knowledge, but to provide individuals with environments where critical reasoning, understanding of knowledge and social validation of these are promoted.

In this sense, a well understood knowledge society is one that can be innovated and built from the knowledge it produces, who can govern themselves to guarantee their rights, focusing their efforts towards satisfying their needs and enhancing their capacities [figure 75]. Therefore, the University must contribute to this society, understanding that the classroom is the city and the environment; and that learning partners are citizens (Salgado et al., 2018):

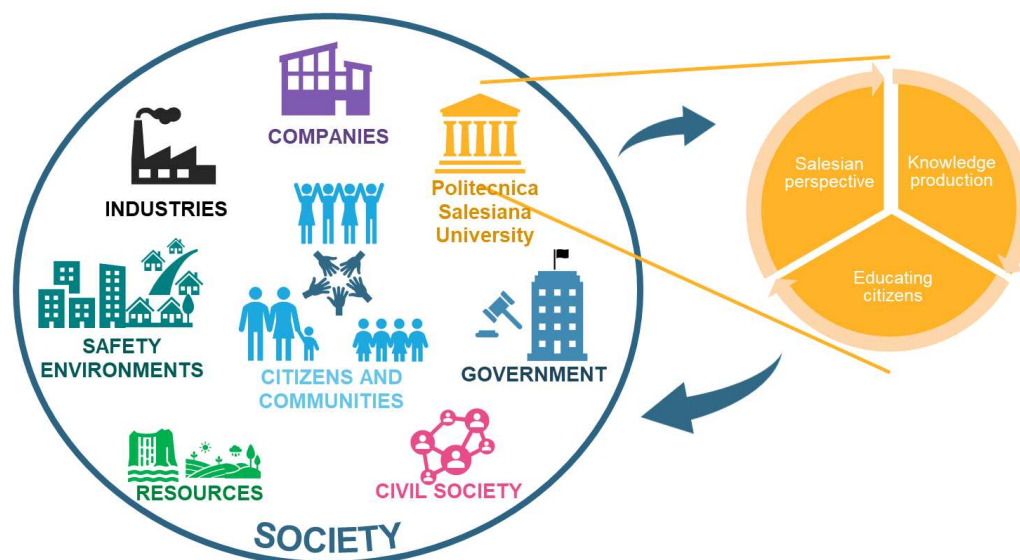
- Knowledge production: an academic community committed to values such as reciprocity and co-responsibility to overcome difficulties and limitations. The search for truth is present in all areas of the University. The scientific community develops because its members provide knowledge and efforts from each responsibility and task to favor the CPR. The university community research while recognizes that the incidence and

⁹⁸ Every society, in one way or another, have been knowledge societies, although it was Peter Drucker (1969) who used the term for the first time, referring to how knowledge has become a tool for promoting well-being and economic growth by improving quality. of life and create new social structures together with innovation, development, and research.

relevance of the research results with society is a goal that guarantee its *raison d'être*. University rankings are understood as indicators that gives necessary inputs for university's management, without leaving behind the context and territory in which it operates.

Figure 75

UPS and the Knowledge Society



- Educating citizen: University education has the person as its center of action as well as student's life project. This project is socially responsible for leading him to be a key actor capable of asking questions and problems along with critical solutions based on ideas and knowledge. It does not only focus on skills acquisition and knowledge transfer, it seeks to achieve critical, analytical and reflexive thinking.
- Salesian perspective: Nowadays, the search for economic success has produced in the modern human being a tendency towards individualism and maximization [see chapter 1, section 0, subsection 1.3]. Inequality and poverty are one of its most visible effects [see chapter 2, section 0]. Prevention from responsibility requires to believe in the person, in their potential and their ability to change behaviors. In this sense, the system faces a global crisis and education has been oriented towards the transmission of information and not to the real understanding of the knowledge imparted. Therefore, education must also be concerned with the emotional aspect and conscience, which are the part that gives meaning to life [see HD report 2022, chapter 2, section 0, subsection 1.2]. The Salesian experience was born with Don Bosco's Oratory and the Preventive System, which represent a way of being, of relating, of responding to life, deep attitudes of each person; is a life choice (Peraza, 2011, p. 4). From this perspective, the goal is

to promote personal, professional, socioeconomic, local, and regional development, carried out in a framework of shared leadership [see VUCA chapter 2, section 0, subsection 0]. In this way, the Salesian mission to s build with a Preventive System based on responsibility.

From society's point of view, at the University, the student not only learns and replicates knowledge, but also discovers the dynamics of how knowledge is produced, searching for causes, circumstances, epistemological resources, and the establishment of all the connections of sense. In this way, the person returns to society -once it has appropriated the knowledge- to give back what they have learned and to provide innovative solutions for many challenges society is currently facing.

The university as a whole represent a private, active, non-profit community, which has been adapting its rules and structure with the aim of protecting or promoting the management, production, and application of knowledge as a common good. Hess and Ostrom (2007) (2007) within the framework of analysis of the common good of knowledge, propose a theoretical framework that has been used by numerous academic-multidisciplinary researchers, for the diagnosis and study of certain common goods or resources: Institutional Analysis and Development (IAD).

IAD serves to study the use of common resources in contexts where institutions affect the behavior of individuals through incentives. Defines institutions as a set of prescriptions and constraints that human beings use to organize all kinds of repetitive and structured interactions, which can include shared rules, norms, and strategies. Thus, institutions are formal and informal norms: the first, characterized by laws or norms of a coercive-coercive nature; and the second, as rules in use, based on custom and ways of proceeding. It establishes three broad groups of variables as basic underlying factors that condition both the institutional design and the interaction models that take place in the respective fields of action [figure 76].

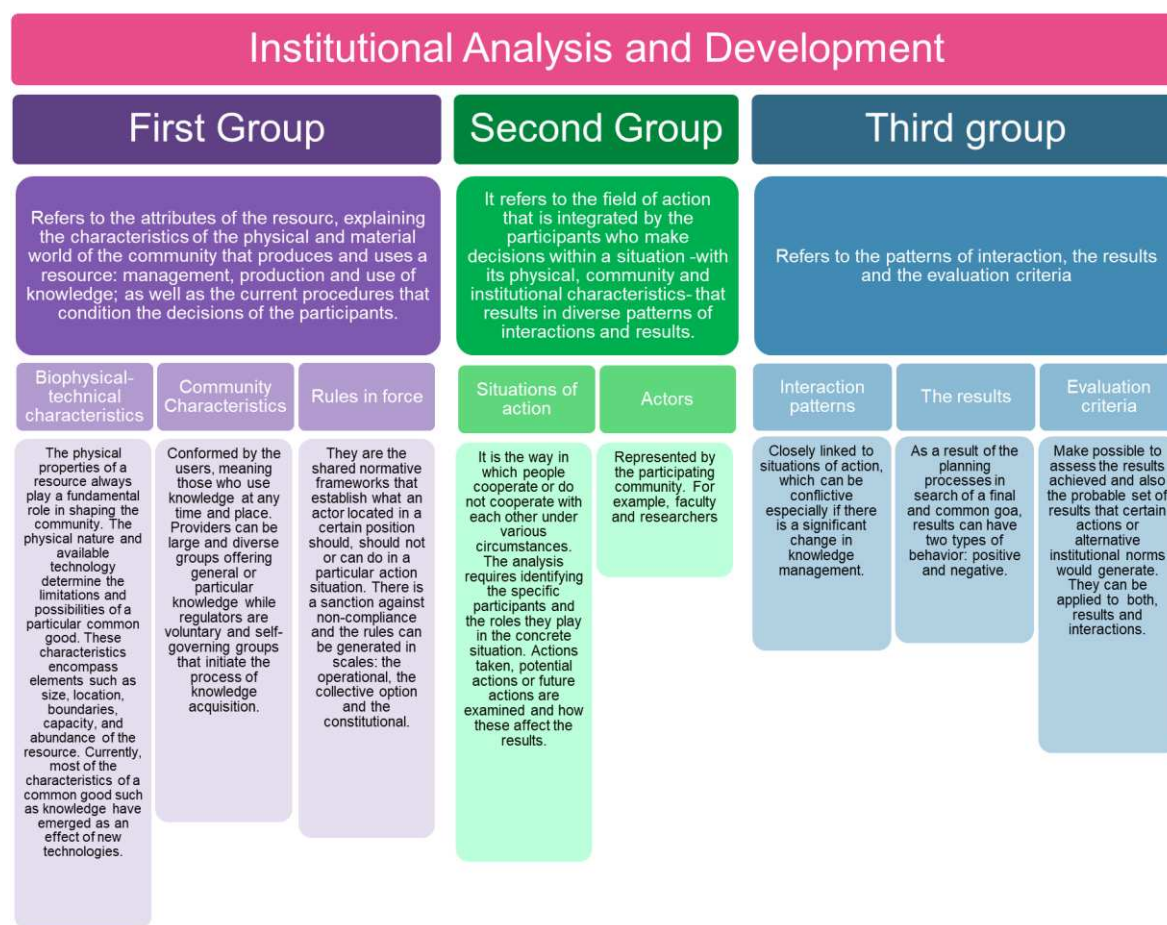
As mentioned above, the commons typically involve sharing resources among multiple users. Successfully managing it requires an active community and evolving standards that are well understood and applied. Knowledge as a common good offers different alternative to current practices that do not generate effective solutions in current contexts [VUCA], where new technologies advance at a dizzying pace and rapidly restructure the environment: management, production and application of knowledge and they reconsider the new communities of knowledge interconnected by the network.

As a consequence, these global scenarios have invited organizations to rethink normative principles. For this reason, a higher education governance model was proposed to provide

the bases for the university to be managed as a CPR, considering education and knowledge as common goods. It is of common interest in the UPS, the management, production, and application of a more humanistic knowledge, always linked to people’s interest in order to achieve a full and holistic development in VUCA contexts as “changes in the world today are characterized by new levels of complexity and contradiction. These changes generate tensions for which education is expected to prepare individuals and communities by giving them the capability to adapt and to respond” (UNESCO, 2015, p. 9).

Figure 76

Institutional Analysis and Development – IAD elements



Note. Based on “The Economy for the Common Good”, by Felber, C. & Hagelberg, G., 2020., p. 39–57 in The New Systems Reader. New York: Routledge.

4.1.4. Common goods indicators matrix applied to the UPS

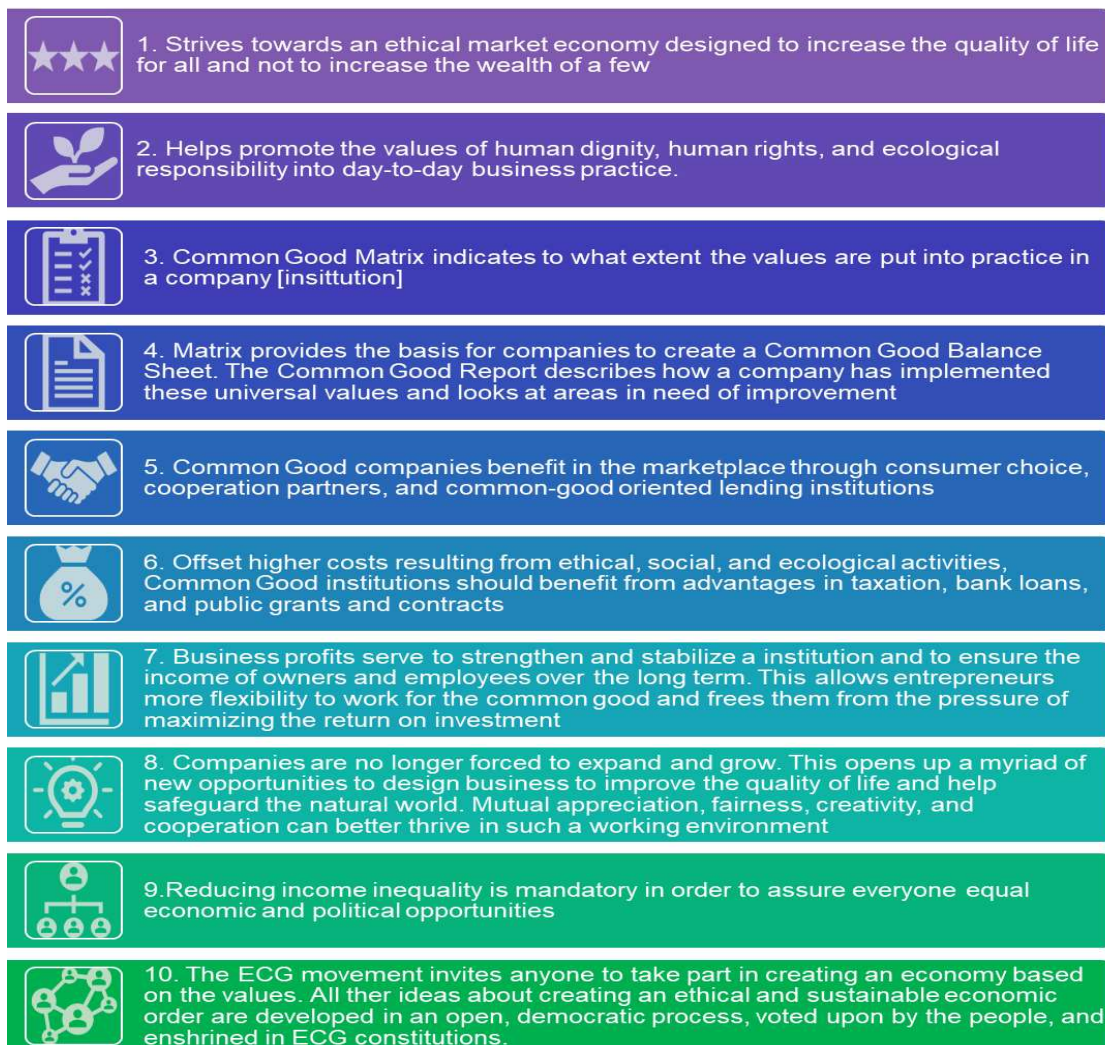
Education is also within the dynamics of globalization and particularly higher education can be perceived as an internationally marketed product sheltered by the knowledge industry (Rama, 2010) that leaves no room for community, justice, and equality. Throughout this

research, the perspective of the common good has been presented as an alternative within the educational management system to protect the values of civil society, culture, and intellectual independence.

As mentioned above, in the context of higher education, actions in favor of the CPR imply the incorporation of a management that motivates practices and actions committed to the common good to promote the progress and development of society as well as its inhabitants. Within the framework of the Economy for the Common Good (ECG) with its 10 principles [figure 77], many tools and methods have been developed and applied to organizations and businesses around the world, especially in Europe and South America.

Figure 77

Economy of the Common Good Principles



Note. From “The Economy for the Common Good. In The New Systems Reader”, by Felber, C., & Hagelberg, G., 2021, pp. 41-43, New York: Routledge.

The Common Good Matrix is one of the tools that help measure ethical indicators within organizations and how they are aligned with Common Good principles. The Matrix is being continually improved through an open and democratic process. The report and the balance sheet are externally audited and then published. In addition to that, an institution's contribution to the common good is available to the public and all stakeholders.

In 2019, GIUB⁹⁹ published the research results on analyzing UPS as a CPR. Chapter 5 presents the “Adaptation of the common good indicators’ matrix to the university context. Case study” where authors analyze UPS pertinence with Common Good values and Indicators. Figure 78 shows the results updated with available information at UPS website.

The ECG Matrix and Balance Sheet does not apply only to companies, schools and Higher Education Institutions, not only are considered key actors as next generations are studying, learning, and questioning their surroundings. Educational institutions can integrate ECG in many different ways including the designing, promotion and application of practices, projects, workshops and many other initiatives (ECG, 2023). For example, the Business School Lausanne (BSL)¹⁰⁰ applied the Matrix and Balance Sheet “to measure its own sustainability efforts against a holistic and relevant framework” (BSL & ECG, 2013, p. 4). In 2012 BSL obtained 365 points in the initial self-evaluation and 2 years later, in the audited result 461 points. After that, BSL committed to ECG, created the Green Team, members include faculty, students and stakeholders who work on the areas needed to improve according to the results.

Certainly, there are no impediments to contribute to challenges our society is facing from a holistic and integral perspective that conceives economy and social systems as means to achieve humans’ well-being, taking care of nature, resources sustainability and responsible development.

⁹⁹ University and Common Good Research Group see chapter 3, section 0.

¹⁰⁰ BSL, & ECG. (2013). Measuring our contribution to society: The Economy for the Common Good Audit Report
<https://datacloud.ecogood.org/index.php/s/GJBXNJ9GQGmrTBc?dir=undefined&openfile=110371>

Figure 78

Common Good Matrix 4.1 in the UPS¹⁰¹

STAKEHOLDER	VALUE
<p>A) SUPPLIERS</p>	<p style="text-align: center;">A1. Ethical supply management</p> <p>Active examination of the risks of purchased goods and services, consideration of the social and ecological aspects of suppliers and service partners</p> <p>Results UPS tangible goods are considered laboratories, online platforms, recreation areas, sports fields, libraries, among others; while UPS intangible supply: knowledge [as a common good see chapter 3, section 2, numeral 2.2.2]. a) Tangible goods: - To improve in this field, UPS leads specific projects that reduce the risk of current basic products and services through the pro-motion of research groups oriented to the optimization of renewable energies, integration of vulnerable populations, development of transport systems, among others*. - The university is restricted to working with suppliers who are in their constituency regardless if they have social and ecological responsibility. b) Intangible goods: - Institutional identity is based on the fulfillment of pastoral education, educating "honest citizens and good Christians" with academic and research skills, capable of performing in a VUCA world; as well as social and cultural promotion to impact through academic activities and contribute to the knowledge of social reality and its transformation, especially in aspects that predispose the lives of young people, human rights, environmental protection, intercultural relations and ecumenical and interreligious dialogue. - Are represented by professors and lecturers, all are part of introductory talks and workshops on Salesian Identity, Preventive System and ethics code in order to contribute to UPS's mission, vision and raison d'être [see chapter 3, section 1]. c) Structural framework for fair price: - UPS explains the fair price of its fees as a consequence of the continuous evaluation of the services it provides, institutional efficiency and the fluctuations of supply and demand in the market, along with the subsequent approval of its union leaders.</p>
	<p style="text-align: center;">B1. Ethical Financial Management</p> <p>Consideration of social and ecological aspects when choosing financial services; common good-oriented investments and financing</p> <p>Results: Ecuadorian context respond to the following situation: on one hand, financial restrictions and increasing difficulties to coordinate all university activities have increased uncertainty, the dynamism of change and the inherent costs in the university sector. On the other, students spend more time in issuing applications for grants and loans, asking for financial help from their parents or finding a part-time job to alleviate their education costs. The criteria for this indicator: (i) Social and ecological quality of financial services, (ii) Deposit oriented to the Common Good, (iii) Financing oriented to the Common Good. UPS keeps its capital flow in a bank rated AAA- (Bank Watch Ratings, 2017). According to the analysis of credit risk, operational management, quality and independence of the administration, strategies and controls, positioning in the market, quality and origin of the guarantee, priority of payment, macroeconomic environment, quality and integrity of information, the bank maintains an outstanding track record of profitability, good reputation, good access to its markets and clear prospects of stability. Bank ratings will no change in a while, therefore banking institutions do not integrate common criteria Regarding criteria (iii), UPS has developed scholarships and assistantships by research groups to contribute to the appropriation and provision process</p>
<p>B) INVESTORS</p>	

¹⁰¹ Based on the Common Good Matrix 4.0 (p.46) in "The Economy for the Common Good. In The New Systems Reader", by Felber, C., & Hagelberg, G., 2021, pp. 39–57, New York: Routledge; and from the information provided on "Adaptation of the common good indicators' matrix to the university context. Case study", by Torres-Toukoumidis, A., Salgado-Guerrero, J. P., Romero-Rodríguez, L., & Salgado, B., 2019, p.97-127, in the book "The University as a common pool resource", Quito: Abya-Yala.

Value Stakeholder	Human Dignity	Cooperation and Solidarity	Ecological Sustainability	Social Justice	Democratic Co-determination and Transparency
C) EMPLOYEES, INCLUDING BUSINESS OWNERS	C1: Workplace quality and affirmative action	C2: Just distribution of labor	C3: Promotion of environmentally friendly	C4: Just income distribution	C5: Corporate democracy and transparency
Results:	<p>Employee-oriented organizational culture and structure, fair employment and payment Policies, workplace health and safety, work-life balance, flexible work hours, equal opportunity and diversity.</p> <p>a) Work schedule: In UPS the schedule is decided according to the guidelines imposed by the legislation, as well as the reports issued by talent management experts, planning and labor unions.</p> <p>b) Arrangement of the job position: Work areas are ergonomic and suitable for the disabled, there are even additional spaces for relaxation and movement.</p> <p>c) Physical health and safety: The university offers preventive talks for improving health, routine check-ups, freedom in medical appointments, free advice and sports activities for its professors and administrative staff. However, regarding ecological cooking and care of employees diet is a point to improve.</p> <p>d) Mental health: The UPS has a pastoral department and the Psychology Undergraduate Program which provide ongoing therapy sessions, training workshops on social skills and personal development which facilitate internal coexistence.</p> <p>c) Self-organization, satisfaction in the workplace: The university promotes equitable work and hierarchies elimination by having Undergraduate Programs Directors. There is no deanship, no secretaries for each undergraduate program, faculties, and other bureaucratic positions.</p> <p>d) Equality and equal treatment for men and women: applies the unified basic remuneration (RBU, Spanish acronym) thus demonstrating equality of salaries. Additionally, the university president's annual report shows that 30% to 70% of directors and professors working at the university are women.</p> <p>e) The Disadvantaged: UPS guarantees equal opportunities in access, permanence, mobility, and graduation without discrimination of ethnic groups, culture, socioeconomic status, or disability. Since 2013 it exceeds the 2% legal quota requirement by the Ecuadorian government.</p>	<p>Reduction of overtime, eliminating unpaid overtime, reduction of total work hours, contribution to the reduction of unemployment</p> <p>UPS Teaching-Research activities place the person at the center of their full and creative existence, developing their potential towards a fully life, with meaning and in the light of human dignity.</p> <p>a) Reduction of normal working hours: UPS is in the process of suppressing extra hours and only complying with the working hours indicated in the contract.</p> <p>b) Increase of the part-time work model (with full pay): it is not possible to achieve such a projection in Ecuador's current socioeconomic situation, especially after the effects of COVID Pandemic. Still HR department seeks full-time hiring processes.</p>	<p>Active promotion of sustainable lifestyles of employees (mobility, nutrition), training and awareness-raising activities, sustainable organizational culture</p> <p>a) Food during the working day: The case study does not show an empirical reaffirmation of an intervention in the balanced diet of professors and administrative staff. In spite of, Research Groups in this field promote sustainable models of food.</p> <p>b) Mobility to the workplace: Sustainable mobility has not been considered a priority.</p> <p>c) Organizational culture: diversity is welcome on the UPS, an ancestral pharmacy, and the celebration of Inti Raymi to name a few. There are also workshops and seminars for teachers, administrative staff, and students in order to create awareness about the importance of ecological issues.</p> <p>d) Ecological carbon footprint in workers: Currently it is not taken into account and is not a short or medium term priority.</p>	<p>Low income disparity within a company, compliance with minimum and maximum wages</p> <p>a) Difference of internal salaries in the company: According 2021 data** salary is established within national regulations and job responsibilities for both, professors and administrative roles.</p> <p>b) Institutionalization: There is full transparency of the minimum wage. Each January HR Department publishes an official document* on the website</p> <p>c) Minimum salary: The minimum full-time salary at UPS is 450 USD, equivalent to the minimum wage in Ecuador</p> <p>d) Maximum salary: Salaries of the president, general academic vice president and vice presidents of each campus have not been disclosed. Based on UPS public information*** for professors on the top of salary scale is 39% higher and for administrative staff is 3 times higher than minimum wage in Ecuador.</p>	<p>Comprehensive transparency within the company, election of managers by employees, democratic decisionmaking on fundamental strategic issues, transfer of property to employees</p> <p>a) Degree of transparency: Since 2012, UPS has free access to its data on self-assessment, remuneration, rendering accounts, financial and management transparency**. The university maintains an exemplary level in this indicator, allowing anyone to have access to this information.</p> <p>b) Legitimization of directors/executives: In its entirety, 60% of the directors are freely chosen, while the remaining 40% is decided by other collective means.</p> <p>c) Co-management for basic/operational decisions: More than 50% of decisions are consensual.</p> <p>d) Co-management to have share or workers' earnings: Not applicable.</p> <p>e) Co-ownership of independent workers / foundations: Not applicable.</p>

Value Stakeholder	Human Dignity	Cooperation and Solidarity	Ecological Sustainability	Social Justice	Democratic Co-determination and Transparency
D) CUSTOMERS / PRODUCTS / SERVICES / BUSINESS PARTNERS Results:	D1: Ethical customer relations Ethical business relations with customers, customer orientation and co-determination, joint product development, high quality of service, high product transparency	D2: Cooperation with businesses in same field Transfer of know-how, personnel, contracts and interest-free loans to other business in the same field, participation in cooperative marketing activities and crisis management	D3: Ecological design of products and services Offering of ecologically superior products/services; awareness raising programmes, consideration of ecological aspects when choosing customer target groups	D4: Socially oriented design of products and services Information, products and services for disadvantaged groups, support for value-oriented market structures	D5: Raising social and ecological standards Exemplary business behavior, development of higher standards with businesses in the same field, lobbying
	a) Institutionalization: Since its foundation in 1994, UPS has work hardy for an integral, scientific, practical, human, moral and ethical professional education; connecting with society's demand. Adapting in a innovative way to organizational culture to challenges maintaining its identity and sense of belonging within university community. b) Scope of ethical marketing: Less than 10% of the budget goes to marketing. c) Formations for ethical sales/marketing: There is no training exclusively channeled to sales or marketing of UPS "brand", but a Marketing department in charge of promoting university graduate and undergraduate programs. d) Alternative bonuses of sales/marketing alternatives: Does not apply in this context of Higher Education services. e) Scope of participation in the client's decision: More than 50% of demands and suggestions made by clients (students) are considered by the Superior Council for university's development and improvement. f) Transparency of the product: The annual data of the university is exhibited since 2012. The progressive incorporation of a report of the Balance of the Common Good is being considered. g) Cooperation with consumer protection: Through strategies such as anonymity and free access to officials that run the UPS, students are guaranteed that their grades and environment will not be affected by expressing their point of view. h) Claims process, independent place of complaints, positive measures of service: Student is expected to evaluate both teaching and the university in general before, during and after the completion of each semester. The system applied at U PS is considered proactive and successful since its beginnings.	a) Disclosure of information + technologies transmission: UPS have signed more than 63 framework agreements with Ecuadorian and international universities, each agreement has its own specificities and maintains transparency. b) Agreements allowing professors and university staff to render services at other institutions, assignments, joint participation in the market: The University has not formalized agreements concerning these issues. c) Cooperative Marketing: UPS is located in three Ecuadorian cities: Quito, Guayaquil, and Cuenca. Therefore, there is both potential collaboration bet ween the different branch campuses and cooperative development with other universities and local actors in these cities.	a) Efficiency and consistency - products and services in ecological terms are equal to competitors or with equivalent alternatives of use: UPS offers five undergraduate programs, along with their respective research groups and projects, linked to the promotion of an ecological vision and environmental solution problems: Environmental Engineering, Management for Local Sustainable Development, Biotechnology, Biomedicine, and Veterinary Medicine. Therefore, when comparing this university with other institutions of higher education, there are a considerable number of alternatives oriented towards the vision of ecological conception in knowledge transfer. b) Proficiency - active organization for ecological use and sufficient consumption: UPS promotes recycling campaigns, urban gardens, natural pharmacies, optimization of irrigation systems, etc., with the participation of students from several undergraduate programs. c) Communication - active communication of ecological aspects with the client: UPS intention to increase the number of variables related to the measurement of ecological aspects in the short term, thus knowing the standards, the demands, and sectorial challenges in order to project a level of stability in policies together with projects with students and community participation.	a) Consideration of economic barriers of clients: Through Student's Well-being Department, UPS manages the subsidy system which considers high school of origin and their socioeconomic situation. Students pay different education costs. In 2016 UPS granted 6,631 for total and partial scholarships and the following years the amount has doubled 12 966 610 USD. b) Conception of open products and services - physical, visual, language and intellectual: The aim is to distribute aid, scholarships, and subsidies for the 4 dimensions, thus enhancing the integration of all profiles into the university context. c) Processes and measures regarding ethical risks and social aspects of clients: UPS has institutionalized the incorporation of social aspects through the 23 articles that conform the General Regulations of Student Well-being.	a) Concurrent cooperation and partners in the production chain: an open and mandatory process for complying with the requirements established by the Secretariat of Higher Education, Science, Technology, and Innovation (Senescyt, Spanish acronym) and by rankings of greater international influence. b) Active contribution for the increase of legal standards: Direct commitment by both officials and professors for the fulfillment of the issued standards. c) Scope, extent of content and depth: Although international standards seek to measure the quality of teaching, research, involvement with industry, international vision, etc., UPS considers it favorable to incorporate socio-ecological aspects both in rankings and in requirements of Public Administration.

Value Stakeholder	Human Dignity	Cooperation and Solidarity	Ecological Sustainability	Social Justice	Democratic Co-determination and Transparency
E) SOCIAL ENVIRONMENT** Results:	E1: Value and social impact of products and services Products and services fulfill basic human needs or serve humankind, society or the environment	E2: Contribution to the local community Mutual support and cooperation through financial resources, services, products, logistics, time, know-how, knowledge, contacts, influence	E3: Reduction of environmental impact Reduction of environmental effects towards a sustainable level, resources, energy, climate, emissions, waste etc	E4: Investing profits for the Common Good Reducing or eliminating dividend payments to extern, payouts to employees, increasing equity, Socialecological investments	E5: Social transparency and codetermination Common good and sustainability reports, participation in decisionmaking by local stakeholders and NGO's
	a) Internal processes in the company: By national Higher Education regulations**** universities must comply with certain parameters assigned for the accreditation and quality assurance of institutions, careers, and programs. On the other hand, UPS also encourages the participation of students to evaluate professors, undergraduate program directors and contribute to the improvement of teaching methods, it maintains updated information for the design and development of internal and external training programs, it promotes professors according to the university's regulations and identifies professors with better performance. b) Cultural compatibility: UPS assesses different rates -new enrollment, student dropout, repetition, graduation, average time to obtain a degree, average time for graduation and the average investment-. It also analyzes professors' rate fourth level education, PhD and master's degrees, average age of teachers, experience, full time professors, enrollment per academic program. In short, UPS measures social aspects that are related to both students and professors and therefore is able to take measures that promote sustainability in later years. c) Natural compatibility, proficiency/moderation: there is no comparison between universities regarding ecological aspects. However, a proposal with its respective dimensions and indicators that enable the measurement of the ecological effect of the university must be presented.	a) Performance: Salesian nature is demonstrated in its altruism and its continuous willingness to help communities. In this regard, UPS proposes internships, training, continuing education, academic and scientific events, specialized services, social extensions (cultural, pastoral, projects), and cooperation networks, so that communities and vulnerable sectors benefit directly from this type of initiatives. b) Effect: The effect is evident in multiple fields. Specifically, transformations are denoted both at the infrastructure level and in the apprehension of knowledge. By 2021, UPS had 133.890 nationwide beneficiaries from project in territories. c) Additional factor: UPS assumes specific responsibilities and sustainable commitment, it has over ten years in formal and continuous projects with society. Besides, in 2021 joined UN Pact Ecuador.	a) Absolute effects: At UPS, beyond following the protocols for the proper use of laboratories, there is no set of indicators that enable the assessment of the absolute ecological effects of its activity. b) Relative effects compared to sectors where the company is located: There is no general assessment on ecological aspect. This means that reduction of ecological pollution compared to other universities is unknown. c) Management and strategy: It is suggested that there be a section in the annual reports that analyzes the ecological effects such as CO2 emission, water consumption and specific resources of the sector.	a) Decline in the distribution of external dividends: UPS does not have shareholders to distribute dividends to. It is worth noting that the Salesian Inspectorate of Ecuador nor any Salesian institution receives economic benefits from the university b) Scope of contact groups: The university applies an active transparency together with providing free access to data, it carries out an open presentation to the public, where professors, students, administrative staff, and outsiders can participate and clarify their doubts about any issues that have been published and is being presented. c) Scope of the sites: The university has three campuses at Quito, Cuenca and Guayaquil, each with its own representatives and officials, who are in charge of the organization and logistics including the immediate response to the group's needs (ver 00). These representatives are fully available to provide data on transparency. d) Companies with <100 employees: Does not apply. e) Company with > 100 employees: entities that exceed a hundred employees need to apply the Global Reporting Initiative (GRI) to identify the variables that could respond to the common good. The process in Ecuador is still maintained based on an exploratory approach. f) Verification > 100 employees: There is no external audit to certify if the data issued by the annual reports. It is simply an internal process delegated to the administrative staff.	
<p>*Available information regarding research groups and projects can be found at: https://pure.ups.edu.ec/es/</p> <p>**Remuneraciones para el personal docente y administrativo, año 2021. Retrieved from: https://www.ups.edu.ec/documents/10184/25098/2021+Remuneraciones/1357de90-e668-4063-88bf-4877584aa09b</p> <p>***About UPS, Transparency Retrieved from https://www.ups.edu.ec/en/transparencia</p> <p>****Region, electorate, future generations, civil society, fellow human beings, animals and plants</p> <p>*****Council for the Evaluation, Accreditation and Quality Assurance of Higher Education (CEAACES, Spanish acronym), Constitution of the Republic of Ecuador and the Organic Law of Higher Education</p>					

4.2. Human and social capital at the UPS through flexible and dynamic environments

In the last century, both the education pedagogical model and the economy has had the main task of “producing human and social capital capable of consuming the market’s productivity and efficiency” (Margiotta, 2017, p. 49). For that reason, the implementation of more flexible and creative educational policies that promote self-achievement in academic communities creates a major challenge. Undoubtedly, education allows people to adapt to new realities in the face of VUCA world. It is also possible to contribute to the development of communities through educational processes that respond to social needs and demands.

In UPS, education is conceived as a comprehensive [holistic] process. This allows the academic community to enhance skills through educational processes that promote critical thinking and help finding a meaning so that they can shape their own future (De Natale, 2017). As a higher education organization, UPS is committed to encourage learning through a practical, collaborative, and cooperative environment through project management and other activities that promote skill development (Alessandrini, 2014, 2017).

The learning context constitutes an important factor since it must be able to transform and generate action. For this reason, UPS has focused on generating “environments that value mutual respect, promote security, attentive listening, and a genuine willingness to understand and accept differences (...) creating opportunities for experiential learning” both formal and informal, as well as inside and outside the classroom (P. Ellerani, 2017, p. 182). These conditions are possible within the framework of an organization-ecosystem that allows self-organization, that is flexible and dynamic, and that adapts to the external context of providing greater development opportunities to its members.

From the perspective of the common good, the values generated are the result of the interactions of the members in different environments. From said values emerges the individual’s commitment to contribute to the sustainability of the CPR under the logic of appropriation-provision [chapter 3, section 0, subsection 0, numeral 0]. Through the capability approach [chapter 2, section 0] members can act freely in the environments and enhance their capacities by being copartners and correspondents in the process.

In addition, given UPS is a Salesian educational institution, it has the Salesian mission of developing good Christians and honest citizens, the continuous search for knowledge, finding and creating your own purpose; all based on the experience of Don Bosco and the Salesian Oratory. Don Bosco's pedagogy has been called "the Preventive System" because it forms the person in an integral way focusing on the human being and considering the context in which the education is to be carried out. Thus, the teacher/educator is responsible of understanding the context and reality of students, being empathetic, and creating

conditions of affection, hope and togetherness inside and outside the classroom (Ávila, 2013).

Oratory is the place where it all comes together. In addition of including an educational/pastoral dimension, it represents an experience for the students. The affective and educational components are combined through pedagogy, spirituality and associationism so that the person feels welcomed and finds meaning to their lives (Dicasterio de Pastoral Juvenil, 2014). A community is more than just a physical space, it is a life experience, a meeting place, a space that supports skill development so that young students can become managers of their own life projects. So, the oratory:

Facilitates a family-like environment and establishes the necessary mediations so that all young people grow up in a welcoming and familiar environment [home], marked by happiness [patio]; where he/she can develop his/her potential and acquiring new skills [school] by also following a clear proposal of faith [parish] (Dicasterio de Pastoral Juvenil, 2014, p. 127)

Within UPS, the oratory is present in different environments that allow members of the community to associate and enhance their skills. These are places that provide opportunities, activities, accompaniment, and support. It is a community in service to its members so that they can develop fully and freely. In this sense, Salesian pedagogy is committed to human development through its work centered on the human being, the creation of oratories (Peraza, 2011) and an environment that enhances people's capacities by providing young people with tools so that they can be change agents and key actors in the construction of the common good in the society where they develop.

Participation in the different university environments and spaces is voluntary. The project acts as the catalyst, where not only the university agendas and programs are articulated, but it also becomes the direct link with society. Thus, through integrating projects, research, entrepreneurship, innovation, volunteering, among others, positive changes are generated inside and outside the community-university.

Salesian University Associationism - ASU groups

The Salesian University Associationism (ASU, Spanish acronym) includes students, teachers and beneficiaries from outside the university, and looks to integrate undergraduate courses, links with society, University Ministry and the area of Reason and Faith within a development project in vulnerable communities-missions (UPS - Informe Anual, 2022). These constitute an essential element of university life at UPS and are approved by the Superior Council and must meet the established requirements and procedures.

The main objective of these groups is to provide a Salesian style meeting place for students that promotes participation, commitment and vocation in the following areas: cultural, sports, communicational, academic, sociopolitical and pastoral (Merchán, 2013). It provides countless opportunities to enhance skills and capacities. It also creates internal and external networks, where individual experience spreads to other students to become part of ASU groups, promoting growth within the community.

The members of the community can then put into practice what they learn and complement their academic, personal, and professional training process through the various activities that brought them together in first place. The members meet goals that are direct result of collective action, commitment, and reciprocal relationships within each group, with other groups, and with the rest of the university. Here the students experience a true community growth because coexistence strengthens the values that entwine as a consequence of their actions.

Educational Innovation Groups

The Educational Innovation Groups (GIE) are meeting places where teachers provide feedback through the search for new didactic and methodological strategies that they can then be applied in the university community. Currently, UPS has 21 Educational Innovation Groups and 12 innovation projects (UPS - Informes de Investigación, 2022) that seek, in a creative and innovative way, to strengthen academic quality within the University through the following seven lines of innovation:

- Didactics and alternative learning methodologies.
- Information and communication materials in educational processes.
- Curriculum design and development
- Educational actions and/or outreach activities for priority populations.
- Effective assessment for learning.
- Development of the teaching dimension from R+D+i projects.
- Teacher education and training (Vicerrectorado de Docente, 2018).

On one hand, teachers look at new forms to transmit knowledge that contribute to the education process of students who are open to new learning paths that contribute to their self-development. These learning environments promote innovation among teachers as an initiative that stems from their commitment to contribute to the development of the university.

Research Groups (RG)

The Research Groups (GI) are academic spaces where knowledge is generated based on scientific research, technological development, and innovation. The groups are created based on the interests of both teachers and students that come together to develop research projects that combine inter and transdisciplinary groups of students with students who develop research in various areas. These groups work autonomously and contribute to the generation of useful insights that solve social issues and demands (J. P. Salgado, 2018). Currently, UPS has 82 research groups; more than 848 research teachers, 1,257 students; 635 projects (UPS - Informes de Investigación, 2022, pp. 12–13).

Community engagement: the third mission

UPS, through its University Social Responsibility (RSU) contributes to society through programs, projects and activities that positively impact different environments, especially in vulnerable situations (UPS, 2018). The UPS works in three types of intervention: academic linkage, organizational strengthening, and development management. It also has nine programs that develop projects in different areas: (i) support for educational organizations, (ii) care in Salesian environments, (iii) care for vulnerable populations, (iv) care for social sectors, (v) specialized care, (vi) scientific dissemination, (vii) productive research, (viii) social research, and (ix) technological transfer. In 2021, 97 projects were executed in which 209 students and 1,131 teachers participated, benefiting 33,890 people [figure 79] (UPS - Informes de Investigación, 2022, pp. 373–375). The students that take part in the RSU environment end up having experiences that complement their university education and make them more sensitive to the reality of the society in which they develop. In that sense, the members of the university community are linked to their environment and its needs; thus, they work to generate positive impacts and build a more supportive society.

Campus minister

The University Ministry bases its work on four pedagogies: (i) community environment, (ii) cultural mediation, (iii) commitment and involvement with the cultural, social and ecclesial reality, and (iv) personal and group accompaniment (UPS - Vida Universitaria, 2018). Its main objective is to educate the university community on the Salesian role in education, academic excellence, respect for diversity and the construction of a more equitable society. Among its initiatives, the following can be highlighted:

- LALA Project, which gives students the opportunity to access counseling and tutoring programs when they have academic, learning or psychological problems. The objective is to strengthen the integral formation process through continued support. The tutor detects factors associated with certain issues and refers them

to peer tutoring, the Psychological Center, Student Well-being or the Listening and Support Center.

- Support project that is carried out through two strategies, the first is peer tutoring and the second, through the Listening and Accompaniment Center (Universidad Politecnica Salesiana, 2017).

Figure 79

Community Engagement Projects 2015-2021



Note. Reprinted from "Resultados de Investigación, Innovación, Emprendimiento y Publicaciones UPS 2021", by UPS, 2022, p. 373. Abya Yala.

UNESCO Chair

University Twinning and Networking (UNITWIN) is the University Twinning and Networking Program launched by UNESCO in 1992, which promotes UNESCO Chair in various areas. Also, it promotes international inter-university cooperation and the creation of networks to improve institutional competences through the exchange of knowledge and collaborative work. UPS began in 2016 with the goal of improving access rates, learning, and participating

in the education of historically excluded populations through innovative support tools based on ICTs. It works with children, young people, adults, indigenous people, older adults in vulnerable situations and/or who have a disability (Cátedra UNESCO UPS, 2022).

Students, teachers, research groups work on different projects to contribute to the objective, in an environment that develops and enhances skills, generating a positive impact on society.

StartUPS y Startlabs

The UPS entrepreneurship and innovation spaces represent a collaborative environment whose purpose is to foster entrepreneurship in the university community. They are made up of the StartUPS Coworking spaces and the Startlabs digital manufacturing and prototyping laboratories. StartUPS Coworking goal is to help with the development of ideas that can be monetized by working on the business model and validation. Startlabs seeks to materialize the ideas by the production of prototypes. Students receive mentoring, tutoring, and can participate in different events, courses, workshops, Hackathons, Bootcamps; as well as applying to incubation programs. Entrepreneurship is a didactic tool that allows students to enhance their abilities.

StartUPS and Startlabs represent a place to work, share, help and grow in the community. Here, collaborative networks are formed that complement the student educational process and provide them with tools for their personal, academic, and future professional-entrepreneurial development. This environment will be developed in depth in chapter 4.

Finally, additionally to the management of the *commons* in different environments listed above, the capability approach allows all members to act freely, enhance their capabilities and contribute to the CPR management and sustainability -appropriation and provision- [see chapter 1, section 3], making people build partnerships and shared responsibilities during the process. Values are the result of the interactions of the members in the different environments together with the individual commitment (Ostrom, 2011). The management of the *common* is possible in environments where, through the capability approach -functioning/actions and capacities- members can act freely, strengthen their capacities, and contribute to the CPR management [figure 80].

The management of the University, its resources, and capabilities, should aim at an education where co-constructed knowledge is generated through cooperation, participation, and learning, in an environment that enhances the capabilities of all the agents of the academic community and promotes their human development. This will be deepened in the following chapter describing the StartUPS project.

Figure 80

Management values and the capability approach



Note. Reprinted from “The environment of the university commune: a human development enhancer” on “The University-Commune”, by Salgado, B. & Carrera-Hidalgo, P., 2019: p. 147. Quito: Abya Yala. Copy Right 2019 by Paola Carrera and Fernando Solorzano (editors).

A brief account/summary on the UPS

The concept of commune has been present in nature and in society for centuries and more than a social organization it is a model of sociality (Sánchez-Parga, 2002). Currently, it has given way to different organizational models in urban spaces, in knowledge management and the economy of the common as a way of responding to society’s current challenges.

In this means, organization theory has also adopted principles of maximization and efficiency of the economic model, and it has addressed the inequalities and effects that have caused in people and their development. Therefore, new approaches have emerged, including those that understands organization as a complex, dynamic, alive, and interrelated system that develops in a certain environment comparable to natural ecosystems.

An ecosystem organization not only makes different analogies with nature and living systems to understand organization theory but also applies different principles to its management. University is a community of people, living beings, who interact, cooperate, exchange, and coexist, resulting in a complex system of relationships.

As shown above, it is possible to conceive of an organization in a different way. Considering human nature -our common home-, freedom practices, modifying the homo economicus individualistic consumer behavior for a more sustainable one, appropriating and providing for CPR sustainability as natural ecosystems do for billions of years.

The 21st century university is the result of constructive governance, the consequence of a clear distribution of power in collegiate bodies and individual authorities, in which there is a culture of responsibilities that occurs in a specific community (Kehm, 2012) as the UPS. It is important to highlight that governance depends on a large extent on the reality of each university: its location, size, dynamics, origin, among others.

In this sense, the university government must have internal institutionality and external significance to ensure the participation of society in the university. This gives way to variations of shared government that achieves representative collegiate bodies and one-person bodies by professional qualification (Herrán Gómez, 2015). In this way, the university organizes its government from models that share the autonomous power of the university to create a governed environment resulting from the synergy of the complex dynamics of the university, and integrates all the actors involved -students, teachers, administrative staff, institutions founders, State.

UPS as a Salesian higher education institution, located in Ecuador, South America -an underdeveloped region-, has ventured on a path to actively promote human development and adopting more sustainable models for its management. It has been addressed that is a university, a complex eco-system organization, that has taken the initiative to manage its resources as a CPR. Social groups within the UPS are research groups, educational innovation groups, academic cloisters, undergraduate programs, graduate programs, Salesian association groups, entrepreneurs. Building community synergies is only possible through dialogue and exchange in flexible and dynamic environments where human beings are at the center of all actions.

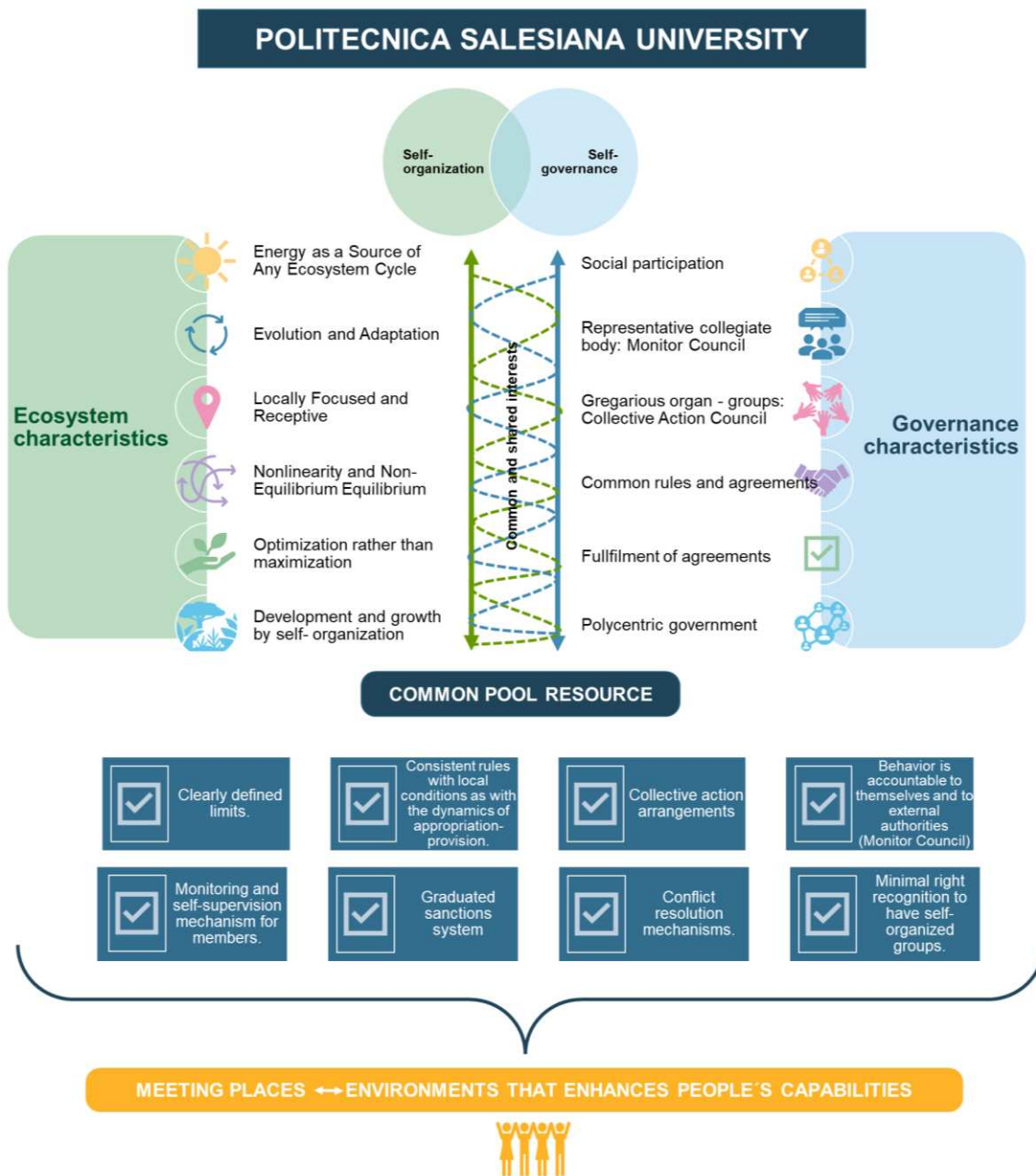
The approach developed allows the possibility of institutionality through economic reciprocity, redistribution, and exchange, being equally valuable social capital and physical capital. It is important to highlight that property, market or the role of the State are not discredited, it is an alternative proposal of how to manage from a CPR perspective,

dialoguing with them, in a practical way -rethinking the use of resources-, based on various studies developed in this field [figure 81].

Finally, it has been noted that ecosystems grow by taking advantage of the resources they have, being influenced by the environment -society and culture- in which it develops and respond to local, national and international needs. For all this, higher education institutions like the UPS play an important role, therefore, it is in s responsibility to build spaces where students and university community in general can develop and adapt competencies, skills, transfer knowledge, technology and increase the academic, personal, professional and economic development of a society.

Figure 81

UPS: ecosystem and governance characteristics



CHAPTER 4: STARTUPS-PROJECT A HUMAN CENTERED INITIATIVE AT UPS, AN ENVIRONMENT THAT ENHANCES PEOPLE'S CAPABILITIES

We live in a rapidly changing and increasingly interdependent world, where knowledge and innovation are important drivers for development. This means that good learning and a good quality education are increasingly determining factors in the well-being of individuals, in the progress of countries, and in the quality of the future of humanity (UNESCO, 2014, p. 9).

Chapter 1 addressed economic development from the accumulation of goods/material resources through the maximization of a person's utility and the exploitation of natural resources. The inequalities generated by the system gave way to new thoughts and theories with the main focus of management with the common good, the person, and their development in mind. Chapter 2 exposes the trends that have given rise to a new economic and social sciences paradigm, which seeks to develop the potential of people in environments that promote their quality of life and well-being.

Chapter 3 describes how universities are a key player in revitalizing the territory and the tendency to generate educational processes that link entrepreneurship to academia that help people identify business opportunities and stimulate the economy (Ardichvili et al., 2003). Access to education represents a tool that promotes social progress, allows contrasting inequalities (Cejudo, 2006) and contributes to the flourishing of so-called open ecosystems, in which innovation and entrepreneurship are actively promoted. Thus, it was described how UPS since 2014 has promoted a series of activities together with the adoption of institutional practices [University-ecosystem, CPR management] to promote the development of a Research, Innovation and Entrepreneurship Ecosystem at the University¹⁰².

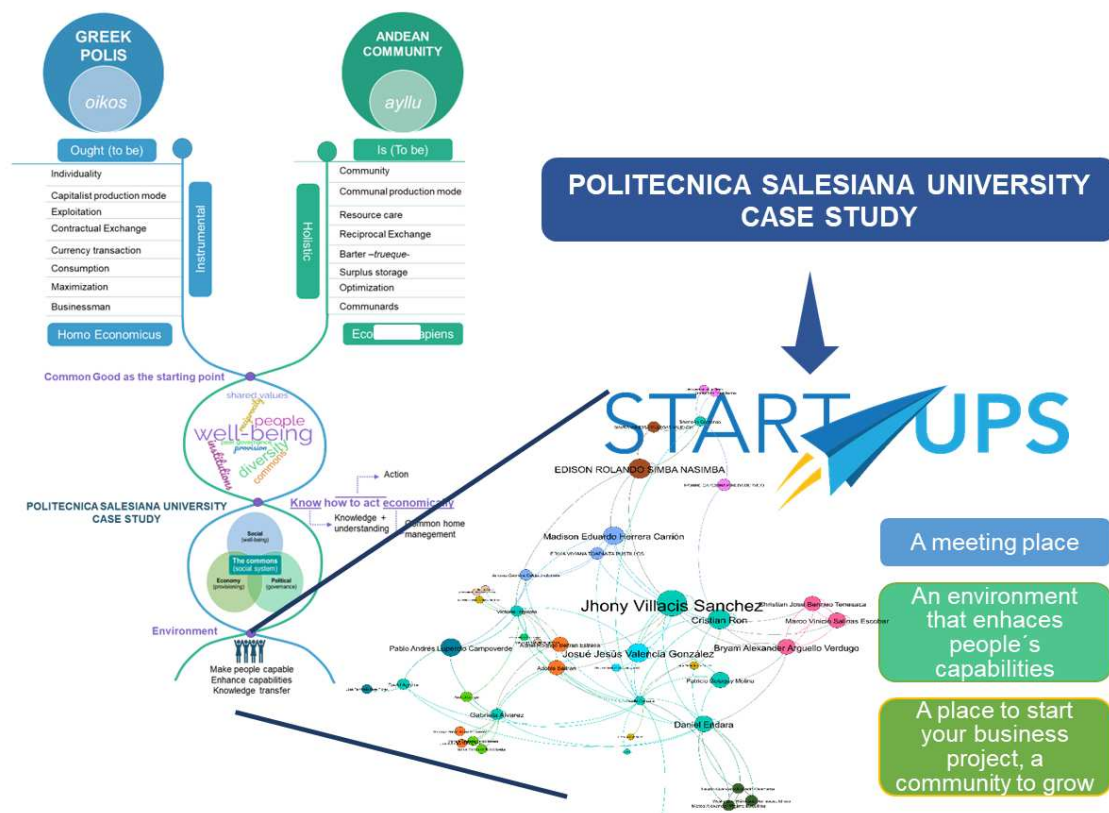
¹⁰² Some of them are compiled in the University Reflection Notebook 14: Towards an academic community that investigates (2014).

The culture of innovation combines key elements for social innovation, promoting a change in the logic of education, the conception of ethics, the structure of a society with a market, the formation of values. It promotes awareness and the development of critical reason, fosters responsible citizenship, always based on trust (Herrán et al., 2019, p. 78).

In that sense, people can enhance their skills in educational environments that create appropriate conditions for their development and that of their skills -capability approach- [figure 82]. In recent years, it has been highlighted how higher education institutions should value the potential of people and promote skills in them (Alessandrini, 2017) that allow them to live fully, creatively, developing their potential and building a meaningful life: their life project.

Figure 82

StartUPS: an environment that enhances capabilities



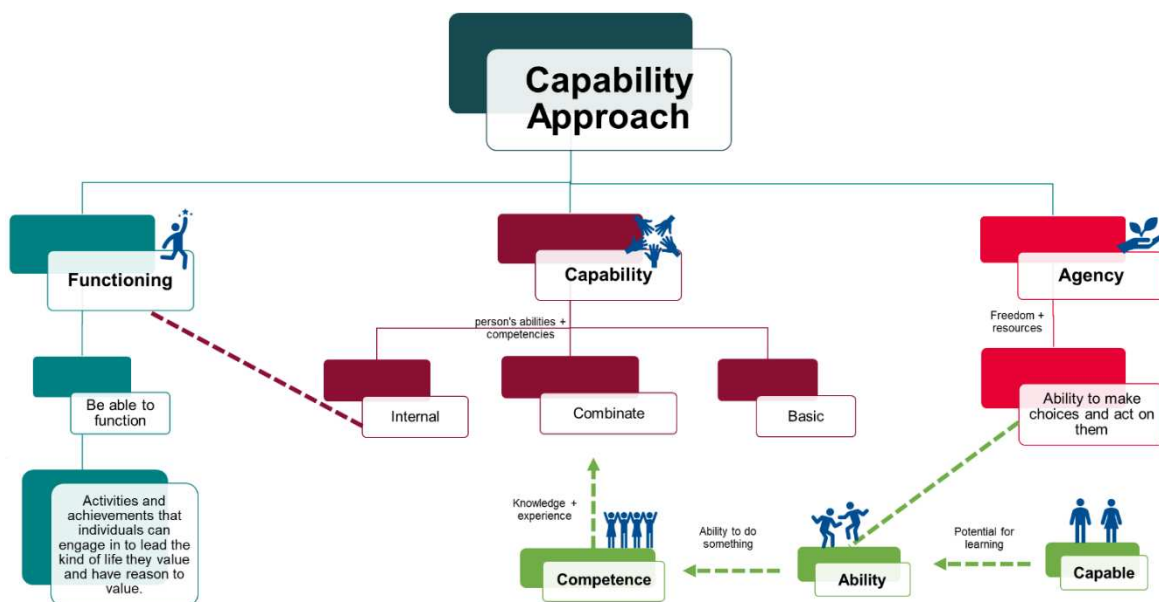
This new educational perspective is conceived as a space where innovation and entrepreneurship are promoted as fundamental pillars to acquire new knowledge that opens the minds of students and can identify opportunities through entrepreneurial activities (Ozgem & Minsky, 2007). This is possible in an environment that enhances their abilities,

gives them the opportunity to develop together with their life project and contribute to the construction of the common good.

The present chapter addresses the UPS entrepreneurship and innovation space as a meeting place, an environment in which people's skills are enhanced. The project has taken into account the Salesian perspective together with the life project of the students, as well as the capability approach for the development of abilities through (i) functioning that represent highly valued activities that contribute to the "well-being" of the person. , (ii) capability as the freedom to carry out activities -functioning- and (iii) agency as the ability to achieve goals by being agents of action and change [figure 83] (Nussbaum & Sen, 2009, p. 31).

Figure 83

Student's development through the capability approach



Note. Capability is a multidimensional concept that encompasses a person's abilities and competencies, as well as their physical, social, and institutional opportunities. Ability and competence refer more narrowly to a person's skills and performance, respectively. And capable refers to having the necessary qualities or attributes to do something (P. Ellerani, 2014; P. G. Ellerani, 2014, p. 25; Nussbaum, 2011; Sen, 2009).

Currently, in the literature of many different academic spheres there has been developed a list of skills and capabilities [table 28] that every person should have or develop. Nonetheless, the functionings -from the capability approach- allow the person to internalize that capability and use it in different scenarios or situations, without limiting the functionings

to be academic, professional, technological, or personal. Meaning, people should be able to use these capabilities in many different aspects of human life. Because of this, this is not a preset of capabilities but a constant building and development of it.

Table 28

Competencies definition

Definition	Field	Author/institution
Combinación de conocimientos, capacidades y actitudes [...] Las competencias clave son aquellas en las que se sustentan la realización personal, la inclusión social, la ciudadanía activa y el empleo.	Education	(Comisión de las Comunidades Europeas, 2006, pp. 2–3)
Conjunto de saberes, habilidades y destrezas a adquirir en el paso por las aulas universitarias.	Higher Education	(ANECA, 2005, p. 155)
Es más que conocimientos y destrezas. Involucra la habilidad de enfrentar demandas complejas, apoyándose en y movilizand recursos psicosociales (incluyendo destrezas y actitudes) en un contexto en particular.	Economy and society	(OCDE, 2004, p. 3).
Un compendio de conocimiento, actitud personal, destrezas y experiencia relevante, necesario para tener éxito en una determinada función y determina 46 competencias necesarias distribuidas en 3 ámbitos: comportamiento, contextual y técnico.	Management	(AEIPRO, 2006)
Posibilidades que tienen las personas para lograr functionings valiosos en la vida y, por tanto, constituye un aspecto fundamental de la libertad	Development and well-being	(Sen, 2003)

que tiene una persona para llevar una determinada clase de vida		
Capability is an integration of knowledge, skills, personal qualities and understanding used appropriately and effectively - not just in familiar and highly focused specialist contexts but in response to new and changing circumstances	Higher Education	(Stephenson, 1998, p. 2)
Es un conocimiento combinatorio y en relación con la acción profesional. Cada acción profesional es el producto de la combinación y movilización de un doble equipamiento de recursos: (i) recursos incorporados, como conocimientos, saber hacer, cualidades, experiencia; (ii) redes de recursos del entorno como medios, red relacional, red de información.	Profesional Life	(Le Boterf, 2001, p. 42)
Es “saber”, “saber hacer”, “saber estar” y “saber ser”.	Personal	(Stevahn et al., 2005)

Around the world there are many organizations and initiatives that promote peoples' capabilities for different areas, not only in professional terms but also personal. For example, the International Project Management Association (IPMA) has defined the bases for the project management competence that contains 46 elements of competence in 3 areas: technical, behavioral, and contextual¹⁰³ [figure 84]. They are part of the evaluation process for the certification of organizations and candidates. It has also been used in other areas as a guide for preparing training materials, in research, and as a general reference document for those seeking information on competency-based project management.

¹⁰³ On chapter 3, **Figure 68** shows how UPS considers the project as a catalyst axis of the university organization

Figure 84

IPMA competencies elements

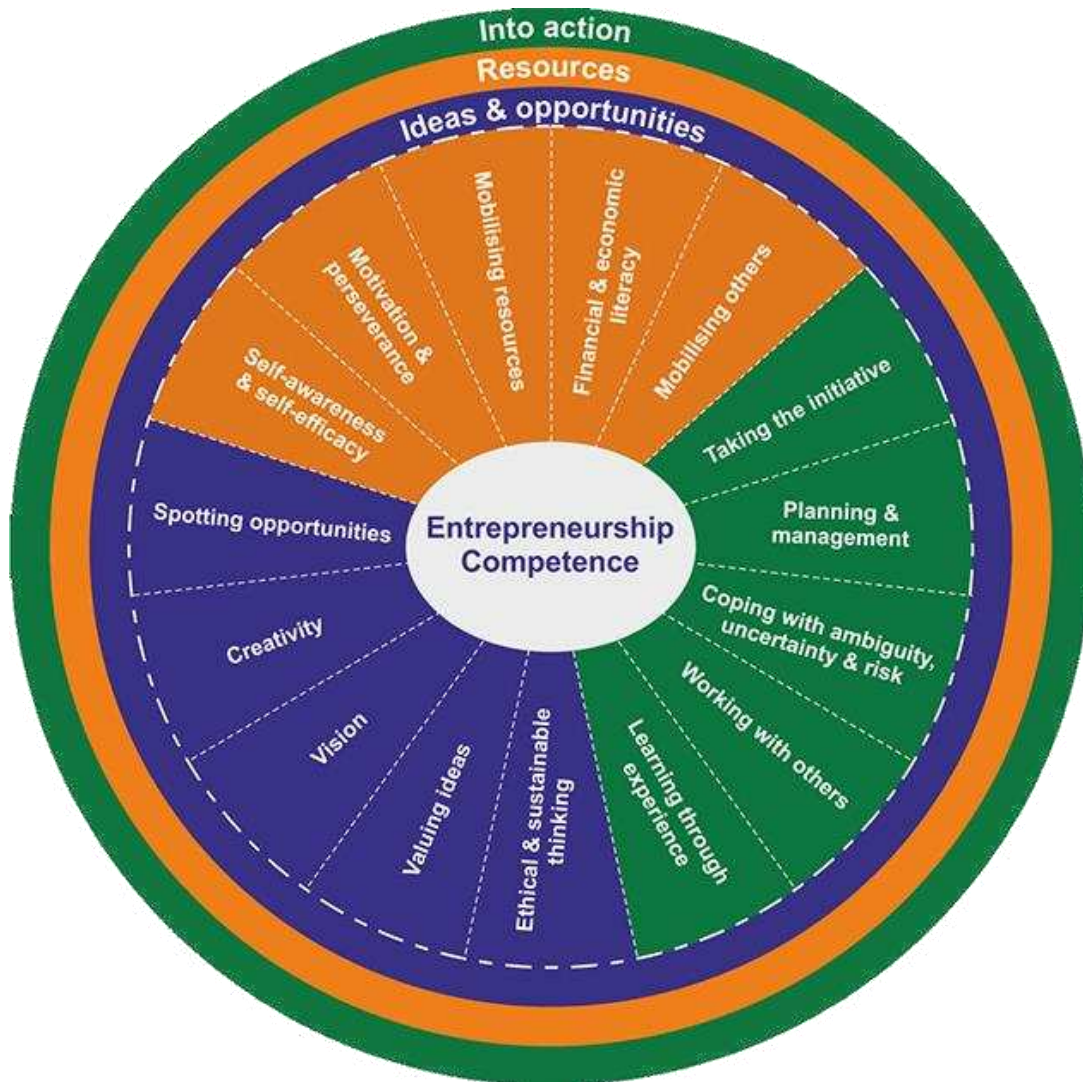
1. Technical competences	2. Behavioural competences	3. Contextual competences
1.01 Project management success	2.01 Leadership	3.01 Project orientation
1.02 Interested parties	2.02 Engagement	3.02 Programme orientation
1.03 Project requirements & objectives	2.03 Self-control	3.03 Portfolio orientation
1.04 Risk & opportunity	2.04 Assertiveness	3.04 Project, programme & portfolio implementation (PPP implementation)
1.05 Quality	2.05 Relaxation	3.05 Permanent organisation
1.06 Project organisation	2.06 Openness	3.06 Business
1.07 Teamwork	2.07 Creativity	3.07 Systems, products & technology
1.08 Problem resolution	2.08 Results orientation	3.08 Personnel management
1.09 Project structures	2.09 Efficiency	3.09 Health, security, safety & environment
1.10 Scope & deliverables	2.10 Consultation	3.10 Finance
1.11 Time & project phases	2.11 Negotiation	3.11 Legal
1.12 Resources	2.12 Conflict & crisis	
1.13 Cost & finance	2.13 Reliability	
1.14 Procurement & contract	2.14 Values appreciation	
1.15 Changes	2.15 Ethics	
1.16 Control & reports		
1.17 Information & documentation		
1.18 Communication		
1.19 Start-up		
1.20 Close-out		

Note. Reprinted from "ICB - IPMA Competence Baseline, Version 3.0", by IPMA, (2006) , p.19., In G. Caupin, H. Knoepfel, G. Koch, K. Pannernbäcker, F. Pérez-Polo, & C. Seabury (Eds.), IPMA Competence Baseline Version 3.0. International Project Management Association. Copyright 2006 by IPMA.

The EU has also put special attention to competencies, in 2016, the European Commission proposed a new skills agenda for Europe, so countries will work together to strengthen human capital, employability and competitiveness. The main purpose was that people develop a set of key competences that can contribute to their "personal development, social inclusion, active citizenship, and employment. These competences include literacy, numeracy, science and foreign languages, as well as more transversal skills such as digital competence, entrepreneurship competence, critical thinking, problem solving or learning to learn" [figure 85] (Bacigalupo et al., 2016, p. 2).

Figure 85

EU Entrepreneurship Competence Framework



Note. Reprinted from “EntreComp: The Entrepreneurship Competence Framework” by Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G., 2016, p. 6. Publication Office of the European Union. <https://doi.org/10.2791/593884>

Within Higher Education institutions competencies developed in the curriculum of the undergraduate programs have also been identified. The aim is that students, through these professional profiles, accredit an interesting number of competencies that are useful at the time of completing their studies. For example, the National Agency for Quality Assessment and Accreditation (ANECA, Spanish acronym) proposed a detailed a large number of transversal competencies which must be implicit in the curriculum in Spain [table 29].

Table 29

ANECA competencies

INSTRUMENTALS	INTERPERSONAL	SYSTEMIC
Analysis and synthesis capacity	Teamwork	Autonomous learning
Organizational and planning capacity	Work in an interdisciplinary team	Adaptation to new situations
Oral and written communication in the native language	Work in an international context	Creativity
Knowledge of a foreign language	Skills in interpersonal relationships	Leadership
Computer knowledge related to the field of study.	Recognition of diversity and multiculturalism	Knowledge of other cultures and customs
Information management capacity	Critical reasoning	Initiative and entrepreneurial spirit
Troubleshooting	Ethical commitment	Motivation for quality
Decision making		Sensitivity towards environmental issues

Note. Translated from “Libro blanco: Título de Grado en Pedagogía y Educación social. (Vol. 1)”, by ANECA, (2005), p. 142. Madrid: Omán Impresores.

The acquisition of these capabilities among the different environments within the UPS aims to empower people so they can become masters of their own life. Seeking this the UPS shifts and embrace a new scope for education, a scope that contributes to freedom of speech, association y freedom to being educated without fear (Alkire & Deneulin, 2009). The creation and empowerment of the entrepreneurial and innovative UPS ecosystem was fueled by the generation of meeting places such as Coworking StartUPS and strategies focused to support the development of capabilities, entrepreneurship, and innovation within the university community. The main objective was to help the students in the process of building life projects and guarantee the adequate technology and know-how was transferred to the many different social sectors.

From a human development and the empowerment of each student perspective in a Salesian university, there has been a set of functionings that has as an objective not only give the students spaces where to develop and practice, but also these spaces contribute to achieve a life project.

StartUPS-project: a brief timeline.

The StartUPS project was born in 2015 promoted by UPS Research Vice-presidency [figure 86] focused on learning based in projects using many different types of activities that were developed among the academic year of the UPS, the main objective was to give the students powerful tools so they can enhance their capabilities¹⁰⁴ and projects. The StartUPS is an open and flexible space that seeks to be a common ground and meeting place of professors, lecturers, students, entrepreneurs, and any other member of the society willing to work collaboratively over their projects, cooperating and making a positive impact over society.

The project began being based on the WWP¹⁰⁵ methodology, with the core goal of create relationships between the “expert” and the “participant group” (De los Ríos et al., 2016, p. 107) so they will connect all the knowledge among the people. This allowed the construction of horizontal relationships between students, researchers, lecturers, and board members giving birth to a flexible “bottom up” space, where continuing learning, individual and common construction enhanced. Over the first years the applied strategies were developed with the help of INTEGRAR, a company focused on creative development which enhanced the IEE in the UPS [figure 87].

StartUPS got his physical space in the UPS under the name “coworking” and since this space was inside the university it was seeing as a collaborative and cooperative environment with main focus on Project Based Learning (PBL), “Challenge Based Learning (CBL), and “learning by doing” (Bustos et al., 2019; Marti et al., 2010; Rodríguez García & Ramírez López, 2014).

Since then, thanks to StartUPS many initiatives that support students’ formation, development of their capabilities and project realization, were born. It is important to clarify that by project we are not only talking about an entrepreneurship project but a life project from a Salesian perspective. Some of the initiatives are listed below:

- Mini Bootcamps: Local events with medium reach range, organized by professors and students’ community, focus to work on a specific topic so new students can join and become part of the dynamic environments the UPS has.

¹⁰⁴ Nussbaum y Sen (2009) Mention that life quality should be evaluated in terms of the capacity of a person to achieve valuable functions and set up two frames: First, the promotion of a person wellbeing in terms economic terms, health access, education, food and housing; Second, through the search of personal growth with the reach of self-achieving goals as an example, check chapter 2.

¹⁰⁵ Cross-reference: Working With People (WWP), chapter 3,

Figure 86

StartUPS timeline

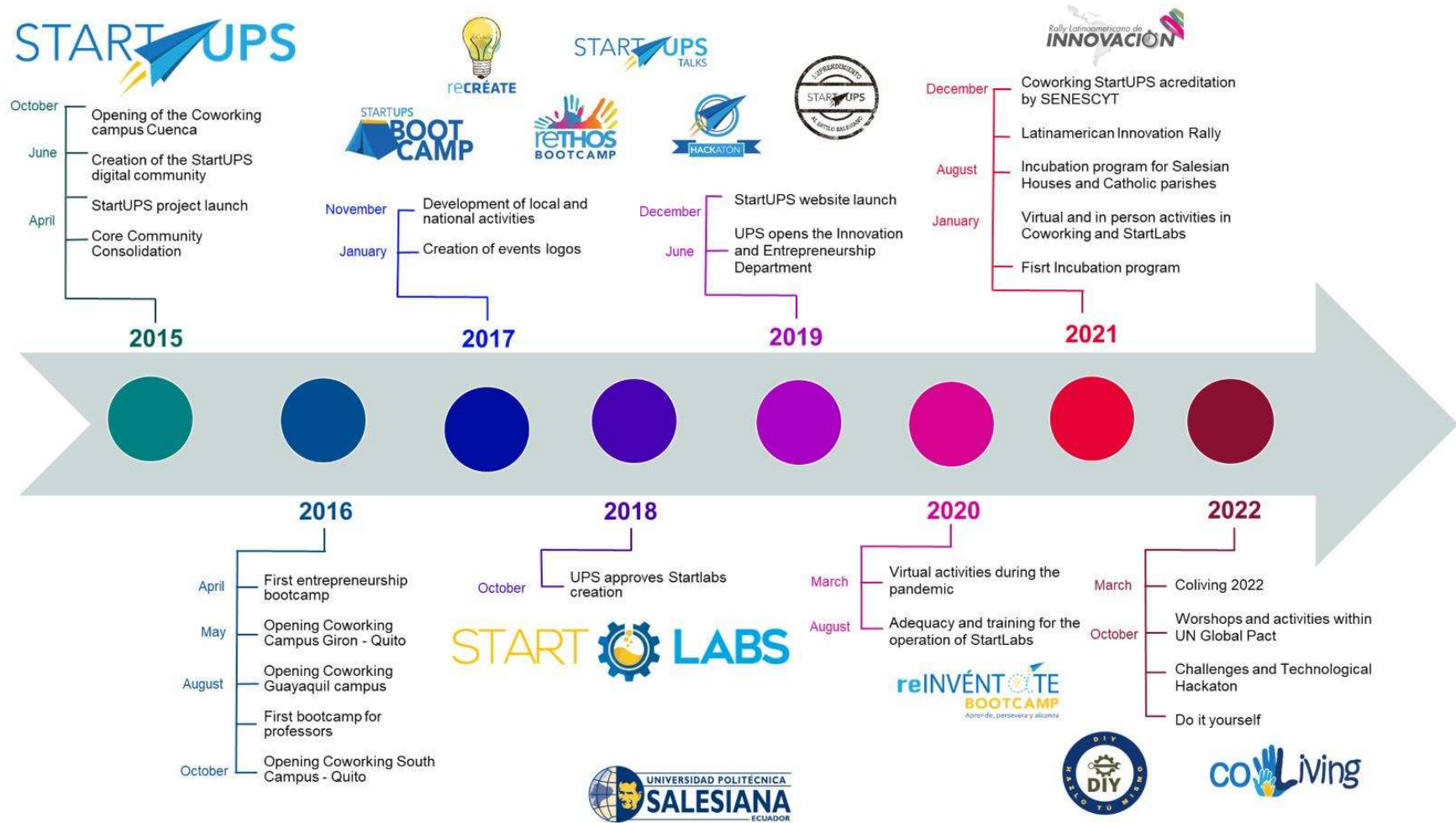
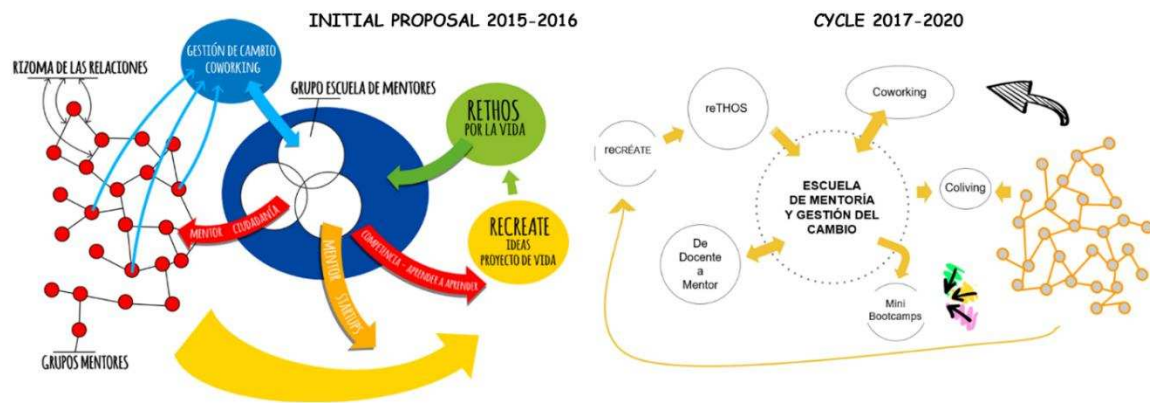


Figure 87

StartUPS training cycle initial proposal



Note. Initial proposal reprinted from “Innovación organizativa para la puesta en valor de la investigación científica. El caso de la Universidad Politécnica Salesiana” by Salgado, JP, 2018, p. 379. Università degli Studi di Ferrara. Cycle 2017-2020 reprinted from Research Vice-presidency, Soriano, B., 2017.

- reCRÉATE: Speed up entrepreneurship introduction event focusing on enhancing the student creativity to help them come up with solutions to regional, national and international problems.
- reTHOS: entrepreneurship validation camp.
- Coliving: Salesian way to explore coexistence and their ontological roots. Promoting self-knowledge, challenging the youth to set up their own life project, implementing common care ethics among them and guiding this practice from a preventive Salesian system.
- “De docente a mentor” (from professor to mentor): Teaching methodologies so the younger professors could help entrepreneurs.
- “Escuela de mentoría y gestión del cambio” (mentoring and change school): Aims to get the students from all three localities of the UPS to be game changers through entrepreneurship, coworking, research and from the charisma of Don Bosco.

In 2018, the creation of prototype, digital design and 3D printing labs were approved and got named StartLabs¹⁰⁶. The main objective was to wide up the service that is provided to student, so they could, on one side work and validate their business model through all the

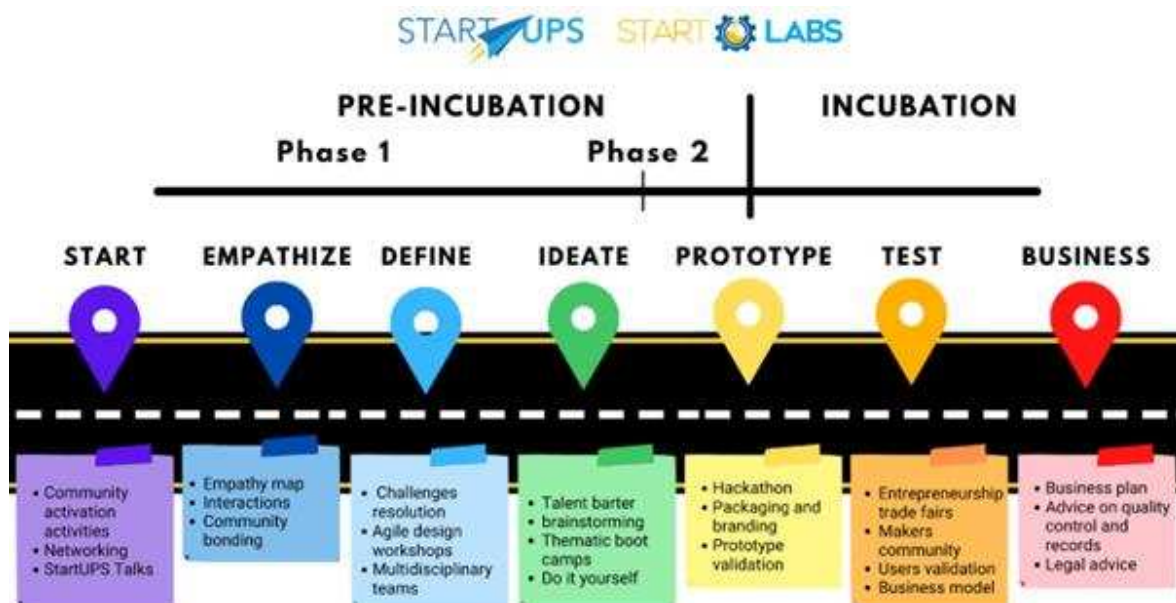
¹⁰⁶ “A Fab Lab or digital fabrication laboratory is a place to play, to create, to mentor and to invent: a place for learning and innovation. Fab Labs provide access to the environment, the skills, the materials and the advanced technology to allow anyone anywhere to make (almost) anything” (FabFoundation, 2023, sec. 1).

activities developed and deployed by Coworking and on the other side make their ideas become actual products in StartLabs.

July 2019, the beginning of the UPS department of entrepreneurship and innovation comes to a reality. With this department open and fully functional a process of feedback to enhance and launch continuous improvement process was set up, some camps were restructured and the construction of the “Salesian Entrepreneur route” began [figure 88], with the main objective of connect spaces and activities that were already taking place in the UPS. The department has been working under the VUCA principles and challenges and also from the feedback given by the participants of many initiatives and activities. Even though the events help them for their life projects, the objective of making a bigger impact, increase the follow up of the projects and transability required more attention to the pre-incubation¹⁰⁷ and incubation 6 stages, since then, the department gives special attention to these stages, because the necessity and importance of a more tailored guidance and mentorship was increasing.

Figure 88

Salesian Entrepreneurship Roadmap



Note. Translated and reprinted from “Resultados de Investigación, Innovación, Emprendimiento y Publicaciones UPS 2021”, by Carrera-Hidalgo, P., (2022, p. 397) (2022), p. 397, on UPS – Informes de Investigación.

¹⁰⁷ “Pre-incubación: Research and definition, “here is where a project is prepared, theoretic aspects of the business model are defined all that is not clear is solved out” (Guerra Triviño et al., 2015).

In 2020 many onsite and virtual camps took place because of the global reality of COVID-19. This specific event shows once more how volatile, uncertain, complex and ambiguous is the world we live in. The “reTHOS” became an incubation program [figure 89], the “Speed Mentoring” was incorporated as a virtual permanent space full of mentoring and tools for the entrepreneurs. “Reinventate” was held up to increase the entrepreneurial community and activities among the many labs.

Figure 89

reTHOS Incubation Program



The Ecuadorian Higher Education, Science, Technology and Innovation Secretary (SENESCYT, Spanish acronym) has a classification for innovation agents among Ecuador territory: Incubators, Technological Transfer center, Company accelerators, Coworking Spaces, Innovation agents and Operators. The UPS was accredited as incubator in 2017 and in 2021 UPS coworking and StartUPS as Coworking spaces. This allowed UPS to be among the many national actors in the map and to participate and being host of many projects SENESCYT launched from the Bank of Ideas¹⁰⁸. TROMPOS was the last project that was incubated in the UPS 2022.

Nowadays, UPS has four physical coworking space and three StartLabs spaces located in Cuenca, Guayaquil, Quito (Giron Campus) and Quito (South Campus) respectively. The current goal is to be able to execute actions that enhance the current entrepreneurial spaces, the whole development of the people and improve their capabilities. Using the common knowledge developed in these spaces, empowering entrepreneurship researchers

¹⁰⁸ Governmental initiative that has several calls throughout the year so entrepreneurs can access to funding.

that aim to come up with innovative results that allow set up the UPS as an example of innovation agent in and out of the country.

For this, all action plans are aiming to:

- Increase the buildup of new entrepreneurship projects with the main goal of using the knowledge generated by the results of the project and research.
- Promote the creation of viable, sustainable and relatable projects within the Salesian frame, aiming to the person is the core of all the process.
- Generate inwards and outwards synergies among the different agents, prioritizing the students, professors, and partnership.
- Strength up the capabilities and opportunities of every participant of the environment, increasing their chances of integral development and aiming to make out of it a game changer.
- Lower the difficulty of knowledge and good practices exchange among the many actors of the entrepreneurial and innovation environment.

The Coworking-StartUPS has changed the Salesian speech and brought a huge opportunity to build a community, to create connections, while being a meeting space to work, share, help and believe. Entrepreneurship is an educational tool that generates nonmaterial and noncommercial exchanges, this because of the coworker spirit of the youth aims to reshape and revalue the common of the space and the co-construction of the collective development (Máytás et al., 2019). With the prevention Don Bosco system, the StartUPS allow becomes a warm wide-open house, a parish that evangelize, a school that prepare for life and a playground to meet, enjoy and discover our fellow men and our inner self [figure 79].

2020 was also the year were the Coworking StartUPS¹⁰⁹ website was launched [figure 91] so people could have direct access to many services such as: space description, data, participants of projects exposure, event announcements and registry, mentoring, diffusion of StartLabs spaces. Thanks to the website, on each event section there is a feedback option and also a general assessment about how the department is working.

¹⁰⁹ <https://coworking.ups.edu.ec/home> developed by Jorge Andrés Galán Mena, Daniel Javier Pulla Sánchez and Frank Gabriel Montalvo Ochoa, coworkers at UPS Research Vice-presidency, who have been working since 2019 adding improvements and new futures.

Figure 90

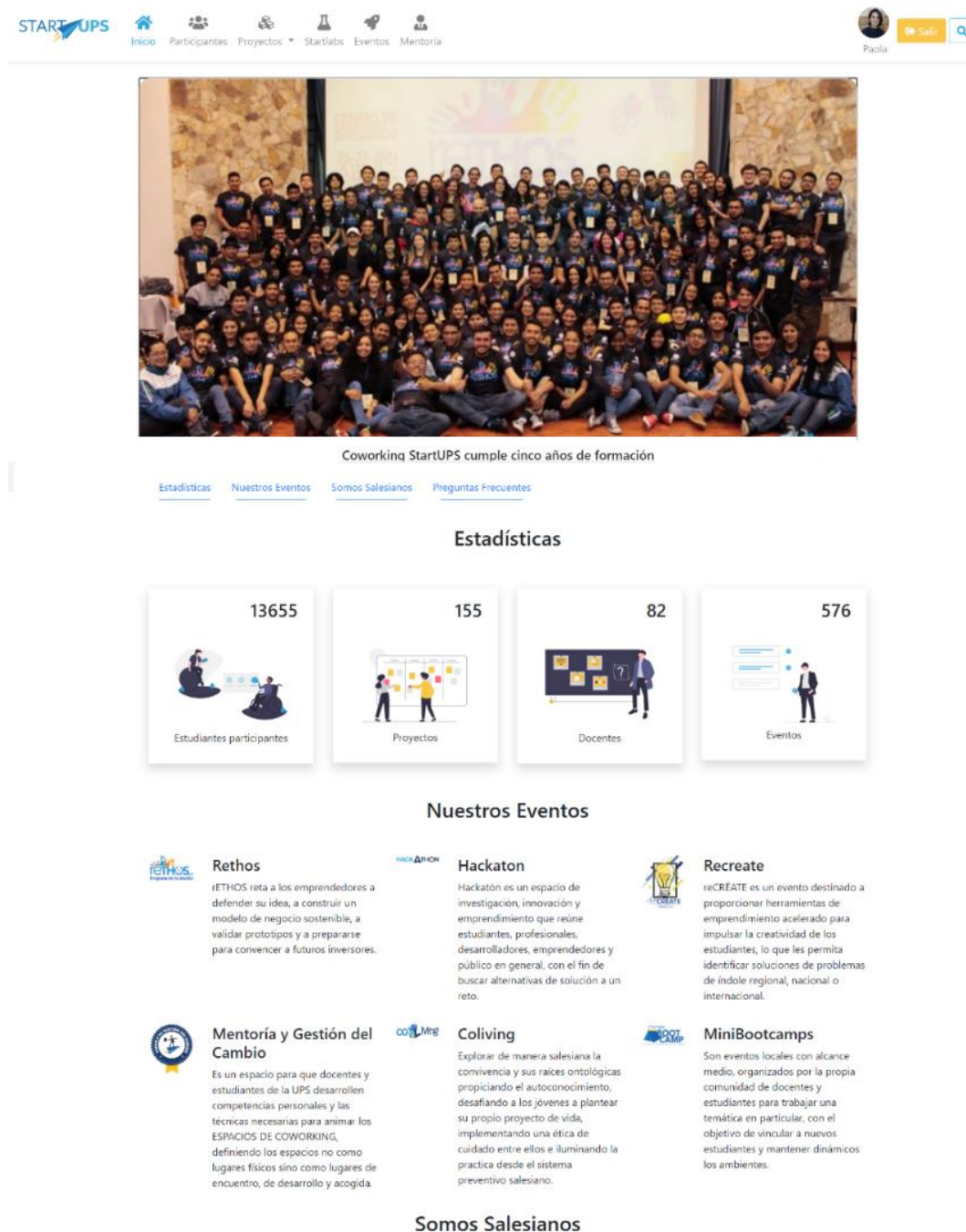
The “salesian” living together experience in an environment that enhances capabilities¹¹⁰.

<p>ASSOCIATIVE EXPERIENCE</p>	<p>VOCATION</p>	<p>EDUCATION AND CULTURE</p>	<p>EDUCATION FOR FAITH</p>
<p>A home that welcomes</p>	<p>A parish that evangelizes</p>	<p>A school that prepares for life</p>	<p>A playground to meet and enjoy</p>
			
<p>Physical integrity: Security and freedom from all forms of physical and verbal abuse.</p> <ul style="list-style-type: none"> - Openness to all young people who not always adapt or integrate into other educational structures and proposals. - Appreciation of the family and what young people can contribute 	<p>Practical reasoning: as a capability to be able to choose in an informed, critical, intellectually sharp way, while building a socially responsible life project in the midst of an uncertain [VUCA] world.</p> <p>Emotional integrity: to be emotional intelligent and able to further stimulate the imagination, understanding, empathy, discernment and conscientiousness.</p> <ul style="list-style-type: none"> - The sense of duty and responsibility reflected in a personal commitment and service to others. - Capability to analyze real life and stimulate attitudes of service and solidarity. - Capability to think in terms of the collective common good rather than individualism behavior. - Moral judgment capacity based on critical reason, supported in valid and real arguments. 	<p>Educational resilience: capability to negotiate risks, persistence in studies, undertake educational opportunities, accepting and meeting challenges. Being resilient based on aspirations and hopes.</p> <p>Knowledge and imagination: capability to use critical thinking and imagination to comprehend the complexity of science and make a moral judgment.</p> <p>Willingness to learn: Be curious and have the desire to learn to become aware of our ignorance and limitations, maintaining a latent capacity for wonder, being an active researcher.</p> <ul style="list-style-type: none"> - Creativity and a spirit of innovation that challenges routine, indifference or conformity. - Capability to reason about political problems and reach conclusions 	<p>Social Networking and relations: Being able to have respect for oneself and others, showing empathy, compassion, honesty and generosity, while interacting and listening to others.</p> <ul style="list-style-type: none"> - Joyful atmosphere that favors optimism and a positive approach to life. Sensitivity to the surroundings, overcoming conformist passiveness and indifference. - Participation in wider contexts to engage with social situations actively and critically. - Capability to see the community as part of a larger, even global, complex order, and therefore understand the need for interaction.

¹¹⁰ The Salesian perspective together with the capability approach for people’s development through environments that enhances capabilities. The Spanish word commonly use fourth dimension is patio, referring to that physical meeting point where people reunite, enjoy and is. Cross-reference: meeting point (Carrera-Hidalgo & Vicerrectorado de Investigación, 2018, p. 4; Dicasterio de Pastoral Juvenil, 2014, pp. 183–184; P. Ellerani, 2017; Nussbaum, 2010; UPS-Coworking StartUPS, 2023).

Figure 91

StartUPS website



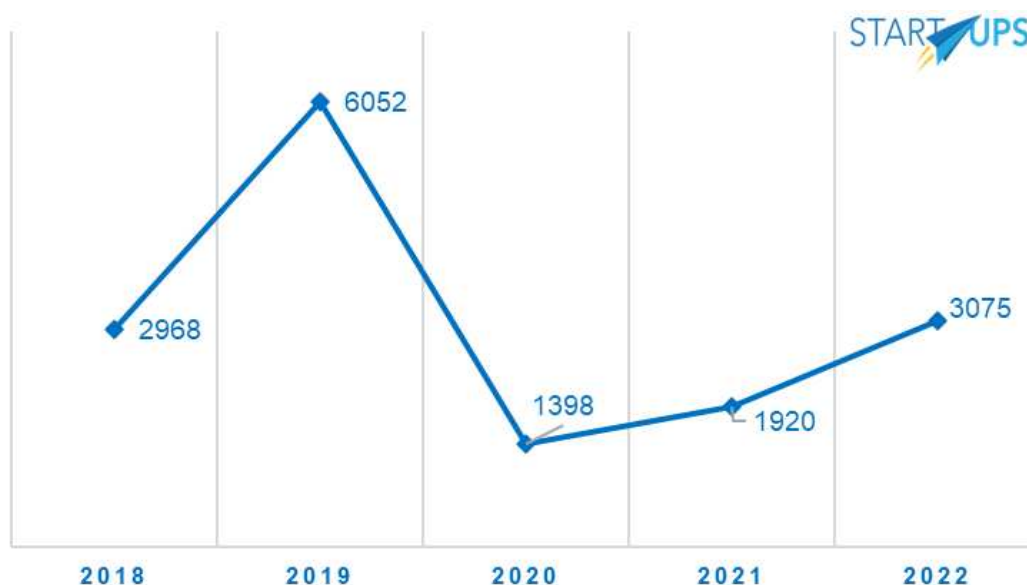
1.1. A sustainable and cooperative growth among time

Inside Coworking and StartLabs the students can share, learn, innovate, research and entrepreneur undertake their projects. The many tools these spaces have help them define innovative ideas that latter on could become big projects than empower change but, overall, projects that help them work on their own personal and professional development within an

ecosystem that sow in each and every student teamwork, perseverance, confidence, and a positive attitude. From the beginning, participation has been active, sustainable and with a regular and positive trend to be consistent over time [figure 92].

Figure 92

Participants in entrepreneurship and innovation activities



Note. In 2020 there is a drop in the number of participants due to COVID-19. Most of the activities that year were held virtually, the amount of people following virtual activities reach almost 4100 (4089 persons to be exactly).

In 2022 while developing all the planned activities over the entrepreneurship and innovation areas about 3,075 people participate on the events and 1,428 people visit and work at the Coworking StartUPS and StartLabs spaces over Quito, Cuenca, and Guayaquil. The past year (2022) 111 projects started and nowadays are un many different stages, 72 out of this 111 are now called 8: Salesian style entrepreneurship and are fully operational y have initial sales that allow the projects to be sustainable and scalable. Among these group, 10 projects are Salesian style and were incubated in UPS and keep working inside de UPS [figure 93, 94, 95].

Figure 93

Participants in entrepreneurship and innovation activities 2022

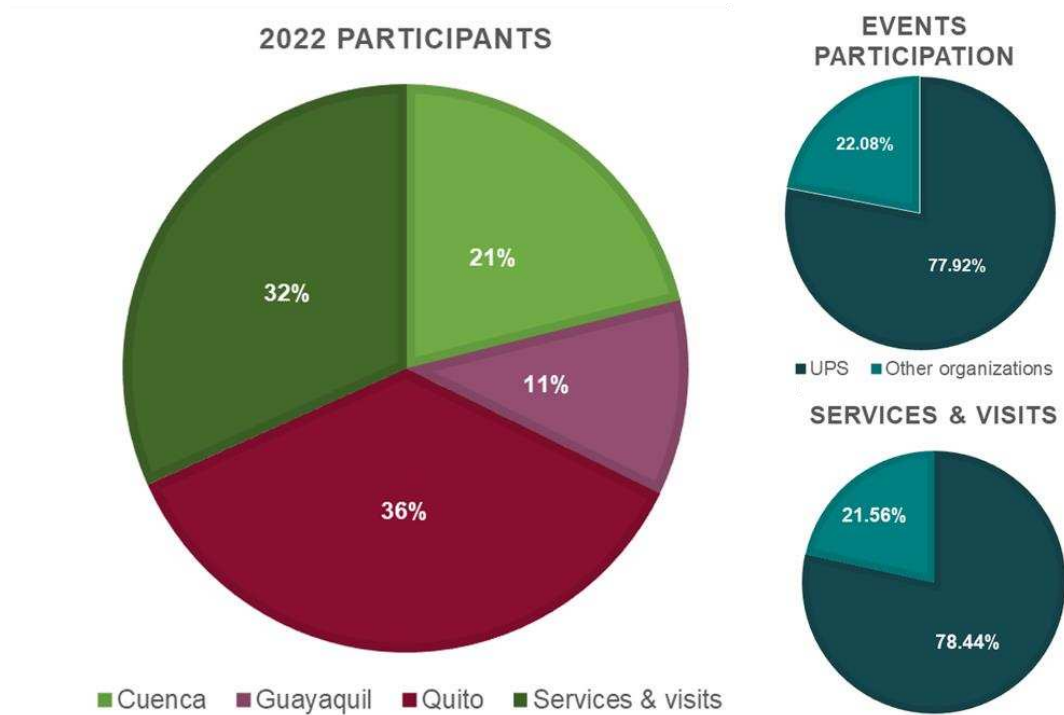


Figure 94

UPS Entrepreneurship and Innovation projects

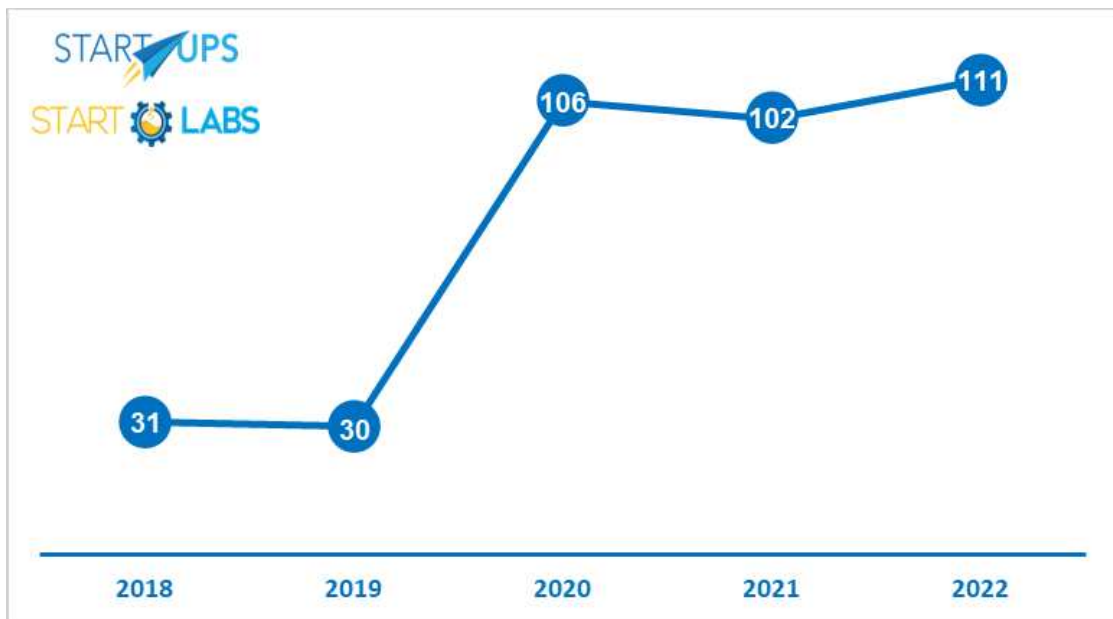
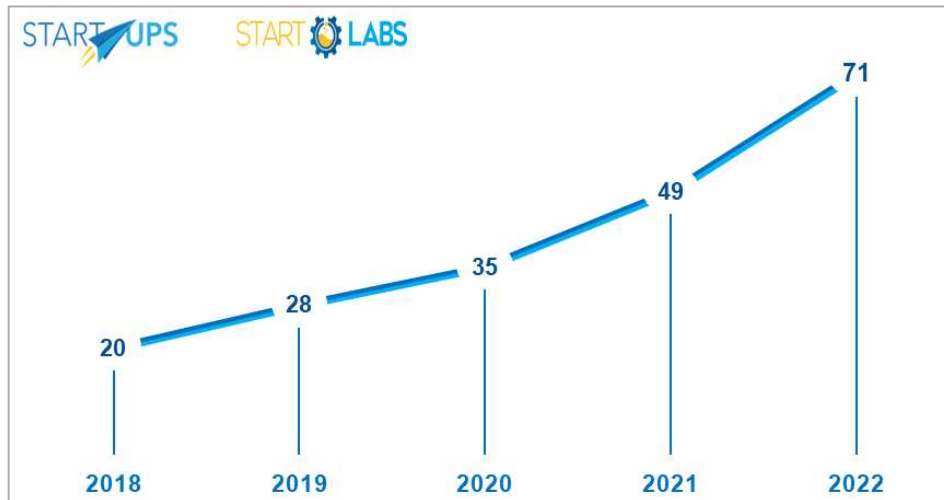


Figure 95

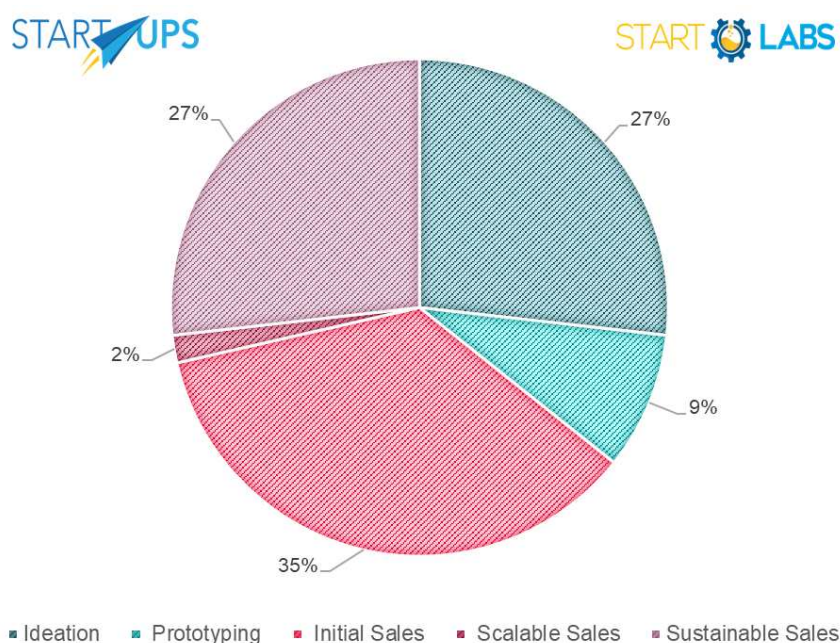
Salesian StartUPS



Since the reactivation of onsite activities among the spaces after the pandemic a new generation of Salesian style entrepreneurs have been consolidating even reaching a generation a minimum viable product that will help them from making first sells to achieve self-sustainable companies aiming to enhance social, technological, economic and cultural development. The projects that are being developed in the spaces are divided into five categories in order to give them a better mentorship and track them [figure 96]

Figure 96

Projects phase



By the end of 2022 there are 111 projects under the innovation and entrepreneurship department [table 30], out of those, 71 are currently having initial, sustainable and scalable sales [figure 97]. All this projects in their vast majority belong to UPS students, but also are some external agents that use the interinstitutional network to cross pollinize the ecosystem.

Table 30

Entrepreneurship and innovation projects 2022

	Project	Brief description	Phase	Members	City
1	Dolce vita by Nicole	Candy/dessert/food stand	Ideation	Nicole Altamirano	GYE
2	BROODEEERS	Hot-dogs foodtruck	Ideation	Andrea Siavichay	GYE
3	Equipo Atom	Device for improving combustion and forced convection heat transfer by introducing devices capable of injecting compressed air into the kitchen air supply system.	Ideation	Lila Camacho	GYE
4	Legion 501	A restaurant with a sensor system to control lighting zones, electrical appliances and automation equipment for temperature control.	Ideation	Alex Jaramillo	GYE
5	Un mundo para todos	An app for HR department its alternates for the staggered personnel selection process based on criteria or parameters	Ideation	Lady Bazurto	GYE
6	Suveci	Network of local businesses, which are distributed within the cities that allows families to connect with the closest businesses.	Ideation	Jonathan Vargas	UIO
7	DAM Creative	BGR Team 1	Ideation	Mauricio Abril Stalin David Anasunta Juan Canchig	UIO
8	Digital Centennials	BGR Team 2	Ideation	Mateo Anasunta Alex Terreros Margarita Llumiquinga	UIO

9	Innova Dreams	BGR Team 3	Ideation	Blanca Suárez Roberto Ordoñez Emilia Muzo	UIO
10	Digital Team	BGR Team 4	Ideation	Alison Camila Angel Pozo Emely Ruano	UIO
11	Inosoft	BGR Team 5	Ideation	Monica Simbaña Andrew Rueda Doménica Velasco	UIO
12	Back Kids	BGR Team 6	Ideation	Victor Aimacaña Karen Mantilla Jhosue Villacrés	UIO
13	SAP	Preparation of biodegradable personal sanitizer	Ideation	Davith Jaramillo Domenica Maldonado Nubia Jami Cesar Cardenas Nikita Martínez Steve Acosta Maria Pineiros Erik Murminacho David Borja Jorge Inlago	UIO
14	TEBIOSOF-TECH	Revaluation of glass and aluminum, processing them for production and marketing in the commercial area of furniture, implementing low-pollution industrial processes	Ideation	Alisson Rojas Marjorie Vaca Dario Guayasamin Francisco Jaguaco Paola Tonguino Alex Guaman Juan García Andrea Tafur	UIO
15	INNOVATION BLUE	Preparation of biodegradable personal sanitizer	Ideation	Mishell Freire Liliana Yucailla Mayra Tandazo Felix Erazo Luis Jimenez José Luis Allauca	UIO

16	AYA-DROP	Power generating bike	Ideation	Jonathan Salazar Jean Salazar Shirley Almeida Verónica Ayala Wilson Lara Nicolai Escobar	UIO
17	BIMAAEE	Snake repellent diffuser based on local plants traditionally used to ward off snakes	Ideation	Lesly Amagua Andre Lema Jhon Vallejo Santiago Aguilar Melanny Unapucha Walter Vega Seis Carol Garcia Samuel Suárez Martínez	UIO
18	8 KISS	Smart handle to connect with the cell phone	Ideation	Camila Córdova Yadira Chango Pablo Aguirre Bryan Acuchi Marlene Chillagana Dustin Núñez Ivanova Flores Erick Taco	UIO
19	Alimentos para ganado	Sale of balanced for cattle	Ideation	Lissbeth Alexandra Montaña Jarama Katherine Paola Montaña Jarama	CUE
20	Cuadrupedo de carga	Manufacture of quadruped robot for heavy load (similar to forklift)	Ideation	Mateo Cordero Santiago Gómez	CUE
21	Diseño de llaveros	Key rings fabrication in different materials	Ideation	Víctor Coreisaca	CUE
22	Impresiones 3D	3D printing	Ideation	Mauricio Salcedo	CUE
23	Chokis	Sale of lunches, bolones, empanadas	Ideation	Teodoro Villa	CUE
24	Creación de sitio web turístico	Website creation with tourist attractions, specific location of government companies, etc.	Ideation	Teodoro Villa	CUE

25	IEEE-UPSCUE 1	Giga, evacuation alert device capable of being assimilated by all people, providing evacuation time in the areas that will be affected, protecting human lives, conserving the ecosystem and reducing considerable economic losses.	Ideation	Daniela Vásquez José Sánchez Andres Chacha Leslie Rodas Prisicla Méndez	CUE
26	BITS Y BYTES	SnowSpike, is a hand sanitizing gel, formulated based on natural raw materials that contain Syzygium aromaticum essential oil as the main component.	Ideation	Mateo Carpio Jennifer Cárdenas Jacqueline Jara Paula Brito Erick Arevalo Liseth Minchala	CUE
27	ECOMÁTICO	Organic matter collector with the ability to transform it into biogas and other by-products	Ideation	José Jiménez María José Montesdeoca Esteban Novillo Jhoder Orellana	CUE
28	Amaru	Amaru device that provides a viable solution for producing areas, since it does not seek to harm flora and fauna, using renewable energy and without the use of chemicals, allowing harmony between subject-reptile.	Ideation	Isabel Chuya Tatiana Cárdenas Bernarda Figueroa Kelvin Tigre Lenis Angulo Emmanuel Choez Guissella Rivera	CUE
29	INNOVACIÓN LRG	Product that optimizes the energy use of the gastronomic sector through an energy regeneration plant called "INNOVA LRG"	Ideation	Doris Peralta Christopher Maurad Bryan Ortuño Erick Sanmartín Delia Macancela Cristian Lema	CUE
30	TEAM INNOVATEC	Service company to implement specific work areas with adequate lighting and sound for the work performance of people with Autism Spectrum Disorder	Ideation	Angel Carranza Katherine Mosquera Christian Avila Froilan Sangurima Daniel Guaman	CUE

31	GrupoHk	Promote my own clothing and footwear through a virtual catalog	Prototy pe	Wendy Yunga	GYE
32	Pixie Dragon	We are dedicated to selling items focused on personal gifts, and some other products, all works of designer creativity.	Prototy pe	Renzo Fernández	GYE
33	JOBAL	Mobile app that allows you to offer various professional services and various trades.	Prototy pe	Adonis Beltrán Adriel Beltrán Juan Andrade Santiago García	UIO
34	Confeccion s Deylan	Dressmaking workshop, specialized in sportswear, children's clothing and quilts	Prototy pe	Rocío Choca	UIO
35	Confeccion s Ismatex	Dressmaking workshop, specialized in sportswear, pajamas and sheets	Prototy pe	Rosa Llulluna	UIO
36	Costuras D' Crishop	Dressmaking workshop, specialized in custom-made clothing, sublimated blouses and shirts	Prototy pe	Karina León	UIO
37	Jhon Steel	Metal products with custom designs	Prototy pe	Jhonatan Imbaquingo	UIO
38	JUMAMI sake	First sake or rice wine produced in Ecuador	Prototy pe	Lenin Navas Naomi Chávez	UIO
39	BIOHEALTH Y	Organic disinfectant developed purely with Uvilla and Dandelion leaves from our country, it has the purpose of disinfecting up to 99.9% bacteria such as Salmonella ssp and E. coli, Viruses, fungi, etc. of fruits, vegetables and greens. You will get a totally efficient and natural disinfection.	Prototy pe	Arelys Alcaciega Mishel Pazmiño	UIO
40	Heladería PATY	Ice cream brand, with branch networks in Guayas and Manabí	Scalabl e sales	Anthony Silva Gutiérrez	GYE
41	KUSNA - POSTRES FRÍOS	We take advantage of the benefits of fruit pulp and gelatin to produce passion fruit, pineapple and chocolate desserts. We are pleased, thank God, to have customers who can attest to our flavor and freshness of our desserts, which I think	Scalabl e sales	Iván Montiel	GYE

		would be a good opportunity to participate in this fair and make ourselves known to many more people.			
42	FARRON Icp ALTERNATIVE	Native Ecuadorian mixed alcoholic beverages for young people from 18 to 35 years old	Initial sales	Ivonne Pineda Bermeo Erika Naula Carrión Santiago Pineda Bermeo	CUE
43	Apícola Campoverde	Measurement of the weight of hive production in order to reduce the cost of transfers from the beekeeper to the apiary, thus increasing productivity and having more profits for the beekeeper.	Initial sales	Jaime Jordán Guillén Marcela Campoverde	CUE
44	ADOPET	Producers of recyclable paving stones from PET plastic.	Initial sales	Pedro Jacop Patricio Marín Oswald Rodríguez	CUE
45	Iglu	Real estate marketing agency, in charge of positioning in the real estate market, increasing the sales of real estate agencies from digital marketing.	Initial sales	David Aguirre Gustavo Gaviria	CUE
46	Hoppe	High quality coffee highlighting the natural characteristics. The Ecuadorian fields and its fertile land that gives rise to the production of high quality coffee.	Initial sales	Mateo Cabrera	CUE
47	CactusLove by JAQE	Sale of custom cacti	Initial sales	Karen Quinteros	CUE
48	Sabag.ec	Ecological handbags based on the collection of plastic covers, a new product called Eco thread is made, to then weave the wallets or other products.	Initial sales	Saily Arana Peñafiel Melany Arana Peñafiel Katherine Fariño Vera	GYE
49	Jennstyle store	Online store of women's clothing and accessories	Initial sales	Jennifer García	GYE

50	Little Gifts	Creating personalized and innovative gifts that meet market expectations.	Initial sales	Brigitte García	GYE
51	Rompiendo Barreras	Digital content on disability and its solutions for the creation of an inclusive, diverse and accessible society	Initial sales	Roberto Zambrano	GYE
52	DOLCE VITA STORE by Kenya	Online store of perfumes, makeup and women's accessories	Initial sales	Kenya Carbo Guerero	GYE
53	Proyecto Akira	Manga sale (Japanese comics)	Initial sales	Doménica Urbina	GYE
54	Cócteles Natasha	It was born in times of pandemic and provides services for parties, engagements and meetings mainly with specialty cocktails	Initial sales	Tatiana Luna Vásquez	GYE
55	Hey.musa.gye	Elaboration of jewelry boxes and incense holders made of clay, hand-painted and personalized.	Initial sales	Katherine Fajardo }	GYE
56	Ligia's Joyas & Resina artesanal	Sale of jewelry, key rings, flower pots, combs, paintings and a number of items made from resin	Initial sales	Diego Loor	GYE
57	Sei divina	Sale of vintage or second-hand clothing, buying this type of sale we support sustainable fashion, reusing and giving it a second chance	Initial sales	Fiorella Licoa	GYE
58	DobleA	Personalized t-shirts, sweaters, printed caps, and many other accessories	Initial sales	Allison León	GYE
59	MAIDA JEWELS	Jewelery for men and women	Initial sales	Danna Reyes	GYE
60	Genios Bot	Entrepreneurship of training services in the area of ICTs (robotics, programming, 3D design) and development of educational kits	Initial sales	Jostin Duarte	GYE
61	Mishi Shop	Personalized advice for a better experience and use of the skin care product: type of product to use according to your skin type, accessible and original makeup.	Initial sales	Michelle Fienco	GYE

62	Poppy_ec	Sale of women's accessories	Initial sales	Nayelli Álava	GYE
63	Food Express	Sweet and salty snacks for all kinds of events, personalized candy boxes, personalized breakfasts, jars, Christmas spheres, accessories, etc.	Initial sales	Ximena Navarro	GYE
64	La Saca	Nuts and spices shop	Initial sales	Jerys Macías	GYE
65	Cardy 3D	Design and 3D printing of custom and collectible figures.	Initial sales	Jordy Toro	GYE
66	Awra	Dehydrated fruit for: snacks, infusions and powdered fruit, without sugar or preservatives with a flavor of adventure and energy.	Initial sales	Andrea Calderón	UIO
67	RUNAI	Company dedicated to the development of functional foods including a vegan probiotic drink and probiotic dairy products necessary for the proper functioning of our body.	Initial sales	Edison Simba Mayra Villegas	UIO
68	Sin Código	Software development agency for clients in the United States with Hispanic-American talent, under the SaaS modality to obtain income under new business verticals.	Initial sales	Jorge Valdez	UIO
69	Vucaflex	Company that provides technological infrastructure and its development, which includes hosting, domains and corporate emails, in addition to facilitating the implementation of web and mobile applications	Initial sales	Cristian Ron	UIO
70	SPA - D' Emperatriz	Integral beauty center for men and women, with the plus of providing post-covid massages	Initial sales	Rosa Pérez	UIO
71	Confecciones Alisa	Dressmaking workshop, specialized in clothing for adults and children	Initial sales	Carmen Pila	UIO
72	Gemma Dream	Cloth shoes with custom designs	Initial sales	Kevin Cañar	UIO

73	Las papas de Gessy	Porciones de papas con un acompañado variado en carnes y ensaladas	Initial sales	Gessica Cuastuza	UIO
74	Mr Chocho	Portions of portable cuttlefish with a variety of dry grains accompanied	Initial sales	Marco Cartagena	UIO
75	Veency	Combine the fruits and species of our country, to provide you with a quality artisan wine. "Unexpected flavors, same pleasure"	Initial sales	Estefanía Abarca Leonardo Silva	UIO
76	I Cann	Manufacture of products derived from hemp or medical cannabis	Initial sales	Alexis Vergara	UIO
77	Crospet	Artisanal dogs treats based on biotechnological ingredients	Initial sales	Emily Silva María José Masapanta	UIO
78	Yeli	Artisanal salt ice cream flavored with mango, passion fruit, currant and tamarind	Initial sales	Emily Silva Caroline Villacís	UIO
79	Salome Nails & Skin Scare	Application of specialized beauty techniques on hands and face to achieve an integral charm	Initial sales	Salomé Ron Pamela Veloz	UIO
80	Vale la chica de los pasteles	Pastry and cookies business	Initial sales	Valeria Vargas	UIO
81	Agro-Bal	Sale of nutritional and veterinary products for small and domestic animals.	Initial sales	Hugo Gómez	UIO
82	LlaverOS	Custom keychains	Prototype	Bryan Ucuango	UIO
83	Okay cosmetics.ec	Sale of beauty products	Sustainable sales	Cristhian Riera Micaela Sigüenza	CUE
84	Las delicias de Cuqui	Sale of fast food, desserts.	Sustainable sales	Pedro Palacios	CUE
85	La vaca griega	Sale of Greek yogurt and alfajores	Sustainable sales	Pablo Sarmiento	CUE
86	Mustard	Sale of shoes, caps and personalized t-shirts	Sustainable sales	Álvaro Quito	CUE
87	Mishki	Sale of handmade chocolate	Sustainable sales	Paola Faringo	CUE

88	Black Cat “Marketing y Comunicación”	Company dedicated to digital marketing, design and communication	Sustainable sales	Sergio Serna	GYE
89	Capacitaciones CPAZ	Training and Consulting Coach services, training and advice in business administration	Sustainable sales	Cristina Carrasco	GYE
90	My Koctel	Preparation of creamy cocktails ready for events/parties	Sustainable sales	Pablo Dillon	GYE
91	New Glass	It is a company with a double impact: in the environmental aspect, it seeks to save energy for the manufacture of glass for glasses, a reduction in glass in garbage dumps and mainly contributes to the reduction of environmental destruction. Socially, it focuses on generating new jobs and improving the lives of recyclers and their families.	Sustainable sales	Rómulo Cedillo	GYE
92	WIESNER SWEET	It was born in 2015 with the fusion of talents by its founders in the business and gastronomy area, it is based on creativity and personalized catering service.	Sustainable sales	Gabriela Wiesner	GYE
93	Estudio Cer	Handmade ceramic pieces	Sustainable sales	Doménica Rivadeneira	GYE
94	Stellar.ec	Sale of handmade accessories	Sustainable sales	Domenika Vega	GYE
95	TGE (Tienda Gaming del Ecuador)	Video game store and technical service for video game consoles.	Sustainable sales	Jairo Jiménez	GYE
96	Cleo Store	Cleo Store is a jewelry and makeup brand	Sustainable sales	Jurayma Cunalema	GYE
97	D’Aji	Chili-based products	Sustainable sales	Diana Gutiérrez	GYE

98	Kattalinmar Jabones Artesanales	Handmade Cosmetics soaps, shampoo made with natural and sustainable ingredients. We take care of the skin with environmental awareness and contributing to the Circular Economy	Sustainable sales	Marcia Cruz	GYE
99	mulamer_ec	Foodtruck: Beer, hot chocolate, alfajores, cakes, cookies, rice with corn with chick in mushroom sauce and mint iced tea	Sustainable sales	Verónica Yépez	GYE
100	INSTEKK	Company dedicated to training in areas of information technology, security certifications and first aid and electronic billing	Sustainable sales	Gianella Muñoz	GYE
101	Artketing Academy	Incubation academy for companies and training for professionals in technical areas. We use virtual reality tools, videos, 3d vision, 2d and 3d animation to make learning processes effective.	Sustainable sales	Jessica Ochoa	UIO
102	Ancestral	Microbrewery born in June 2017 with the goal of offering quality craft beer. They incorporate local elements such as horchata, passion fruit and chocolate into their beers, baptizing each style they make with the name of characters from our Andean culture such as Inti, Supay and Pachamama.	Sustainable sales	Telmo Salazar	UIO
103	Fun And Fast English	English language teaching institute. We provide English tutorials and workshops to the community, emphasizing the comprehensive development of our students in a practical, efficient and accessible way.	Sustainable sales	Isis Patiño	UIO
104	Hackem Cybersecurity	Expert consultants with a very distinguished track record in different fields of science and engineering, providing specialized services in Computer Security, Cybersecurity, Ethical Hacking, Penetration	Sustainable sales	Galoget Latorre	UIO

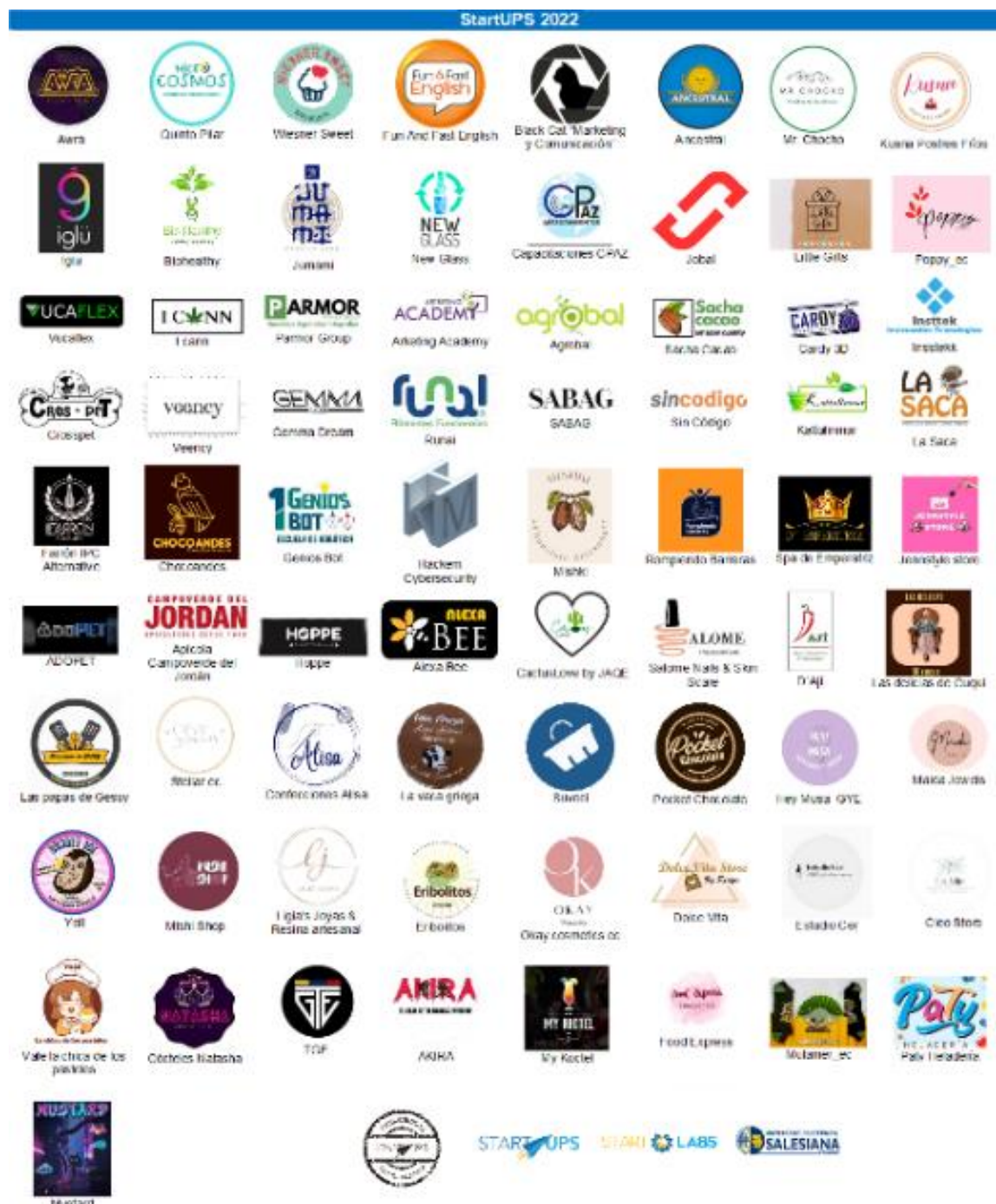
		Testing and Computer Forensics.			
105	Parmor Group	We provide customized end-to-end agricultural solutions through integrated crop management programs and strategies, thus optimizing operating costs, use of agrochemicals, and increasing production by up to 50%.	Sustainable sales	Jonathan Paredes Jhonny Aguilar	UIO
106	Micro Cosmos	Our kit contains tools that allow you to use your cell phone as a microscope, you can take pictures, film videos of your observations and share them on social networks.	Sustainable sales	Roberto Vallejo	UIO
107	Sacha Cacao	We provide advice and technical support to Amazonian cocoa producers, through our lean 80/20 matrix of integrated cocoa management to increase production by up to 60%. Transform it into delicious chocolate bars fused with endemic herbs and fruits.	Sustainable sales	Jonathan Paredes Jhonny Aguilar	UIO
108	Eribolitos	Handmade quimbolitos with personalized flavors	Sustainable sales	Erika Imbaquingo	UIO
109	Alexa bee	Eucalyptus honey products and their derivatives	Sustainable sales	Julia Oña	UIO
110	Pocket Chocolate	We turn your dessert idea into reality	Sustainable sales	Samantha Tituaña	UIO
111	CHOCOANDES	Products derived from cacao, with natural sweeteners and rescuing the cultural history of the country.	Sustainable sales	Nathaly Zumba	UIO

Note. The projects listed on the table are the ones that were developed during 2022 and others that keep working on Coworking and StartLabs, receiving mentoring and participating in events, workshops and other activities. Abbreviation for UPS campus were used: Guayaquil (GYE), Quito (UIO) and Cuenca (CUE). Information was taken from the

Annual Activities Report from the Innovation and Entrepreneurship national department at UPS (SETEI, 2022).

Figure 97

StartUPS with products and services in the market



1.2. Cross-pollination: a few examples of activities within the national ecosystem

UPS, as a higher education institution, is a key actor for both territory dynamization and IEE flourishing. StartUPS is an environment that enhances people's capabilities need to interact

with the outside borders of the university. In chapter 3, the importance of incubating individuals and tribes, intertwining stakeholders and cross pollination was addressed. Therefore, StartUPS organize many different events and activities withing the Salesian Entrepreneur Roadmap with the main goal of strength partnerships with external agents [figure 98], generates new alliances and gives to the community a change to be part of movement.

Figure 98

StartUPS partners



1.2.1. Rumiñahui General Bank “A Day with the academy”

Through an alliance between Rumiñahui General Bank (BGR, Spanish acronym) and UPS, each party innovation department have worked to develop problem/challenge solving activities for the students. The fact that these kinds of spaces are being generated allow us to contribute with innovation and entrepreneurship culture to the students and show them new knowledge, abilities and tools that the current Ecuadorian banking system requires from professional profiles.

BGR challenge - 2021¹¹¹

BGR set up a challenge that was resolved by the computing and business administration students from the UPS in an intense workday, this challenge help them learn about design thinking focus on the solution development. The first-place prize won gift cards of \$75.00,

¹¹¹ See news: <https://www.bgr.com.ec/noticias/bgr-challenge-un-dia-con-la-academia>

second place got \$50.00 gift card for each team member respectively, also there was five slots for the innovation BGR school that were raffle among the first and second places.

- The first place won with the “Invest with Her” solution, a recommendation feature added to the current BGR chatbot that helps military staff (active and retire) about and how to invest their money.
- Second place, “BGR Revolution”, a solution focus to under 20-year-old non banked profiles, aiming to motivate them to become part of the banked population in exchange of benefits of their interest.

Hackathon: Technological Prototyping - BGR 2022¹¹²

Both entrepreneurship and innovation departments worked together to set up a technological prototype hackathon, aiming to create a nexus between academia and actual needs from the Ecuadorian banking system. Students from digital business and business administration and computing careers participated in this 2-day mobile app development hackathon. The first round (day) took place in StartLabs so the participants could work over the functional prototype. Second round (day) took place inside the BGR offices and end with the presentation of the prototype by each team:

- First place: DAM creative, and app targeting kids and teenagers where they can transfer and learn financial education principles while they start saving.
- Second place: Innova Dreams, a project called AtiBakn, propose to guide, educate, promote and gather kids/teens, families and the BGR through a digital app.

1.2.2. Latin American Innovation Rally

This is a 28 hour straight international competition aiming to empower open innovation among Latin-American university students. Teams must solve challenge and present: (i) The challenge solution via 2-minute max video upload to the YouTube channel with the written report. (ii) A ludic international interaction of the solution, where this interaction shows how it works with the participation of other team from other country or culture. In a brief summary each team have to handle in the pdf with the written report, the video of the presentation and a tik-Tok link with the international interaction.

The challenges are being settled up by public, private, international or social society institutions. The objective is that the team works about nowadays real problems in the

¹¹² See news: <https://www.bgr.com.ec/noticias/hackathon-bgr-un-dia-con-la-academia-en-la-salesiana>

region. For the last 2 consecutive years UPS participates as a country coordinator in Ecuador.

2021 Edition

On the 2021 Edition of the rally 12 Latin-American countries participated, Ecuador held 117 personas, 79 of them where UPS [in university campuses and virtually] among 4 different venues and 26 challenge solution proposals were sent. 2 teams from de UPS advanced to the regional kick-off round:

- In the innovation category IEE (name of the team) team from Cuenca present Mórinx11, a water potabilization product, focus on long term rainwater project focus on easy collect, accessibility and mechanism. This product adapted to the many deficiencies, infrastructures, territorial, economic activities and community demands of people who don't have access to potable water or relays over agriculture for their life.
- In the social impact category, ICTE UPS from Quito, presented FIBER-BLOCK12, an extrusion machine for plastic filaments, which could be used to develop fishing nets y with the residual construction blocks.

2022 Edition

On the 2022 Edition of the rally 13 Latin-American countries participated, Ecuador held 168 persons meaning 21 teams, 126 of them where from the UPS among 5 different venues and 26 challenge solution proposals were sent. 2 teams got the main places from the regional kick-off round:

- In the Social Impact category, GIGA13 proposal from team EEE UPSCUE-1, the team proposed a device that prevent mud avalanches. These natural events are typical in the region and have caused big problems and disasters among vulnerable communities. The device was a self-sustainable, trustworthy, easy to handle and low-cost device with GPS and lifetime tracker.
- Over the Innovation category, the team from Quito UPS campus was ranked 4th in the regional kick off with the BIMAE14 proposal, a bamboo diffusor that helps save life from snake bites minimizing environmental harm.

1.2.3. World Robot Olimpiad – WRO Ecuador

Center Campus and StartUPS organized a qualifier competition to the “World Robot Olympiad”- WRO. A robotic competition for kids and teenagers were the participants have the chance to live and international experience. The 2022 edition defined that year world

theme was “My robot my friend”. Ecuador held 2 categories for the competition: Future innovators and Robomission, 5 institutions participate with a total of 45 people and 10 coaches: “Centro Campus Academy”, “Unidad Educativa Thomas More”, “Unidad Educativa Bilingüe”, “La Moderna”, “Unidad Educativa Particular Bilingüe Liceo Panamericano (Sambo)” y la “UPS Guayaquil Campus”. In this edition ATOM team from UPS was the national winner and traveled to Germany to participate in the World Robot Olimpiad.

StartUPS-project: Functionings to function

The “Navigation Chart” of the UPS contains the Strategic planning from 2019-2023 and sets functionings [figure 99] that have been developed by a significant group of professors from the UPS over the mentor project frame¹⁵. Some of the functionings are transversal, they can be enhanced in three areas and involve inside of them other needs to develop. In this way the University-Ecosystem managed as a common resource, gives many environments that rewrite the Don Bosco speech and allow the students and other members of the university community develop and enhance their capabilities and develop their life project.

Figure 99

UPS functionings set

Personal	Ecosystemic	Intra- entrepreneurship
<ul style="list-style-type: none"> • Critical reasoning • Communication • Conflict resolution • self-directed learning • Research • Identity • Resilience • Inclusion • Creativity • Innovation • Ethical commitment 	<ul style="list-style-type: none"> • Conflict resolution • Self-organization • Critical reasoning • Project desing and management • Leadership • Identity 	<ul style="list-style-type: none"> • Entrepreneural spirit • Project design and management • Leadership • Communication • Conflict resolution • Identity

Note. Reprinted from “Plan Estratégico Institucional-Carta de navegación 2019-2023” by UPS - Carta de Navegación, (2019), p. 19. Editorial Don Bosco.

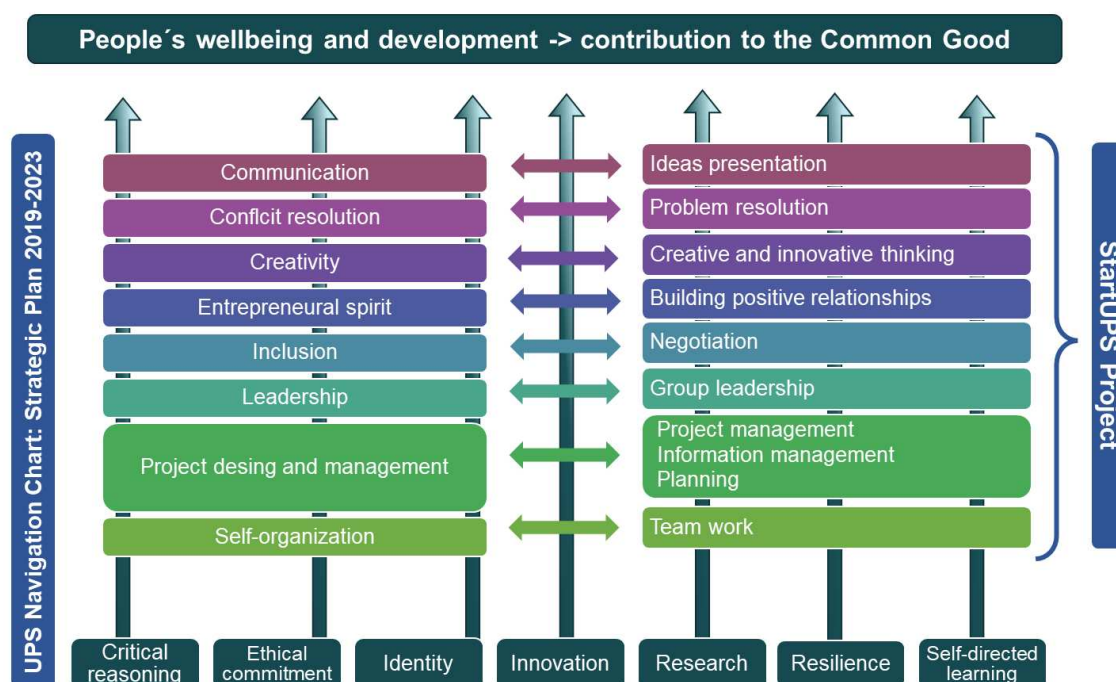
UPS focuses on the person, with identity among their peers, gives a quality service so people can be capable of being responsible autonomous. Because of this, the environments are essential to reach the educational project, StartUPS is one of those many environments. This is why the activities and events of StartUPS promote other spaces where each student can strength their capabilities in the cognitive, conduction, affective and attitudinal scope; also, these spaces let the students participate in a sustainable cycle through the experience learning (Salgado et al., 2017). Learning while doing lets the students put into practice technical knowledge previously received in their undergraduate education and at the same time gives them the creativity and common sense to develop themselves (De los Ríos et al., 2010).

The concept of functioning in the capability approach highlights the importance of understanding what individuals can do and what they are able to be, and how policies and institutions can enhance those opportunities. This is the reason why UPS, as a higher education institution, through StartUPS project promotes a dynamic and flexible environment where, based on the capability approach, people can enhance their capabilities and contribute to people's functionings.

As mentioned above, functionings described in UPS Navigation Chart [see figure 00] have been studied and selected by a work group of professors at UPS, GIUB research group, also from Rome and Salento universities, and are closely related to the functionings evaluated in different activities held by StartUPS. [figure 100]. The same group of professors have selected ten functionings for the StartUPS project as it aims to promote entrepreneurship and innovation. Each of this functionings have related actions [74 in total] that contribute to understanding and evaluating participants [table 31].

Figure 100

UPS and StartUPS functioning



Note. Functionings at the bottom of the figure are transversal and exercised when participants at StartUPS perform different actions throughout the activities/events/programs. All of them, contribute to people's well-being and development, therefore each individual contributes to the Common Good, being capable of facing life challenges with an open mind and different way of relating to each other, more cooperative and collaborative.

Table 31

Functionings in StartUPS

Functioning	Actions	Level
Building positive relationships	Keeps an open attitude and treats others fairly and respectfully.	4
	Defends the trust and dignity of people, showing respect for their opinions.	4
Builds constructive working relationships characterized by a high level of	Seeks and considers the ideas of those who find it difficult to express their point of view.	4
	Anticipate and acknowledge the concerns of others, even if they are not expressed openly.	3

acceptance, cooperation, and mutual respect.	Is always open to listen, discuss, negotiate, encourage and motivate others.	3
	Tries to resolve conflicts and disagreements constructively.	2
	Supports and accept the good ideas of others, even if they have a different point of view.	2
	Focuses on the situation, problems, or behavior, rather than judging people.	1
	Recognizes the good ideas of others, even if they are different from his/her own.	1
Information management	Knows where and how to access the right data for a particular use.	4
Identifies, collects and organizes data for analysis and decision making.	Examines irrelevant and vague information while maintaining high-quality data.	4
	Questions the limits, quality and accuracy of the data, searching for details and confirming suspicious data.	3
	Document clearly the sources and organizes information according to research needs.	3
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	2
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	2
	Find trends and relationships between emerging facts.	1
Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	4
Coordinates ideas and resources in order to achieve goals.	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	4
	Develop reasonable performance standards and ways to assess results quality.	3
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	3

	Ensures that resources and skills among staff are available.	2
	Evaluates the progress and success in comparison with performance standards.	2
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1
Group leadership	Creates a positive environment in which all people are motivated to do their best.	4
Promotes the organization's mission and objectives, directing it toward ways to achieve them.	Conveys confidence in a group's ability to face challenges and achieve goals.	4
	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	4
	Sees potential in others and seize opportunities to apply and develop this potential.	3
	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1
Negotiation	Valora los intereses de los demás a través de la escucha activa y propone soluciones de ganar-ganar	4
Solve difficult or complicated challenges.	Obtiene la confianza de otros quienes reconocen la honestidad, el respeto y la sensibilidad a sus necesidades.	4
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	3
	Actúa (modula) de manera adecuada y coherente con la situación, es amable y asertivo.	3
	Busca sugerencias e ideas de otros.	2
	Es abierto a muchos enfoques para abordar las necesidades o resolver problemas	2
	Discute y argumenta aportando hechos y una sólida base de conocimientos.	1
	Looks past problems from a new perspective and apply new approaches to solve them.	4

Creative and innovative thinking Develops innovative ideas that provide solutions to the challenges that arise in educational and work contexts.	During brainstorming sessions, provides original contributions and with high perspective.	4
	Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	4
	Generates unique but viable and useful solutions to complex problems.	4
	Takes advantage of opportunities to solve problems creatively without creating new problems and proposing possible solutions.	3
	Present ideas/solutions that not only solve the immediate problem, but broader ideas/solutions.	3
	Finds ways to turn ideal ideas or solutions into reality.	3
	Experiments with new ideas, methodologies and procedures with interest.	2
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2
	Discusses and outlines the consequences of problems and decisions.	1
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.
Coordinates and implements ideas and resources to achieve goals	Is able to predict the impacts and risks of decisions and actions.	4
	Creates realistic project plans and follows through (accomplishes)	3
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	3
	Prepare strategies to face problems or drastic changes.	2
	Evaluates proposed actions and timelines against the organization's mission and values.	2
Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1	

Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	4
	Uses appropriate vocabulary and grammar in accordance with the situation.	4
	Conveys ideas and facts orally using appropriate language so the audience understands	3
	Provides time for the listener to process the information and ask questions.	3
	Reads body language of others and adjust the tone and style accordingly.	3
	Uses simple language to explain complex or technical concepts.	2
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2
Problem resolution	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1
	Analyzes problems and identify all facets, including hidden or difficult aspects.	4
	Contextualizes and analyzes problems before solving them.	4
	Solves difficult or complicated challenges	3
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	3
	Seeks all possible sources of answers and think "outside the box" to find solutions.	3
	Uses the good ideas of others to help develop solutions.	2
Teamwork	Checks the proposed solutions and possible effects before proceeding with the selection.	2
	Looks beyond appearances and don't stop at the first answers.	1
	Recognizes and supports the work and results of teammates.	4
	Helps teammates who ask for support, assistance or need something.	4
	Promotes cooperation and commitment within a team	3
	Encourages team to stick together.	3

to achieve goals and results.	Shares information, skills and resources with the team.	3
	Works together with the team to solve problems.	2
	Recognizes and celebrate the achievement of teammates.	2
	Praises the team's success.	1

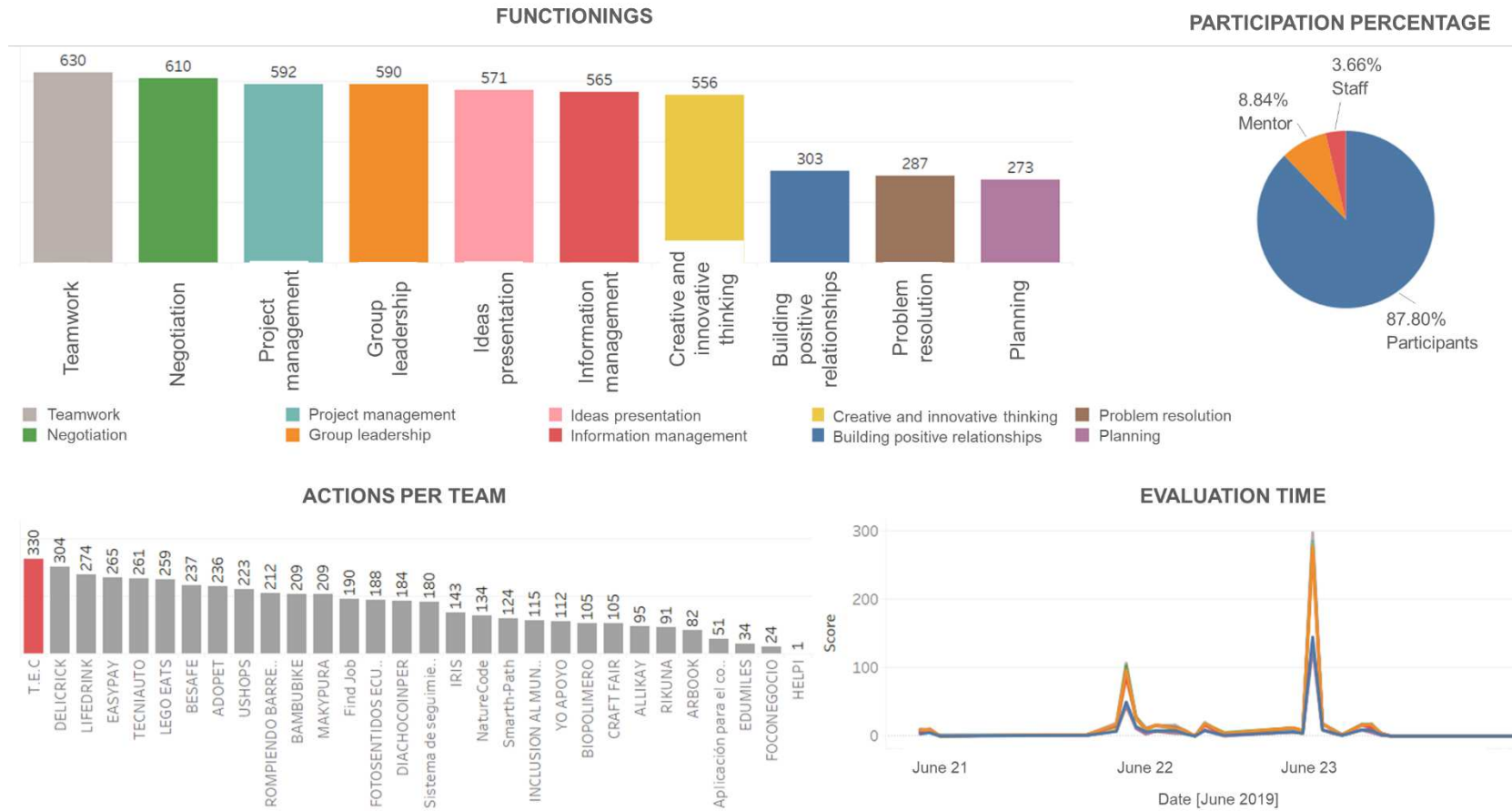
Note. Level 4 is Expert, level 3 Professional, level 2 Intermediate and level 1 Beginner.

A pilot was applied in 2019 during reTHOS¹¹³, an entrepreneurship validation Bootcamp where 30 teams took part, with a total of 88 participants respectively. To carry out the trifocal assessment the following roles are identified: participants; mentors, who support and advise teams; and staff, UPS members who organize the event. The dashboard [figure 101] shows the total of actions evaluated per each functionings, how many actions each group evaluated, percentage of actors with their role during the event, and the number of evaluations during the event.

¹¹³ For more information on the pilote see “An Ecosystem Called University”, by Salgado-Guerrero, J. P., 2021, p. 459-465, Abya-Yala. <http://dspace.ups.edu.ec/handle/123456789/20170>.

Figure 101

rETHOS Bootcamp 2019 Dashboard



Note. Source Creaminka

In the following section, it will be explained deeply functionings assessment in StartUPS project, carried out for the present doctoral thesis, contrasting qualitative and quantitative data to address the research hypothesis.

StartUPS-project: a journey to personal development.

For matters of the present research, measuring competencies refers to the process of evaluating an individual's knowledge, skills, and abilities in a particular domain. To measure the functionings prior each activity/workshop a group of experts gather together to analyze the agenda and content of each activity. In this way, you can identify and compare the actions that all participants will be part of with the actions that belong to each functioning and establish the key moments to run a specific evaluation. After the beginning of the workday, establishing the website set up to gather and run evaluations is a must.

Once the event is taking place every evaluation is available to be taken according to the schedule established by the group of experts. Once we have each evaluation completed, information is systematically gathered and Creaminka generates the dashboard with the results. Finally, the participant network is generated so we can register and communicate the results [figure 102].

Figure 102

Assessment process



It has been applied a triadic assessment¹⁷ [equation 1] process which involves: (i) self-assessment if the assessed person and evaluator are the same person; (ii) peer-assessment if the assessed person and evaluator have the same role in the event; and (iii) and performance-assessment¹¹⁴¹⁸ if the assessed person and the evaluator have different

¹¹⁴ In Spanish, the term commonly use is hetero-evaluation, which in the field of performance evaluation, refers to the evaluation process carried out by a person other than the person evaluated, usually their boss or an expert in the field. In education field usually is the teacher, mentor, tutor (Dominguez, 2012). Is a very broad term that can also include your colleagues, for this reason for this research is used performance assessment as a more accurate term according to the algorithm definition “the assessed person and the evaluator have different roles in the event” [Creaminka].

roles in the event. Therefore, according to the role the person has during the event will carry out the self, peer or performance assessment [table 32].

Equation 1

Triadic Assesment Formula

$$w_1 * \sum_h^H performance - assessment_h + w_2 * \sum_p^P peer - assessment_h + w_3 * \sum_s^S self - assessment_h$$

Table 32

Triadic evaluation roles

Assessment	Description	Role	Weight
Performance	Involves getting feedback from a mentor or program/event administrator who has direct oversight of the individual's work.	Mentors Program/event administrators	0.55
Peer	Involves getting feedback from colleagues or peers who have observed the individual's work.	Mentors Group members	0.30
Self	Involves individuals reflecting on their own skills and experiences to determine their level of competency.	Participant Student Entrepreneur Mentor	0.15

For example, when measuring competences for participants, they carry out their self-assessment; their group members or colleagues the peer-assessment; and performance-assessment is carried out by mentors, who had individual or group -mentoring- sessions during the event. For the case of mentors, they carry out their self-assessment, their mentors' colleagues the peer-assessment, and performance-assessment by participants together with program/event administrators. As a result, actions within a functioning can be validated, semi- validated or single validation [table 33]

Table 33

Actions and functionings validation

Actions assessment	Description	Result
Validated	The assessed person has the three assessments performance, peer and self.	3/3
Semi-validated	The assessed person has only two out of the three assessments: e.g., self and peer, peer and performance, or self and performance assessments	2/3
Single Validation	The assessed person has only one out of the three assessments: e.g., self, peer, or performance assessment.	1/3

The following chapter will address the evaluation of actions and functionings carried out in the incubation program and in an ideation bootcamp. Together with the interviews results.

CHAPTER 5: RESULTS

The previous chapter described what this environment of entrepreneurship and innovation is like at UPS, which has been called StartUPS. It makes visible its beginnings, development and evolution over time, as well as the new challenges to continue providing a dynamic, flexible space of opportunities for the participants. It started with coworking spaces where events, workshops and bootcamps take place; later the service was extended with StartLabs, prototyping and digital manufacturing laboratories so that they can develop their MVP. Currently, it is sought that the incubation program can connect with sources of financing, seed capital and/or angel investors.

Below are the results of the evaluation process of functionings that was carried out in the reTHOS incubation program and in the reCREATE Bootcamp, as well as the results of the interviews carried out with participants, mentors and university authorities. The objective was to contrast the quantitative data with the qualitative one and understand how the environment contributes to the empowerment of the participants' capacities, giving them tools, access to opportunities and a community with which to grow and learn.

reTHOS 4.0 Incubation Program

In 2020 a project to enhance reTHOS and make it an incubation program capable of sticking longer and specialized for each entrepreneur. Aiming to all of them and their projects could develop, go to the market, be sustainable over time and self-sufficient. The core object was to make the students entrepreneurs' projects become more innovative, dynamic, scalable, and social aware.

The incubation process takes a 16-week duration, over this time, the entrepreneur is offered constant technical, financial, economic and market mentorship but also while working over his/her personal skills aiming to help them being more connected to their city and country ecosystem. Prior these 16 weeks there is an open invitation to receive and select projects that are in advanced stages and could be part of the incubation process. The selected teams have access to perks¹⁹ that contribute with the development of the project depending on the topics that are being covered over each module. Finally at the end of those 16 weeks a business shower is held up so the entrepreneurs could promote, sell, and

interact with customers having under their toolbox all the feedback and learning from the program.

Over the 2021¹¹⁵ edition, launched on January 9, 32 projects were received and 13 were selected [table 34] out of those, 10 acceded the perks¹¹⁶ [figure 103] offered in the program: legal mentorship, marketing, branding, packaging, media publicity, hosting, digital presence and domain. Initially there were 10 slots available for the program, but while interviewing and selecting projects 3 more projects were accepted because they were considered to be suitable for incubation¹¹⁷.

Table 34

Participating Teams – reTHOS 4.0

Project Name	Team members	Description
AF2 Labs	Renzo Fernández Chacón Erick Fuentes Merchán Xiomara Alcívar	Additive, subtractive manufacturing and mechanical design services solving the client's need. Website: https://a2flabs.com
JOBAL	Adonis Beltrán Adriel Beltrán Estrada Juan Andrade Torres Santiago García	Mobile app that allows to offer various professional services. Website: https://jobal.app
Takyt Ecuador	Josué Valencia John Landázuri Evelyn González	Takyt is a Legaltech, that is, it is a legal technological innovation company that through its website provides a multifunctional legal service. Website: https://takytecuador.com

¹¹⁵ See event website, information, agenda, mentors, participants, projects and network. <https://coworking.ups.edu.ec/event/v8w78RtZkl4vKlla9GFs>

¹¹⁶ Term used in IEE that refers to the benefits that a person can access at work, institution, or in this case, by being part of the reTHOS incubation program. Benefits are not necessarily monetary, seed capital or a grant.

¹¹⁷ The three projects participated in the education and training process without access to the perks since the program had an approved budget for ten projects.

Giftyway	Bryam Argüello Christian Bermeo Marco Salinas	Is an online directory where businesses can publish their giveaways and promotions, so they can gain exposure and customers. Website: https://giftyway.net
Awra	Madison Herrera Viviana Toapanta Andrea Calderón	Dehydrated fruit for: snacks, infusions and powdered fruit, without sugar or preservatives with a flavor of adventure and energy. Website: https://awrafoods.com
Runai Alimentos Funcionales	Edison Simba Mayra Villegas	Company dedicated to the development of functional foods including a vegan probiotic drink and probiotic dairy products necessary for the proper functioning of our body. Website: https://runaialimentos.com
Farron Icp Alternativa	Ivonne Pineda Erika Naula Iván Pineda	Native Ecuadorian mixed alcoholic beverages aimed at young people from 18 to 35 years old Website: https://farronec.com/inicio
Kisar	Luis Bravo Gustavo Colcha	Handmade ecological bags made from tree sap with unique and original designs that seek to encourage people to have a sustainable life in harmony with the environment.
Cordero Del Buen Pastor	Giancarlo Alvarado Mateo Pizarro Washington Hernández	Breeding of lambs for meat purposes, marketing of special cuts and animals on the breeding ground.
Mifan: cerveza de arroz	Anabel Crespo Michelle Carpio Yanela Toledo Xavier García	Company that produces rice beer, using flavors typical of our land.
EcoDrim	Saily Yamiled Arana Peñafiel Katherine Fariño Vera Melany Arana Peñafiel	Ecological Wallets based on the collection of plastic covers, a new product called Eco thread is made, to then weave the wallets or other products.

Apícola	Jaime Jordán	Measurement of the weight of hive production in order to reduce the cost of transfers from the beekeeper to the apiary, thus increasing productivity and having more profits for the beekeeper.
Campoverde	Marcela Campoverde	
	Luciano Cabrera Villa	
	Víctor Polo Cervantes	Website: https://campoverdedeljordan.com

Figure 103

Incubation Program Perks



Once the participants had started the incubation program, the functionings assessment process showed earlier in Figure 102 was implemented:

- (i) Expert Panel: figure 105 shows the actions selected based on the activities and content of the modules during the incubation program, including the integration activity at the beginning, and the business shower at the end of the program.
- (ii) Event website setup: participants had access to the content and assessment on the website. Administrator role was in charge of setting up the assessment process [figure 106].

- (iii) Enable the assessment: all the participants and actors involve in the program took the assessment according to the schedule. Each mentor was in charge of monitoring the groups and motivating participants to complete this task.
- (iv) Information systematization: when the program finished, all the information was collected, reviewed, and documented. All participants' assessment information was organized into two groups, the first one distributed by teams and team members; and the second one by mentors. Figure 107 shows an example of one team, and results of its members, highlighting the action that was validated and to which functioning belongs. To see all the results, go to appendix 1.
- (v) Event dashboard generation: Shows the main KPI according to the evolution of the evaluation over those 4 months of the program. The dashboard allows us to have an accurate tracking of the evaluators, the assessed participant, actions total, actions distributed by person, team or functioning, date of register, everything needed to keep an adequate track of the program and goals [figure 108]. To see all the results, go to appendix 0.
- (vi) Participant network: All the information from the whole program duration is collected and Creaminka develops an interaction network of the participants. Colors are assigned to each member of the participating teams and a single color identifies all mentors [figure 109].
- (vii) Final report & feedback process: results were registered in the report and participants were able to provide feedback from the experience [figure 110]. An online form was completed by participants to receive feedback from the program. Twelve out of the thirteen projects completed the Incubation Program, of which 67% if the increased their sales. Overall, 98% recommended the incubation program; achievements included idea validation, MVP upgrade and business model; while the main suggestion was to have more material and modules focused on services not only products. Finally, virtual badges were delivered to the participants, mentors, jury and teams. This activity wants to acknowledge the effort, commitment and constant dedication over the 16 weeks, also aims to give a sense of community and belonging to StartUPS.

Chapter 5: Results

Figure 104

reTHOS Expert panel – functionalities selection

	Integration teams and mentors	Module I			Module II					Module III			Module IV		Module V	Module VI	Business shower	TOTAL ACTION COUNT
		Collaborative remote work (KPI's and OKR's)	Organization & customer service	Agile design	Media content	Social networks	Brand presentation	Commercial decks and landing pages	Subscriptions and metrics	Product development (MVP)	Business model	Validation, survey and concierge	Pitch validation	Mentoring and interactions	Sales and Marketing Tools	Investment and Legalization		
Building positive relationships	Keeps an open attitude and treats others fairly and respectfully.								x							x		2
	Defends the trust and dignity of people, showing respect for their opinions.									x			x			x		3
	Seeks and considers the ideas of those who find it difficult to express their point of view.																x	1
	Is always open to listen, discuss, negotiate, encourage and motivate others.			x														1
	Supports and accept the good ideas of others, even if they have a different point of view.	x																1
Information management	Knows where and how to access the right data for a particular use.								x	x								2
	Examines irrelevant and vague information while maintaining high-quality data.							x	x		x							3
	Document clearly the sources and organizes information according to research needs.			x														1
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	x			x	x												3
	Identifies new lines of search or new data that lead to more complete or successful conclusions.						x											1
Find trends and relationships between emerging facts.			x														1	
Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.									x								1
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.													x				1
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.							x										1
	Ensures that resources and skills among staff are available.					x												1
	Evaluates the progress and success in comparison with performance standards.		x															1
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.		x															1

		Module I			Module II					Module III			Module IV		Module V	Module VI	Business shower	TOTAL ACTION COUNT	
	Integration teams and mentors	Collaborative remote work (KPTs and OKR's)	Organization & customer service	Agile design	Media content	Social networks	Brand presentation	Commercial decks and landing pages	Subscriptions and metrics	Product development (MVP)	Business model	Validation, survey and concierge	Pitch validation	Mentoring and interactions	Sales and Marketing Tools	Investment and Legalization			
Group leadership	Creates a positive environment in which all people are motivated to do their best.								x										1
	Conveys confidence in a group's ability to face challenges and achieve goals.													x				x	2
	Links the mission, vision, values, objectives and strategies to the daily work in the organization.									x									1
	Sees potential in others and seize opportunities to apply and develop this potential.												x						1
	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.		x				x												2
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.		x																1
Negotiation	Values the interests of others through active listening and proposes win-win solutions									x				x	x	x			4
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.										x			x				x	3
	Presents own interests and ideas in a way that helps others understand and solve problems.												x						1
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.			x															1
	Seek suggestions and ideas from others.								x										1
Creative and innovative thinking	Looks past problems from a new perspective and apply new approaches to solve them.													x					1
	Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.								x									x	2
	Generates unique but viable and useful solutions to complex problems.									x									1
	Finds ways to turn ideal ideas or solutions into reality.																		1
	Experiments with new ideas, methodologies and procedures with interest.					x													1
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.				x	x													2

Chapter 5: Results

	Integration teams and mentors	Module I			Module II					Module III			Module IV		Module V	Module VI	Business shower	TOTAL ACTION COUNT
		Collaborative remote work (KPI's and OKR's)	Organization & customer service	Agile design	Media content	Social networks	Brand presentation	Commercial decks and landing pages	Subscriptions and metrics	Product development (MVP)	Business model	Validation, survey and concierge	Pitch validation	Mentoring and interactions	Sales and Marketing Tools	Investment and Legalization		
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.												x	x		x	3	
	Is able to predict the impacts and risks of decisions and actions.								x								1	
	Creates realistic project plans and follows through (accomplishes)						x										1	
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.									x		x					2	
	Evaluates proposed actions and timelines against the organization's mission and values.		x	x													2	
Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.						x	x				x	x	x	x	x	7	
	Uses appropriate vocabulary and grammar in accordance with the situation.										x					x	2	
	Uses simple language to explain complex or technical concepts.	x		x	x												3	
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	x		x	x												3	
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.			x	x												2	
Problem resolution	Analyzes problems and identify all facets, including hidden or difficult aspects.										x		x	x			3	
	Contextualizes and analyzes problems before solving them.												x				1	
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.									x	x						2	
Teamwork	Recognizes and supports the work and results of teammates.								x	x			x			x	4	
	Helps teammates who ask for support, assistance or need something.								x				x			x	3	
	Encourages team to stick together.										x		x		x		3	
	Shares information, skills and resources with the team.	x				x	x				x				x		5	
	Works together with the team to solve problems.		x														1	

Figure 105

reTHOS website setup

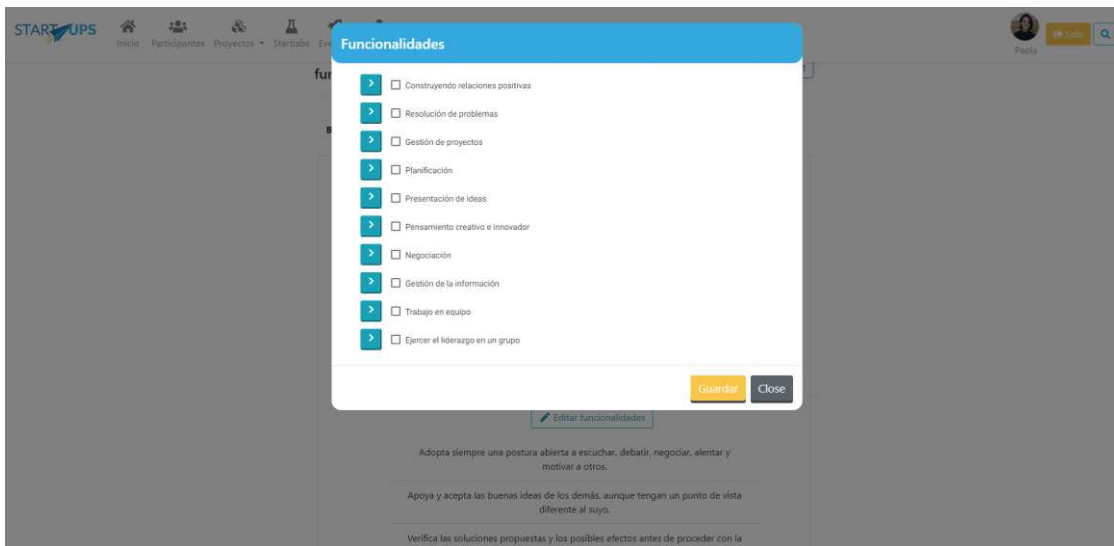
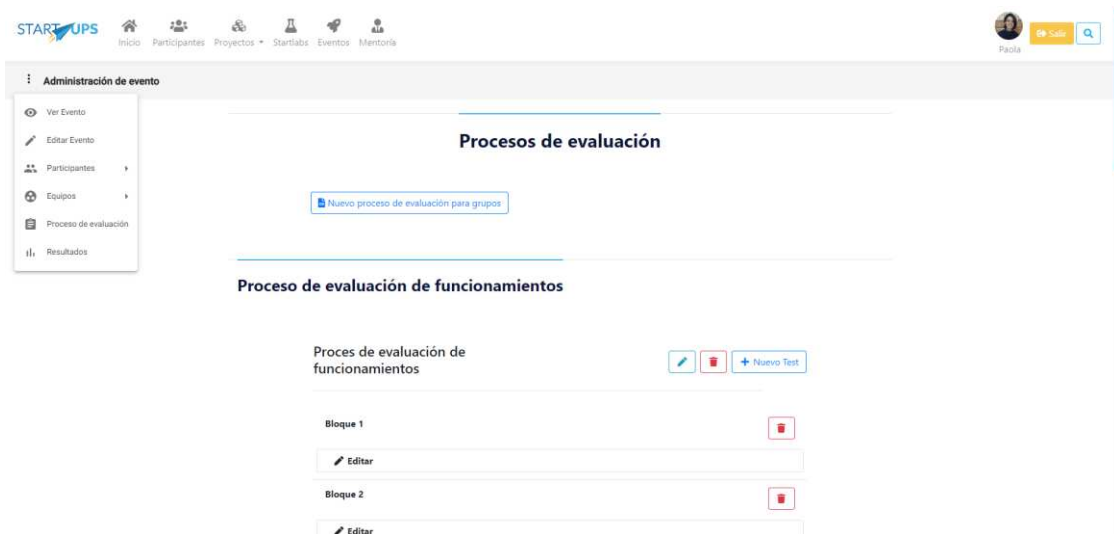


Figure 106

Information systematization example

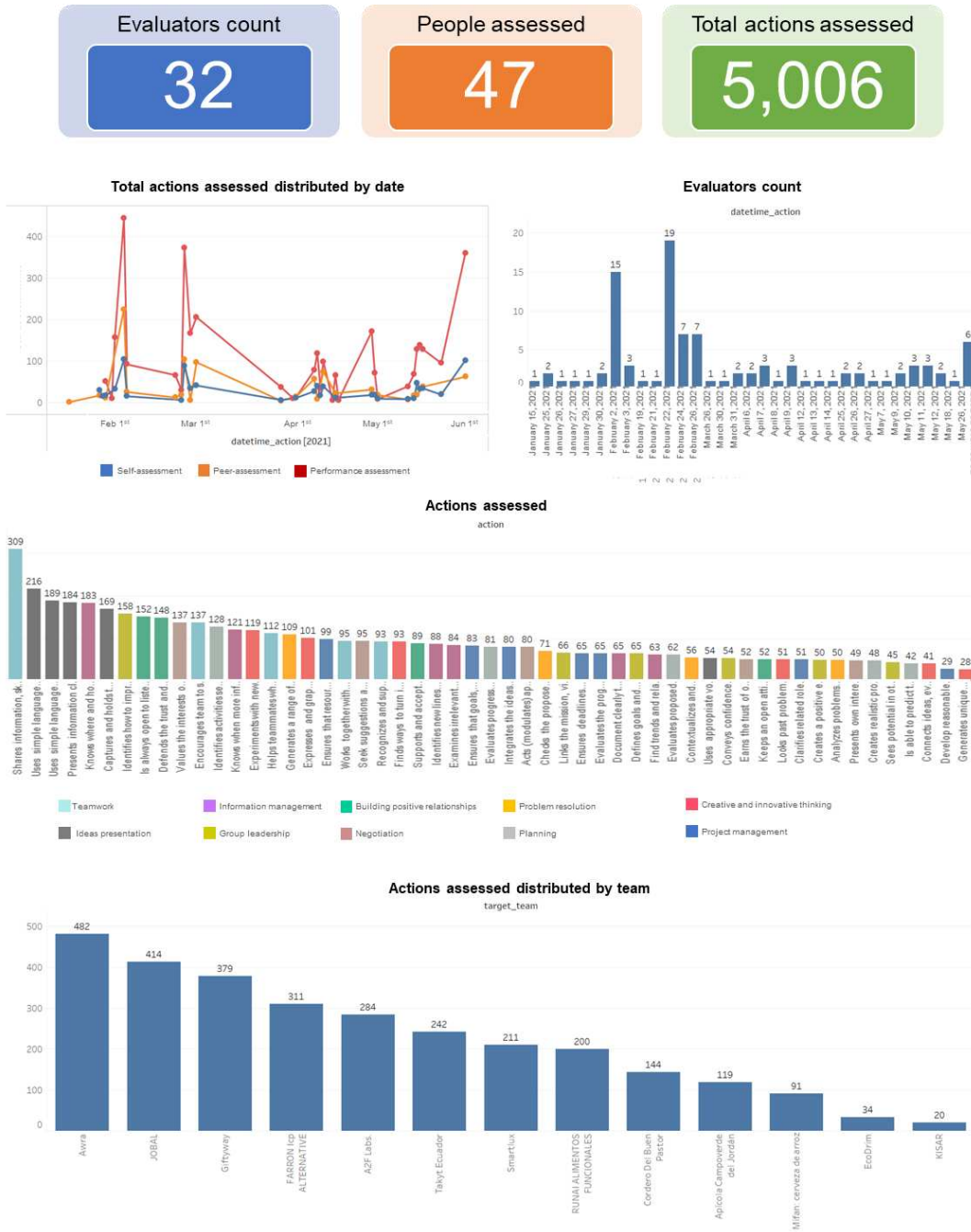
Team	Full Name	Functioning	Action	Formu	Result
Taky Ecuador	John Kener Landázuri Cuero	Building positive relationships	Supports and accept the good ideas of others, even if t	0.3	Single Validation
			Is always open to listen, discuss, negotiate, encourage	0.3	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical c	0.3	Single Validation
			Presents information clearly, concisely and logically, fo	0.3	Single Validation
		Information management	Knows where and how to access the right data for a pa	0.3	Single Validation
			Find trends and relationships between emerging facts.	0.3	Single Validation
			Knows when more information is needed and when end	0.55	Single Validation
			Document clearly the sources and organizes informati	0.3	Single Validation
		Negotiation	Acts (modulates) appropriately and coherently with the	0.3	Single Validation
		Planning	Evaluates proposed actions and timelines against the c	0.3	Single Validation
Problem resolution	Checks the proposed solutions and possible effects be	0.3	Single Validation		
Project management	Ensures that resources and skills among staff are avail	0.3	Single Validation		
Taky Ecuador	Josué Jesús Valencia González	Building positive relationships	Shares information, skills and resources with the team.	0.3	Single Validation
			Defends the trust and dignity of people, showing respe	3.6	Semi-validated
		Creative and innovative thinking	Keeps an open attitude and treats others fairly and resp	0.45	Semi-validated
			Is always open to listen, discuss, negotiate, encourage	3.05	Semi-validated
			Supports and accept the good ideas of others, even if t	1.25	Semi-validated
			Expresses and graphically represents potential proble	0.7	Semi-validated
		Group leadership	Generates unique but viable and useful solutions to cor	1	Validated
			Connects ideas, events, circumstances that are appar	0.45	Semi-validated
			Looks past problems from a new perspective and apply	0.7	Semi-validated
			Experiments with new ideas, methodologies and proce	0.7	Semi-validated
Finds ways to turn ideal ideas or solutions into reality.	1.25		Semi-validated		
Links the mission, vision, values, objectives and strateg	2.35		Semi-validated		
Ideas presentation	Creates a positive environment in which all people are	0.45	Semi-validated		
	Identifies how to improve activities and results, trying a	2.5	Semi-validated		
	Conveys confidence in a group's ability to face challeng	1.25	Semi-validated		
	Defines goals and expectations of the group in a clear.	1.25	Semi-validated		
Information management	Sees potential in others and seize opportunities to appl	0.7	Semi-validated		
	Presents information clearly, concisely and logically, fo	2.4	Validated		
	Captures and holds the attention of others, using langu	2.5	Semi-validated		
	Vary the content, style, and form to suit the topic, purpo	1.95	Semi-validated		
Negotiation	Uses simple language to explain complex or technical c	3.6	Semi-validated		
	Uses appropriate vocabulary and grammar in accordar	0.7	Semi-validated		
	Knows where and how to access the right data for a pa	4.05	Validated		
	Examines irrelevant and vague information while maint	1.15	Validated		
Planning	Identifies new lines of search or new data that lead to n	1.25	Semi-validated		
	Document clearly the sources and organizes informati	1.8	Semi-validated		
	Find trends and relationships between emerging facts.	1.8	Semi-validated		
	Knows when more information is needed and when end	0.7	Semi-validated		
Problem resolution	Seek suggestions and ideas from others.	0.7	Semi-validated		
	Acts (modulates) appropriately and coherently with the	2.35	Semi-validated		
	Values the interests of others through active listening a	3.05	Semi-validated		
	Presenta sus propios intereses e ideas de una manera	1.25	Semi-validated		
Project management	Earns the trust of others who recognize honesty, respe	1.25	Semi-validated		
	Evaluates progress in relation to program goal, adaptin	2.25	Validated		
	Identifies activities sequence and resources needed to	2.5	Semi-validated		
	Creates realistic project plans and follows through (acc	0.45	Semi-validated		
Teamwork	Is able to predict the impacts and risks of decisions and	0.45	Semi-validated		
	Evaluates proposed actions and timelines against the c	1.25	Semi-validated		
	Generates a range of solutions and identifies actions w	2.8	Validated		
	Checks the proposed solutions and possible effects be	1.25	Semi-validated		
Teamwork	Contextualizes and analyzes problems before solving t	1.25	Semi-validated		
	Analyzes problems and identify all facets, including hid	1.25	Semi-validated		
	Develop reasonable performance standards and ways	1	Validated		
	Integrates the ideas and needs of others in developing	1.45	Validated		
Teamwork	Clarifies related roles and responsibilities, final results.	1.25	Semi-validated		
	Ensures deadlines are met and keeps stakeholders inf	1.8	Semi-validated		
	Ensures that resources and skills among staff are avail	1.25	Semi-validated		
	Ensures that goals, scope and criteria for the success	2.35	Semi-validated		
Teamwork	Evaluates the progress and success in comparison wi	1.25	Semi-validated		
	Reconoce y apoya el trabajo y los resultados de los co	1.45	Validated		
	Helps teammates who ask for support, assistance or n	1.7	Validated		
	Encourages team to stick together.	3.6	Semi-validated		
Teamwork	Shares information, skills and resources with the team.	6.65	Semi-validated		
	Works together with the team to solve problems.	1.8	Semi-validated		

Note. Validation means that the participant obtained the self, peer and performance assessment. The column "formula" is the result of the formula that includes the number of

times that the action was assessed during the whole event, as shown in expert panel, Figure 102.

Figure 107

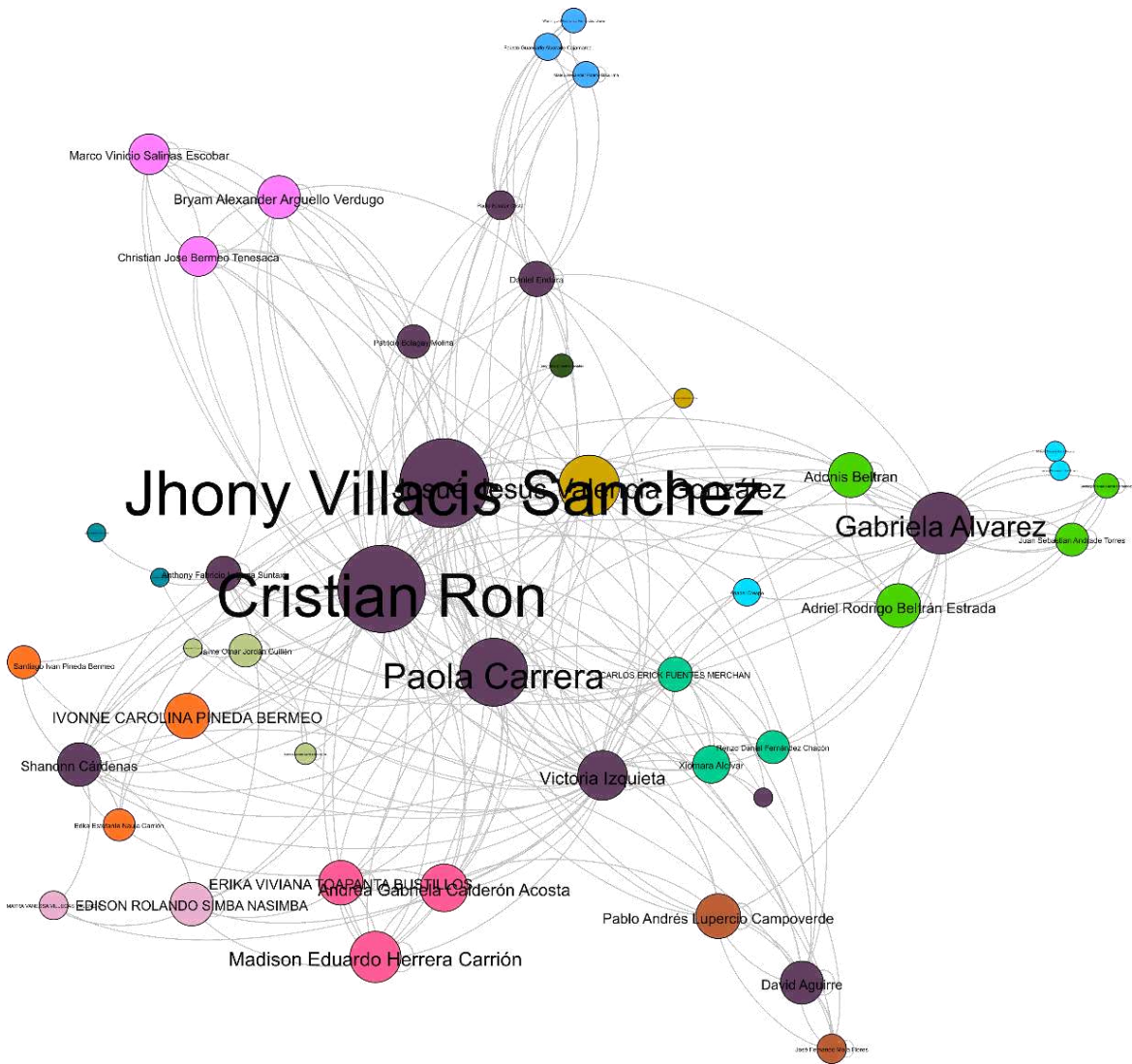
reTHOS 4.0 Dashboard



Note. Source Creaminka

Figure 108

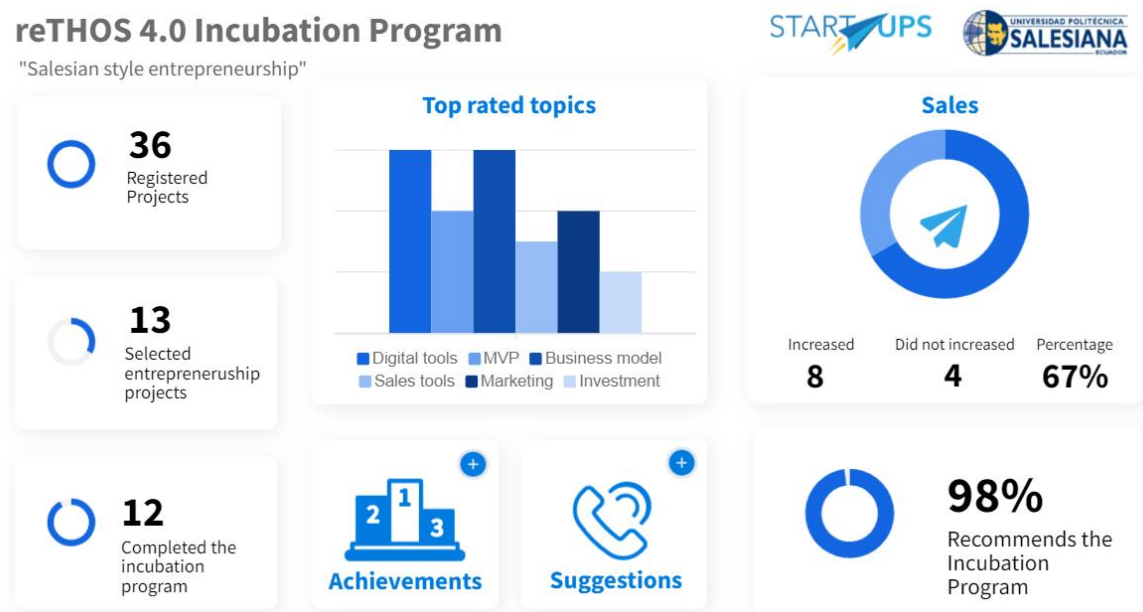
reTHOS participant network



Note. Source Creaminka

Figure 109

reTHOS final report and feedback



Note. Translated from "Informe de Actividades 2021" by Secretaría Técnica de Emprendimiento e Innovación SETEEI, 2022, p. 11. Villacís, Jhony. Interactive figure <https://view.genial.ly/63f0716a9fe56300112a6f53/interactive-content-dashboard>

In light of this information 47 people and 5,006 actions were evaluated during the process. "Shares information, skills and resources with the team" was the most evaluated action 309 times, which means that it is one of the actions that was put into practice the most in reTHOS within Teamwork. The network makes it possible to visualize the relationship within the work teams, and of the participants with the mentors and with other participants. The evaluation process of functionings within this program makes visible how the participants develop and interact in relation to the activities that take place in it. Furthermore, upon exploring the participants perspectives, 98% recommended the incubation program and 67% of the entrepreneurship projects increased their sales, demonstrating a positive insight and contribution of the program to participants development.

Bootcamp reCREATE 2021

The bootcamp reCREATE main goal is to promote and generate proposals that gives solutions to actual/real problems that have been taking place in nowadays crisis. The

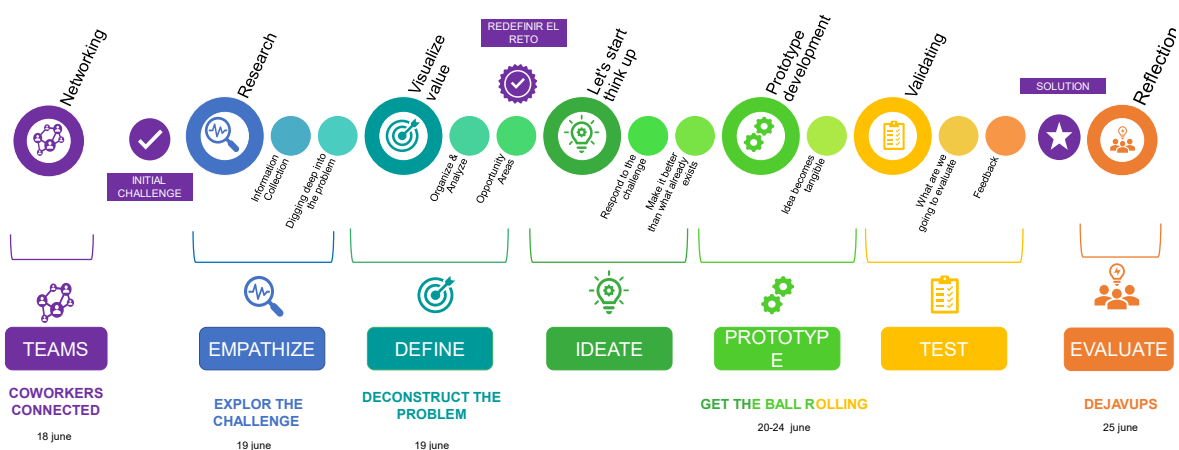
Chapter 5: Results

development of TICs has promoted the education system searches to generate spaces where people develop creativity and innovative ideas.

The second national virtual edition took place from 18 to 26 of June, for this edition the Design Thinking¹¹⁸ [figure 111] methodology was applied. The main objective was to dive deeper into the learning and formation process of the participants aiming to achieve better results in learning. The prepared activities contribute with the “learning by doing” and there were specific challenges and problems selected in order to promote this in order to make the participants build up innovative solutions.

Figure 110

reCREATE Desing Thinking



reCREATE 2021 Bootcamp¹¹⁹ had 58 registered participants, 38 out of those initial participants remain in the program and 11 teams were form, assigned with a distinctive color in order to identify them [table 35]. These teams were set up over the first day workshop called “Coworkers Connected”. A total of 20 mentors joined and guided the teams. All of the teams present their solutions with a pitch scored by an external jury, the score card followed this metrics: Clear identification of the problem/necessity, acknowledgement of opportunity areas, innovation of the proposal, viability of the solution,

¹¹⁸ Design Thinking is a methodology that focuses on the sensitivity of the person who designs and his/her capacity to solve problems that allow him/her to satisfy the potential client needs, all this through the use of commercially viable technology. Is an innovation centered at the person.» (Steinbeck, 2011).

¹¹⁹ See event website, information, agenda, mentors, participants, projects and network: <https://coworking.ups.edu.ec/event/0Mjk796yF3gBMEOI9asB>

rentability of the project, effective pitch/presentation and answering jury questions criteria [see appendix 3].

Table 35

Participating Teams – reCREATE

TEAM	PARTICIPANTS	DESCRIPTION
Rikudou [Gray]	Mateo Cabrera Arlem Chica Gandhi Bonilla	Reduce the ecological footprint, through a project that applies the 6Rs (Recycle, Reduce, Reuse, Reject, Repair, Reflect), focused on job creation, environmental conservation, and fair trade.
Team yellow 1	Sebastian Mite Torres Patrick Rocha Ortiz	Open a Human Resources office, in order to propose an efficient and effective Human Talent Management - GTH within Ecuador.
Conforteem [Blue]	Cristopher Matute Astrid MAlvarez Ariana Cedeño	Generate alternatives to improve thermal behavior inside homes.
Kawsay Natura [Purple 2]	Freddy Gualoto Santiago Buyancela Quezada Kelly Yaharia Guallichico Andrés Ávila	Strengthen environmental culture in 8-year-old students from private schools
Charla y Café [Green 2]	Bryan Vergara Iza Genesis Zambrano	Provide psychological assistance to people who have suffered from post-pandemic anxiety.

Team Green 4	Henry Paul Quizhpi Luis Lanchi Lucero	Compete with the demand for traditional plowing tools, introducing more friendly, transportable, ergonomic and economical agricultural machinery (motor-tillers or motor-hoes). Benefit small and medium-sized producers in the agricultural sector in Ecuador's highlands. Carry out the study for the redesign and improvement of the walking tractor for work on uneven terrain and terrain with a 30° inclination.
Brasmart [Red]	Tania Toaza Muñoz Allison Villacreses Josue Sebastian Emilio Chulca	Help people take control of their health and facilitate the monitoring of those who need care from others without the need to be by their side all day.
Team purple 3	María José Masapanta Melisa Rueda Emily Silva	Create a healthy diet for dogs with overweight and poor nutrition problems
Oxinergr [SkyBlue]	Paola Tonguino Espinoza Daniela Gonzalez Jazmín Játiva Jenniffer Morales	Improve air quality for people with asthma and allergy problems, by purifying the environment.
Caffeto [Green 1]	Mara Garrido Palacios Nicole Zavala Lucas Valeria Carrera Lili Castillo Serrano	Reduce heavy metal contamination of water
BioCrok [Green 3]	Cristina Naranjo Byron Simba Taco Denisse Pareja Cristopher Alvarez	Reduce the environmental impact of solid contaminants (dishes) caused by fast food restaurants

Once the bootcamp started, the functionings assessment process [showed in figure 00] within participants was implemented:

- (i) Expert Panel: figure 112 shows the actions selected based on the workshops and activities of the bootcamp, including the networking activity at the beginning where groups were conformed, and the final pitch presentation.
- (ii) Event website setup: participants had access to the content and assessment on the website. Administrator role was in charge of setting up the assessment process [figure 113].
- (iii) Enable the assessment: all the participants and mentors that took part in the Bootcamp took the assessment according to the schedule. Each mentor was in charge of monitoring the groups and motivating participants to complete this task.
- (iv) Information systematization: when the event finished, all the information was collected, reviewed, and documented. All participants' assessment information was organized into two groups, the first one distributed by teams and team members; and the second one by mentors. Figure 114 shows an example of one team, and results of its members, highlighting the action that was validated and to which functioning belongs. To see all the results, go to appendix 0.
- (v) Event dashboard generation: Shows the main KPI according to the evolution of the evaluation over those 9 days of the event. The dashboard allows us to have an accurate tracking of the evaluators, the assessed participant, actions total, actions distributed by person, team, date of register, everything needed to keep an adequate track of the program and goals [figure 115]. To see all the results, go to appendix 0.
- (vi) Participant network: All the information from the whole bootcamp is collected and allow Creaminka the development of an interaction network of the participants [figure 116].
- (vii) Final report & feedback process: finally, the results were registered in the report and bootcamp winners were published [figure 117]. In this edition, virtual badges were delivered to the participants, mentors, jury and teams, this with the sole purpose of promote participation and strength the sense of community and belonging to StartUPS [figure 118].

Figure 111

reCREATE Expert panel – functionings selection

		TEAMS	EMPHATIZE	DEFINE	IDEATE	PRTOTYPE	TEST	EVALUATE	Final Pitch	Actions count
		Coworkers Connected	Explore the challenge	Deconstruct the problem	Thinking Up	Prototype Development	Validating	Reflection		
Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.						x			1
	Supports and accept the good ideas of others, even if they have a different point of view.	x		x						2
	Focuses on the situation, problems, or behavior, rather than judging people.		x							1
Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.			x			x			2
	Find trends and relationships between emerging facts.	x	x			x			x	4
Project management	Evaluates the progress and success in comparison with performance standards.						x			1
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.				x					1
Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.					x		x		2
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.				x		x			2
Negotiation	Seek suggestions and ideas from others.							x		1
	Is open to many approaches to address needs or solve problems				x	x				2
	Discusses and argue by providing facts and a solid knowledge base.	x								1
Creative & innovative thinking	Experiments with new ideas, methodologies and procedures with interest.				x					1
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.			x		x			x	3
	Discusses and outlines the consequences of problems and decisions.	x								1
Plan-ning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.				x					1
Ideas presentation	Uses simple language to explain complex or technical concepts.								x	1
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.				x		x			2
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	x								1
Problem resolution	Uses the good ideas of others to help develop solutions.				x		x			2
	Checks the proposed solutions and possible effects before proceeding with the selection.		x	x		x				3
	Looks beyond appearances and don't stop at the first answers.	x								1
Teamwork	Works together with the team to solve problems.			x	x	x	x			4
	Recognizes and celebrate the achievement of teammates.								x	1
	Praises the team's success.	x								1

Figure 112

reCREATE website setup

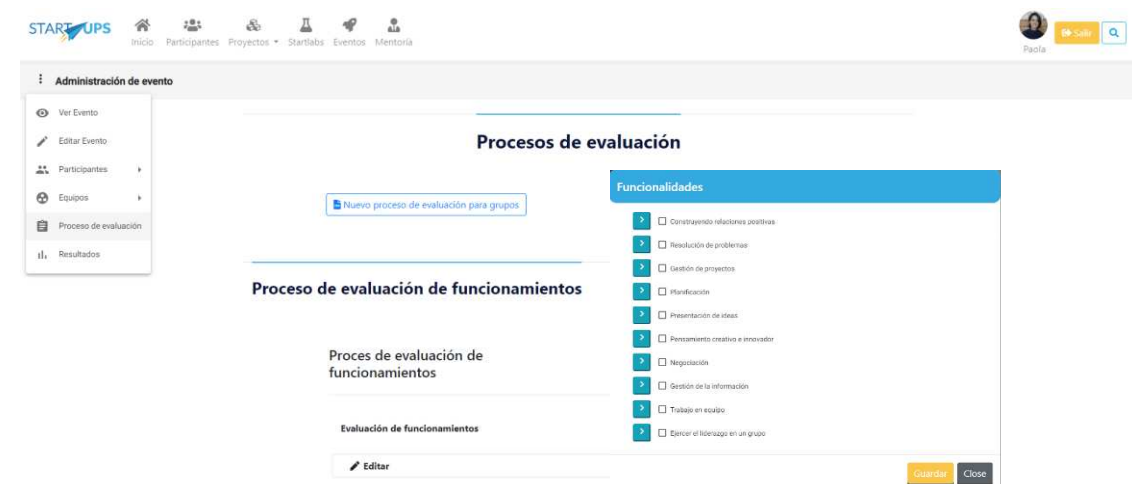


Figure 113

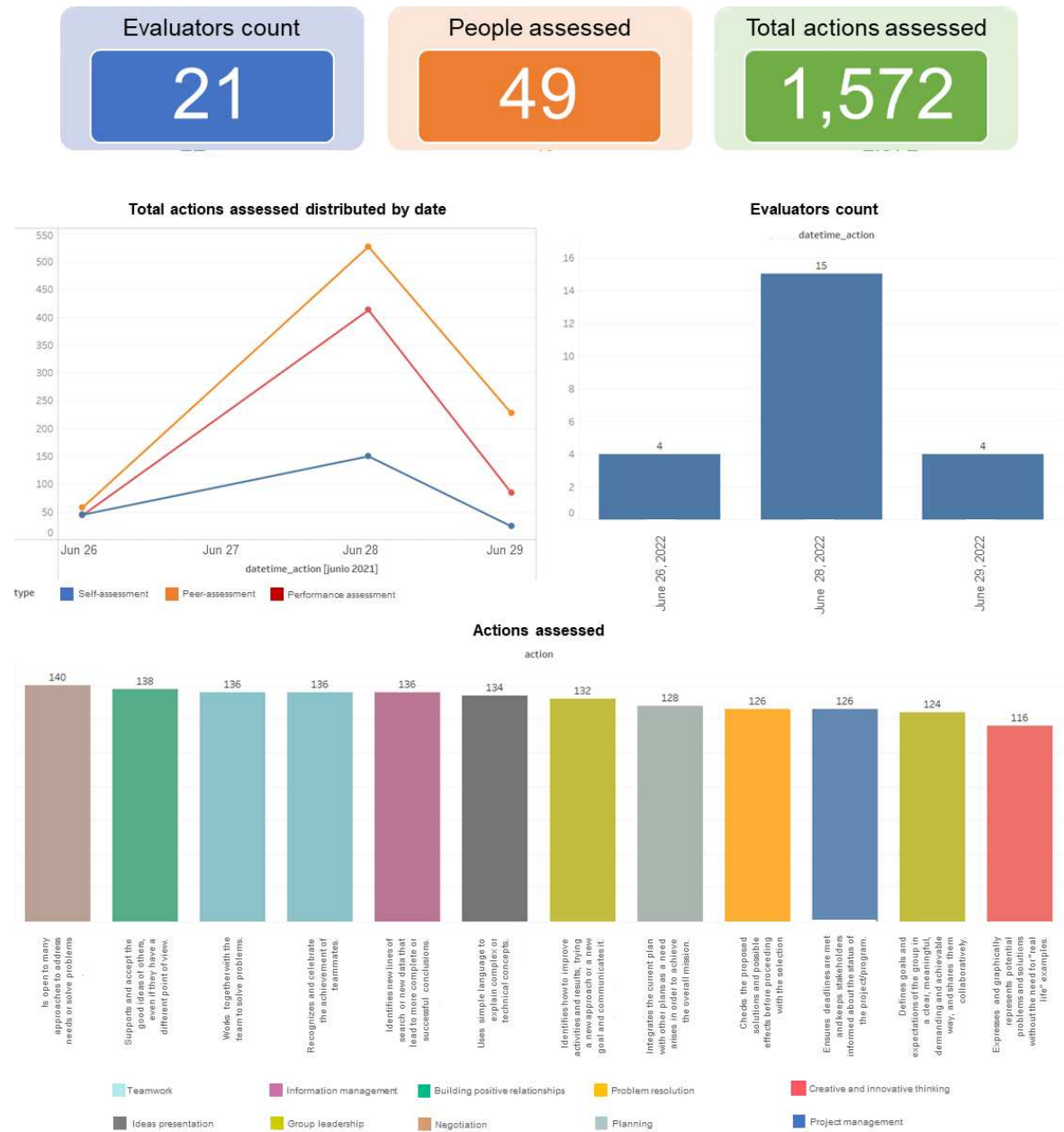
Information systematization example

	Full Name	Functioning	Action	Formu	Status
Conforteam [Blue]	Astrid María Álvarez Blacio	Building positive relationships	Supports and accept the good ideas of others, even if tl	1.6	Validated
		Creative and innovative thinking	Expresses and graphically represents potential problem	1.6	Validated
		Group leadership	Identifies how to improve activities and results, trying a	1.6	Validated
		Ideas presentation	Defines goals and expectations of the group in a clear,	1.05	Semi-Validated
		Information management	Uses simple language to explain complex or technical c	1.6	Validated
		Negotiation	Identifies new lines of search or new data that lead to r	1.6	Validated
		Planning	Is open to many approaches to address needs or solve	1.6	Validated
		Problem resolution	Integrates the current plan with other plans as a need a	1.6	Validated
		Project management	Checks the proposed solutions and possible effects be	1.45	Semi-Validated
	Ariana Mercedes Cedeño Lasso	Teamwork	Ensures deadlines are met and keeps stakeholders inf	1.6	Validated
		Group leadership	Recognizes and celebrate the achievement of teamma	1.6	Validated
		Building positive relationships	Works together with the team to solve problems.	1.6	Validated
		Creative and innovative thinking	Identifies how to improve activities and results, trying a	1.9	Validated
		Group leadership	Supports and accept the good ideas of others, even if tl	1.6	Validated
		Ideas presentation	Expresses and graphically represents potential problem	0.9	Single Validation
		Information management	Defines goals and expectations of the group in a clear,	1.35	Semi-Validated
		Negotiation	Uses simple language to explain complex or technical c	1.35	Semi-Validated
		Planning	Identifies new lines of search or new data that lead to r	1.05	Semi-Validated
	Anthony Cristopher Matute Arichabala	Problem resolution	Is open to many approaches to address needs or solve	1.9	Validated
		Project management	Integrates the current plan with other plans as a need a	1.9	Validated
		Teamwork	Checks the proposed solutions and possible effects be	1.6	Validated
		Building positive relationships	Ensures deadlines are met and keeps stakeholders inf	1.6	Validated
		Creative and innovative thinking	Works together with the team to solve problems.	1.9	Validated
		Group leadership	Recognizes and celebrate the achievement of teamma	1.9	Validated
		Ideas presentation	Supports and accept the good ideas of others, even if tl	1.6	Validated
		Information management	Expresses and graphically represents potential problem	1.6	Validated
		Negotiation	Identifies how to improve activities and results, trying a	1.6	Validated
Planning	Defines goals and expectations of the group in a clear,	1.6	Validated		
Problem resolution	Uses simple language to explain complex or technical c	1.6	Validated		
Project management	Identifies new lines of search or new data that lead to r	1.6	Validated		
Teamwork	Is open to many approaches to address needs or solve	1.6	Validated		
	Integrates the current plan with other plans as a need a	1.6	Validated		
	Checks the proposed solutions and possible effects be	1.6	Validated		
	Ensures deadlines are met and keeps stakeholders inf	1.6	Validated		
	Recognizes and celebrate the achievement of teamma	1.6	Validated		
	Works together with the team to solve problems.	1.6	Validated		

Note. Validation means that the participant obtained the self, peer and performance assessment. The column “formula” is the result of the formula that includes the number of times that the action was assessed during the whole event, as shown in expert panel, Figure 102

Figure 114

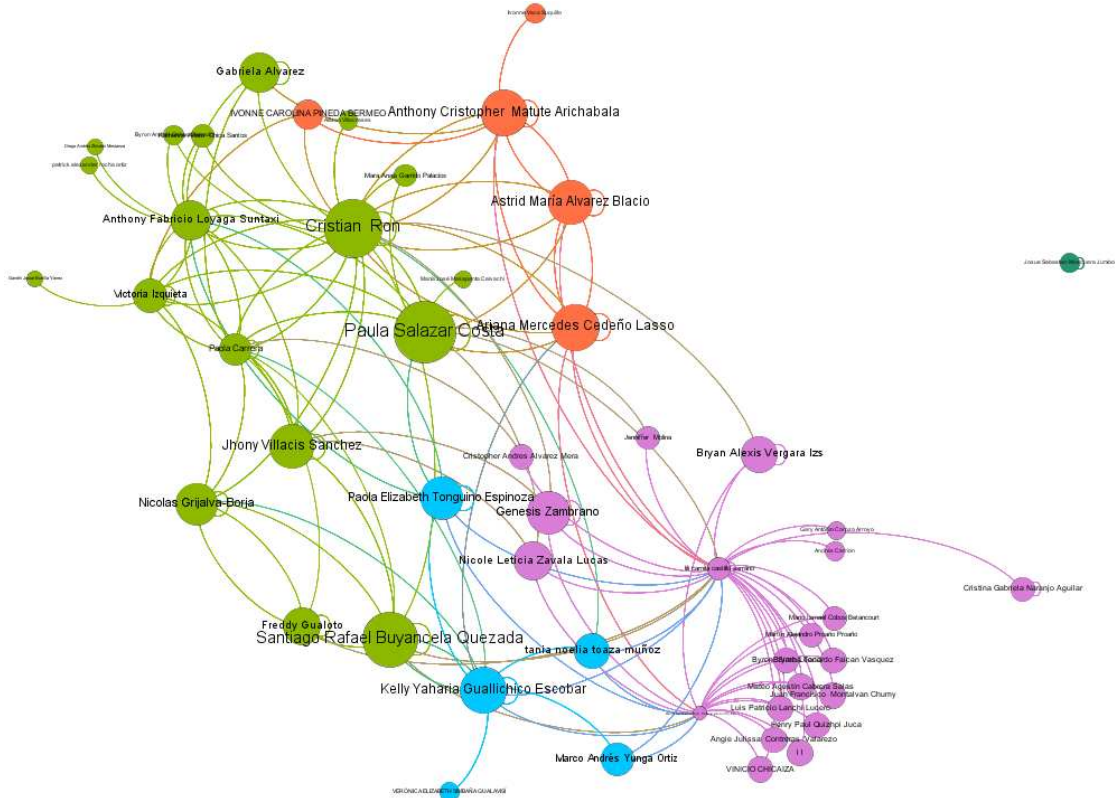
reCREATE Dashboard



Note. Source Creaminka

Figure 115

reCREATE participant network



Note. Source Creaminka

Figure 116

reCREATE winners



Figure 117

reCREATE badges



Based on the results of this study,

In light of this information 49 people and 1,572 actions were evaluated during the process. "Shares information, skills and resources with the team" was the most evaluated action 309 times, which means that it is one of the actions that was put into practice the most in reTHOS within Teamwork. Unlike the reTHOS incubation program, participants are students who do not have an entrepreneurial project but during the bootcamp they form teams to solve real challenges. The network visualizes the interactions of all participants and mentors during the bootcamp. The evaluation process of functionings within this bootcamp makes visible how the participants develop and interact in relation to the activities that take place in it. Issuing badges have a lot of potential to motivate and bring more people to participate on StartUPS project activities.

Interviews results: Self-perception in capabilities development

Aiming to gather information with quantitative data from multiple participants, 21 half structured interviews were conducted to different agents from the StartUPS project: (I)

Entrepreneurs, divided in two groups, on one side entrepreneurs that have participated in events and others who does not work in events but they have been actively involved in with the environment, (ii) Mentors, (iii) Professors-mentors and (iv) university authorities.

The interview process accomplished the data collection, data revision and organization. Allow the identification of the mentioned categories for the four groups of interviews [figure 119] and summarize properly the information to accurately analyze and come up with conclusions [see appendix 06].

Figure 118

Interviews categories

Group interviewees	Entrepreneur	Mentor	Professor -mentor	University authority
Topic, concept, or category				
Interviewee presentation	x	x	x	x
How he/she joined StartUPS project	x	x	x	
Project timeline	x			
Capabilities development	x	x	x	
Connection with other entrepreneurs	x			
What does it mean to be a mentor for him/her		x	x	
Main contribution		x		
What he/she has received		x		
Motivation			x	
Project that remembers			x	
Application in teaching			x	
What is coworking StartUPS for him/her	x	x	x	
Final Message	x	x	x	x

Upcoming, the results from the analysis from the interviews will be shown, also they will be contrasted with the data obtained from the quantitative evaluation of the functionings. Because of the extension of the data from the interviews, for this section there has been selected the first two interviews from each group alphabetically ordered. While performing the interviews, the term that refers to functionings is competence or soft skills, this is due the fact that within these environments and among their actors these terms are used more often but refers to the concept of functionings.

For the group of entrepreneurs that have participate in events or programs, 5 interviews were held, 100% of these people agrees that their linkage with the coworking space and the interaction within the activities has impact positively in their competence development. The

results [figure 120] from Bryan Arguello (as an example) from the GIFTAWAY project show us all the enhance of knowledge and how the mentoring and experience help him improve personally and as entrepreneur eventhough his prototype was not approved. Reviewing his feedback over the interview he was satisfied, he was able to see a team member apply the strategies developed over reTHOS in his current job. On the other side, Jouse Valencia, from the project TAKYT, considers that the spaces like coworking not only contributes to the development of life competences but also helps people to growth, connect and learn [figure 00]

Figure 119

Entrepreneurs who have participated in events

Project	Interviewee	Interview results	reTHOS functioning assessment		
GIFTWAY	Bryam Alexander Arguello Verdugo	He did not know how to work and monetize, being a team leader learned to work better, to exercise leadership, communicate better and be more organized. He has lost his fear and now knows how to manage a project , not only for commercial purposes but also social. I learned to handle frustration, it was the main challenge as a team leader	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	Validated
			Ideas presentation	Uses simple language to explain complex or Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	Validated
				Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	Validated
			Information management	Knows where and how to access the right data for a particular use.	Validated
			Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	Validated
			Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	Validated
TAKYT	Josué Jesús Valencia González	Definitely. It has better development, structuring, organization and more vision of its business. He highlights communication , now he is a school teacher. He learned about business, how to distribute his time and be persevering.	Teamwork	Shares information, skills and resources with the team.	Validated
			Creative and innovative	Generates unique but viable and useful solutions to complex problems.	Validated
			Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	Validated
			Information management	Knows where and how to access the right data for a particular use.	Validated
				Examines irrelevant and vague information while maintaining high-quality data.	Validated
			Planning	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	Validated
			Problem Resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	Validated
			Project management	Develop reasonable performance standards and ways to assess results quality.	Validated
Integrates the ideas and needs of others in developing viable strategies to achieve goals.	Validated				
Teamwork	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo. Helps teammates who ask for support, assistance or need something.	Validated			

For the group of entrepreneurs that did not participate in events or programs but have been actively working over the spaces and getting mentorships, 5 interviews were held, 5 out of 5 affirmed that being part of StartUPS led them to develop and enhance their competences. Estefania Abarca results are displayed [figure 121], her project VEENCY, she commented that since she is part of the community, her production has been increasing y there has

been place to improve their work chain, control and quality process so that she got her sanitary permision to operate and expand her market. Talking about competences, the communication functioning overcomes, she considered herself a shy person and now she can address to many different type of audiences.

The nex interview to analyze is the one with Julia Oña from ALEXA BEES project. She has not only shown a growth in her project but also in other areas that were not her strenght. Marketing is a good example, because thanks to a service exchange with other entrepreneurur she received a marketing course with the commintement to help other project that needs her assitant. One the aspects she also emphasized during the interview was loosing fear to work on her own business, to interact with different audiences, and be more receptive to possitive feedback as it helps her and the project grow. Having someone to guide and support the process is very usefull because it encourages and motives her to continue.

Figure 120

Entrepreneurs who have not participated in events

Project	Interviewee	Interview results	Functioning relation
VEENCY	Estefania Abarca	Technical capabilites through mentoring, on accounting and financial aspects. The space allows you to generate networks and contacts . Before she was very shy now she knows how to communicate, dialogue , she is safer and also has the mentors for the resolution of conflicts . She has been able to grow, learn and generate networks.	✓ Building positive relationships
			Creative and innovative thinking
			Group leadership
			✓ Ideas presentation
			✓ Information management
			Negotiation
			Planning
			✓ Problem resolution
Project management			
Team work			
ALEX BEES	Julia Oña	Of course. Creativity , persistence. The main contribution that she considers is on the subject of marketing, customer relations, sales channels and more effective strategies. She didn't know anything and now she functions much better, she has lost her fear of persistence. The main contribution that she considers is on the subject of marketing, customer relations, sales channels and more effective strategies . She didn't know anything and now she functions much better, she has lost her fear of speaking and interacting . She is no longer afraid to start her own business, she has become more receptive to criticism , she seeks constant growth to improve and overcome obstacles that arise	✓ Building positive relationships
			✓ Creative and innovative thinking
			Group leadership
			✓ Ideas presentation
			Information management
			Negotiation
			✓ Planning
			Problem resolution
✓ Project management			
Team work			

For the mentors group, 3 out of the 5 people belong to the UPS. All of them affirmed that being part of the StartUPS led them to develop and enhance their competences. Cristian Ron`s results are shown [figure 122], who nowadays is the StartUPS coworking coordinator in the Giron campus in Quito, he affirms that the coworking space helped him improve in different aspects and the oportunities goes beyond a salary, he acknowledge that in his

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first interaction with the space as a participant in one of the events he could start developing competences.

The second example is Jhony Villacis, he is a senior development officer in a digital business developers company, he mentioned that since he is part of the space, his life change completely, he has been able to develop competences for his professional life, he focus on explaining the importance of competences like emotional intelligence, being empathic and resilience and how eventhought these are highly valuable competences these are not teach in regular classroom.

Figure 121

Mentors

		THE OVERALL MISSION					
Jhony Villacis	Coworking changed his life , he had to make difficult decisions, postpone his studies, but he did a 360 turn. Soft skills have allowed him to have an accelerated learning curve. The ones that stand out the most are teamwork , learning to communicate , creating a community, going out to sell and getting up after failure . They have allowed him to have emotional intelligence , empathy and be resilient .	✓	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions. Is always open to listen, discuss, negotiate, encourage and motivate others. Supports and accept the good ideas of others, even if they have a different point of view.	Validated Validated Validated	Supports and accept the good ideas of others, even if they have a different point of view.	Validated
			Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	Validated	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	Validated
		✓	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	Validated	Defines goals and expectations of the group in a clear, meaningful. Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	Validated
		✓	Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact. Presents information clearly, concisely and logically, focusing on key points. Uses simple language to explain complex or technical concepts.	Validated Validated Validated	Uses simple language to explain complex or technical concepts.	Validated
		✓	Information management	Knows where and how to access the right data for a particular use. Find trends and relationships between emerging facts. Identifies new lines of search or new data that lead to more complete or successful conclusions.	Validated Validated Validated	Identifies new lines of search or new data that lead to more complete or successful conclusions.	Validated
		✓	Negotiation	Seek suggestions and ideas from others. Values the interests of others through active listening and proposes win-win solutions Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	Validated Validated Validated	Is open to many approaches to address needs or solve problems	Validated
		✓	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	Validated	Checks the proposed solutions and possible effects before proceeding with the selection.	Validated
		✓	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program. Ensures that resources and skills among staff are available.	Validated Validated	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	Validated
		✓	Teamwork	Shares information, skills and resources with the team. Encourages team to stick together. Works together with the team to solve problems.	Validated Validated Validated	Recognizes and celebrate the achievement of teammates. Works together with the team to solve problems.	Validated
			Planning	Evaluates proposed actions and timelines against the organization's mission and values. Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	Validated Validated	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	Validated

Interviewee	Interview results	Functioning	reTHOS functioning assessment	reCREATE functioning assessment	
Cristian Ron	From the beginning, he learn about management and entrepreneurship, generation of new ideas , being efficient and agile in hierarchical environments, having a more operational leadership and contributing positive relationships. As we live in a world of uncertainty to which we have to adapt.	✓ Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view. Validated Defends the trust and dignity of people, showing respect for their opinions. Validated Is always open to listen, discuss, negotiate, encourage and motivate others. Validated	Supports and accept the good ideas of others, even if they have a different point of view. Validated	
		✓ Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest. Validated	Expresses and graphically represents potential problems and solutions Validated	
		Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals. Validated	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it. Validated Identifies how to improve activities and results, trying a new approach or a new goal and communicates it. Validated	
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively. Validated		
			Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact. Validated		
		✓ Ideas presentation	Uses simple language to explain complex or technical concepts. Validated	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience. Validated Presents information clearly, concisely and logically, focusing on key points. Validated Uses appropriate vocabulary and grammar in accordance with the situation. Validated	Uses simple language to explain complex or technical concepts. Validated
			Knows when more information is needed and when enough has been gathered to reach a conclusion. Validated		
			Identifies new lines of search or new data that lead to more complete or successful conclusions. Validated		
			Identifies new lines of search or new data that lead to more complete or successful conclusions. Validated		
		✓ Information management	Acts (modulates) appropriately and coherently with the situation, is kind and assertive. Validated	Values the interests of others through active listening and proposes win-win solutions Validated Earns the trust of others who recognize honesty, respect, and sensitivity to their needs. Validated Seek suggestions and ideas from others. Validated	Is open to many approaches to address needs or solve problems Validated
			Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action. Validated		
			Evaluates the progress and success in comparison with performance standards. Validated		
		✓ Negotiation	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers. Validated	Ensures that goals, scope and criteria for the success of the project/program are clearly defined. Validated Ensures deadlines are met and keeps stakeholders informed about the status of the project/program. Validated	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program. Validated
Ensures that goals, scope and criteria for the success of the project/program are clearly defined. Validated					
✓ Problem resolution	Helps teammates who ask for support, assistance or need something. Validated Works together with the team to solve problems. Validated	Works together with the team to solve problems. Validated	Recognizes and celebrate the achievement of teammates. Validated		
				Ensures that goals, scope and criteria for the success of the project/program are clearly defined. Validated	
					Works together with the team to solve problems. Validated
✓ Teamwork	Integrates the current plan with other plans as a need arises in order to achieve the overall mission. Validated	n/a	n/a		
				Planning	n/a

The group for professors-mentors had 4 people among the Quito, Guayaquil and Cuenca cities (where the UPS has campuses) all of them affirm that being part of StartUPS as mentors help them not only to develop and enhance their competences but also get feedback for their classes. Jorge Fajardo results are being shown [figure 123], he is currently the director of the Automotive Engineering Career in Cuenca Campus, he actively participates in the spaces as an opportunity to be close to the students, know their life perspective and somehow as a way to contribute his own learning process. He mentioned that he participated so actively because these are the kind of spaces or opportunities, he

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did not have but always wanted, he considers this the kind of opportunities that forms business owners and not only a company collaboration. With his actively participation he has learn techniques and methodologies for his classes and since he is a truly believer of these spaces, he encourages his students to join the StartUPS.

The second case presented is Ivonne Vaca, UPS professor of the Biotechnology at Quito campus. She strongly believes that the study field has an enormous capacity of resources, so students can explore, research, and develop products. Throughout these years as a mentor listening to ideas, helping projects grow and develop, supporting students, she makes him feel satisfied. She considers that it is an environment where you explore, exchange, share with other people and everything contributes to personal and professional growth. She and her students motivate and encourage them to take advantage of the potential that Biotechnology has with the resources and the possibilities of generating various products.

Figure 122

Professors-Mentors

Interviewee	Interview results	Functioning Relation			
Jorge Fajardo	It has been two-way, it is a win-win relationship and learn by learning . New agile techniques and methodologies , the importance of validation and losing the fear of failure	✓	Building positive relationships		
		✓	Creative and innovative thinking		
		✓	Group leadership		
			Ideas presentation		
		✓	Information management		
			Negotiation		
			Planning		
			Problem resolution		
		✓	Project management		
		✓	Team work		
Interviewee	Interview results	reTHOS functioning assessment			
Ivonne Vaca	Definitely yes. It is an experiential experience that allows you to learn from the students and contribute . In the space, experiences are exchanged , people with different profiles are met and everything contributes to professional life .	✓	Creative and innovative	Supports and accept the good ideas of others, even if they have a different point of view.	Single validation
		✓	Ideas presentation	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	Single validation
			Group Leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	Single validation
				Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	Single validation
		✓	Ideas presentation	Uses simple language to explain complex or technical concepts.	Single validation
			Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	Single validation
			Negotiation	Is open to many approaches to address needs or solve problems	Single validation
		✓	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	Single validation
			Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	Single validation
			Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	Single validation
✓	Teamwork	Works together with the team to solve problems.	Single validation		
		Recognizes and celebrate the achievement of teammates.	Single validation		

Finally, for the UPS authorities group the former chancellor of the UPS, Father Javier Herran Gomez, PhD, who supported the creation of the StartUPS project and the current Chancellor of the UPS, Father Juan Cardenas Tapia, PhD were interviewed in order to know their perspective of the authorities, the vision of the university, its projections and the role it has related to comprehensive education and the impact on the territory [table 36].

Table 36

UPS Chancellor and former Chancellor interviews

Interviewee	Padre Javier Herrán UPS Chancelor period 2009-2020	Padre Juan Cárdenas UPS Chancelor 2020-present
Q1: University entrepreneurship	For his Salesian formation he has confidence in young people. At the beginning he did not like expressions in English, but he learned with them. You cannot launch to the future with everything done, you will always learn in the way.	The university is responsible for comprehensive training that develops cognitive and social skills that teach students to know how to do. In this way, professionals with leadership and business capacity are promoted, aware of the context in which they develop.
Q2: Entrepreneurial students	Not being professionals to accumulate resources but to enjoy life, the professional structure now demands new things, a mechanical engineer who knows about economics and health, has its own garden and start a business out of it.	University provides various opportunities for students to develop their skills. The ASU groups are natural environments that complement the training process in the classroom, where students interact, interact and work as a team. There is also coworking, StartLabs, Coliving.
Q3:Challenges in the world	It is not necessary to launch into the future with everything done, since science advances at an accelerated pace and implies other demands. For example, Europe has approved that there is no car with gasoline, these are the challenges that students face and they must be prepared.	Globalization implies risks because it can make us forget about glocalization, human and social geography, inequities and the situation of minorities regarding access to education, health, basic services, violence. Therefore, science must be at the service of people.
Q4: College life	Youth should enjoy life, not in having but in being. Be open to change, get involved and also accept your mistakes. Appreciate life from different ways, don't wait for them to give you doing things. Not being	The training process has to be enjoyed and not suffered, students must explore science and knowledge to build a responsible personal life project with others, taking advantage of their potential.

	professionals to accumulate resources but to enjoy life	
Q5: University organization	Management of common use resources, it is a new way of doing university, it is important to change the rules of the game and seek collective well-being, which is circular. The university connects with the context and the vision of the students must be more global, they must interact, link and connect with the context. The academy gives a broader vision of the context.	The university must not lose its charismatic principles and the social role in the national context. The center is the student and the people, so it is important to create an environment that values and enhances the capacities of all members, in this way a reading of the social context is promoted and contributes to the generation of solutions to real challenges.
Final message	Young people are always looking for something different, they must be patient, respect their parents and teachers but teach them to respect their decisions and also accept the consequences of their decisions. That is why it is important to support them for their development and growth.	Education is an act of faith in itself, students must trust their abilities and qualities, believe in their teachers. Young people have to be actors in the context, the authors of the new social dynamics, they are carriers of new values and forms of participation, they are co-responsible with the context through the honest exercise of their professional life.

The promotion intentional environments, such as StartUPS project within an institution, not only requires a dynamic, flexible, open organization, and this is possible thanks to the support of its leaders and highest authority. This allows the process to be accelerated and the results to be positive for the beneficiaries and the academic community in general.

Brief insights on the interviews

The interviews allow us to understand important aspects that overcome about the Coworking StartUPS project, the impact inside and outside the university community, the impact among its members, how it is seen and other aspects about the strategies and performance. For the participants, entrepreneurs, UPS mentors this StartUPS represents a gathering space where you can growth, develop, improve your network and add value to your entrepreneurship/project/life project. In a very straightforward perspective is easy to

see how all major connections and exchanges among the members are being build and perform, all these members discover the potential that cooperation has. For many of these people, this is also a place that gives you learning opportunities that will not be taught in a classroom such as capabilities and skills development all these opportunities while getting to know people with different perspectives about life.

For some others, this type of space has become a lifestyle, because there is a support group, a place where there is freedom to ask a question, a place that help them overcome their professional, project or personal fears. Sharing with other people inspire, tech and help people come out of their comfort zone. In this sense, one of the key aspects from the interviews is the positive impact over the entrepreneurs and participants that the way of mentoring and support them over these spaces has, from the way of being welcome them to how they get confidence to believe in themselves.

Entrepreneurs like mentors recommend be part of the StartUPS community and a significant number of the surveys indicates the necessity of spreading the word even more about the activities to increase their reach and could positively impact over more people, not only inside the university but to the general public.

Finally, is important to mention that for these spaces to exist is a must to count on with the support of the institutional leaders who focus on the development of activities and performance of the physical spaces. In this way, from superior education institutions, as key actors to dynamize the territory, projects like StartUPS contribute to the flourishing of the IEE.

CHAPTER 6: CONCLUSIONS, PROSPECTION AND RESEACH LINES

Throughout the present research, it has been possible to carry out a brief overview of modern economic theory and how new approaches have emerged that seek to contribute and create new forms of coexistence to promote collective development, care for the environment, management of common pool resources to guarantee their access, use and sustainability, without compromising the present of anyone or the future generations.

The rebirth of the common, for example, which is a concept that has been present in many cultures and within the worldview of many peoples such as the Greek and the Andean. The meaning of oikos and ayllu have made it possible to weave a different way of interrelating, taking the common good as a starting point, and from this, placing the person and their well-being as the center of all action.

Politecnica Salesiana University has undertaken an effort of organizational management from the perspective of ecosystems to contribute to the Common Good. This allows for the generating of a dynamic, flexible structure that can adapt to the challenges of a world that is volatile, uncertain, complex, ambiguous [VUCA], which changes at an accelerated rate and also requires people to adapt to develop in this context.

The UPS StartUPS project has been established as an environment that enhances people's capabilities. The results of the quantitative evaluation and of the interviews make it possible to visualize that these environments contribute to the functioning of people, from the perspective of the capability approach, where it is not only having a competence but also being able to apply it in different contexts, scenarios and moments. The evaluation of actions and operations is a way of motivating the empowerment of people and the generation of networks that make it possible to visualize how the person has developed in that environment.

One of the major revelation from this study was the interviews results, which allow broadening the perception of the impact that these environments have on people's lives. One of the words that was repeated the most was the perception of StartUPS as an opportunity that has allowed them to empower themselves, lose their fear, feel more confident in themselves. The non-monetary exchanges that are generated within the

entrepreneurs of knowledge, time for time, products and the willingness to support each other to grow together, is a reflection of how the larger structure, which is the UPS, operates as a CPR.

The teacher-mentors provided an important contribution on how win-win relationships are generated within this environment and how they have provided feedback in their classes based on the learning acquired in StartUPS project. Another relevant aspect is the majority opinion that the number of beneficiaries should be increased so that these opportunities reach more people. This has allowed us to visualize three objectives on which to work. The first is to broaden the scope to engage more students through the activities, including those who do not have an idea or a project. The second is to generate strategies so that more teachers can join to be mentors, including activities specifically for teachers in which they can live experiences that add value to them. The third is, with a focus on entrepreneurs, linking the incubation program to seed capital opportunities, angel investors or external calls.

Regarding research purposes it is important to highlight that the aim is not to certify competencies because the development and well-being of people is broad and diverse, this exercise yields relevant information to monitor this intentional environment and contributes to strategic decisions-making process to respond to the needs of the participants and the context. Putting the person at the center of all action generates positive results and impacts on people's lives that give them various tools to function inside and outside these environments.

Finally, this research opens the way to new questions to continue the development of this topic:

- How can more synergy and interrelation with other university environments be generated to enhance the results and positive impact on people, the university community and the environment?
- How a project like StartUPS can work in other higher education contexts located in rural areas?
- Can the development of these environments be explored in other educational contexts such as initial, basic and high school education?
- How to explore a strategy of incentive generation so that professors-mentors can be part and participate more actively in the environment?

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APPENDIXES

Appendix 1: reTHOS Teams members and mentors functionings assessment results

Full Name	Functioning	Action	Weight	Result
A2F Labs Xiomara Alcívar	Building positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	2.5	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.3	Single Validation
		Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.65	Single Validation
	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	1.55	Validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1	Validated
		Looks past problems from a new perspective and apply new approaches to solve them.	1.1	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.3	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	1.1	Single Validation
	Group leadership	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.85	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	1.1	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.1	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	1.1	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.3	Single Validation
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.55	Validated
		Uses simple language to explain complex or technical concepts.	2.1	Validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1	Validated
		Presents information clearly, concisely and logically, focusing on key points.	1.95	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	1.1	Single Validation
	Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1	Validated

		Knows where and how to access the right data for a particular use.	1.7	Semi-validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.1	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	0.3	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.95	Semi-validated
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation
		Seek suggestions and ideas from others.	1.1	Single Validation
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	2.5	Semi-validated
		Is able to predict the impacts and risks of decisions and actions.	0.3	Single Validation
		Creates realistic project plans and follows through (accomplishes)	0.3	Single Validation
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation
	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.4	Semi-validated
		Contextualizes and analyzes problems before solving them.	1.1	Single Validation
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	1.1	Single Validation
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.85	Semi-validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.3	Single Validation
		Ensures that resources and skills among staff are available.	1.1	Single Validation
Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.		0.55	Single Validation	
Teamwork	Helps teammates who ask for support, assistance or need something.	1.4	Semi-validated	
	Shares information, skills and resources with the team.	3.6	Semi-validated	
	Encourages team to stick together.	1.95	Semi-validated	

Renzo Daniel Fernández Chacón		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.3	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
	Building positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	1.4	Semi-validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.1	Single Validation
		Keeps an open attitude and treats others fairly and respectfully.	0.3	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.15	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	1.15	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.1	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.3	Single Validation
		Mira los problemas pasados desde una nuevas perspectivas y aplica nuevos enfoques para resolverlos.	0.55	Single Validation
	Group leadership	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.85	Semi-validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.1	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.3	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.7	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	1.95	Semi-validated
		Uses simple language to explain complex or technical concepts.	2.25	Semi-validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.15	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	1.7	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.15	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	0.85	Semi-validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation

	Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.4	Semi-validated	
		Seek suggestions and ideas from others.	1.1	Single Validation	
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation	
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation	
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.85	Semi-validated	
		Is able to predict the impacts and risks of decisions and actions.	0.3	Single Validation	
		Creates realistic project plans and follows through (accomplishes)	0.3	Single Validation	
	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.85	Semi-validated	
		Contextualizes and analyzes problems before solving them.	0.55	Single Validation	
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation	
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.85	Semi-validated	
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.3	Single Validation	
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation	
		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation	
		Ensures that resources and skills among staff are available.	1.1	Single Validation	
	Teamwork	Helps teammates who ask for support, assistance or need something.	0.85	Semi-validated	
		Shares information, skills and resources with the team.	3.05	Semi-validated	
		Encourages team to stick together.	1.4	Semi-validated	
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.3	Single Validation	
		Works together with the team to solve problems.	0.55	Single Validation	
	Carlos Erick Fuentes Merchán	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	2.35	Semi-validated
			Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
			Is always open to listen, discuss, negotiate, encourage and motivate others.	1.65	Single Validation
			Keeps an open attitude and treats others fairly and respectfully.	0.15	Single Validation
			Experiments with new ideas, methodologies and procedures with interest.	0.85	Semi-validated

	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.3	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	1.1	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.15	Single Validation
	Group leadership	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.25	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.15	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	1.25	Semi-validated
		Uses simple language to explain complex or technical concepts.	1.4	Semi-validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.4	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	1.1	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.3	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	1.4	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	1.25	Semi-validated
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.3	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.8	Semi-validated
		Seek suggestions and ideas from others.	0.55	Single Validation
Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.		1.1	Single Validation	
Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.		0.55	Single Validation	
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	2.35	Semi-validated	

			Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.1	Single Validation
			Creates realistic project plans and follows through (accomplishes)	0.15	Single Validation
			Is able to predict the impacts and risks of decisions and actions.	0.15	Single Validation
		Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.7	Semi-validated
			Analyzes problems and identify all facets, including hidden or difficult aspects.	1.1	Single Validation
			Contextualizes and analyzes problems before solving them.	1.1	Single Validation
		Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.25	Semi-validated
			Ensures that resources and skills among staff are available.	0.55	Single Validation
			Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.15	Single Validation
			Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.1	Single Validation
			Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
		Teamwork	Helps teammates who ask for support, assistance or need something.	1.25	Semi-validated
			Encourages team to stick together.	1.8	Semi-validated
			Shares information, skills and resources with the team.	3.45	Semi-validated
			Works together with the team to solve problems.	0.55	Single Validation
Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.15		Single Validation		

		Full Name	Functioning	Action	Weight	Status
Apícola Campoverde del Jordán	Luciano Javier Cabrera Villa	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation	
		Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	0.3	Single Validation	
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.3	Single Validation	
		Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	0.3	Single Validation	
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation	
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.3	Single Validation	
		Negotiation	Seek suggestions and ideas from others.	0.3	Single Validation	
		Project management	Ensures that resources and skills among staff are available.	0.3	Single Validation	

		Teamwork	Works together with the team to solve problems.	0.55	Single Validation	
			Shares information, skills and resources with the team.	0.3	Single Validation	
Marcela Azucena Campoverde Torres	Buiding positive relationships		Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation	
			Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation	
	Creative and innovative thinking		Finds ways to turn ideal ideas or solutions into reality.	0.3	Single Validation	
			Experiments with new ideas, methodologies and procedures with interest.	0.15	Single Validation	
			Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.15	Single Validation	
	Group leadership		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation	
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.3	Single Validation	
	Ideas presentation		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.7	Semi-validated	
			Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.7	Semi-validated	
			Uses simple language to explain complex or technical concepts.	1.25	Semi-validated	
			Presents information clearly, concisely and logically, focusing on key points.	0.3	Single Validation	
	Information management		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.7	Semi-validated	
			Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.3	Single Validation	
			Document clearly the sources and organizes information according to research needs.	0.55	Single Validation	
	Negotiation		Seek suggestions and ideas from others.	0.3	Single Validation	
	Project management		Ensures that resources and skills among staff are available.	0.3	Single Validation	
			Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation	
	Teamwork		Shares information, skills and resources with the team.	0.85	Semi-validated	
	Jaime Omar Jordán Guillén	Buiding positive relationships		Defends the trust and dignity of people, showing respect for their opinions.	2.2	Single Validation
				Is always open to listen, discuss, negotiate, encourage and motivate others.	1.1	Single Validation
Supports and accept the good ideas of others, even if they have a different point of view.				0.55	Single Validation	
			Finds ways to turn ideal ideas or solutions into reality.	1.25	Semi-validated	

	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	0.7	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	0.55	Single Validation
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.9	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.1	Single Validation
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.7	Semi-validated
		Uses simple language to explain complex or technical concepts.	2.35	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
		Presents information clearly, concisely and logically, focusing on key points.	1.25	Semi-validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.7	Semi-validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.25	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.25	Semi-validated
		Knows where and how to access the right data for a particular use.	1.65	Single Validation
	Negotiation	Seek suggestions and ideas from others.	0.7	Semi-validated
		Values the interests of others through active listening and proposes win-win solutions	1.1	Single Validation
Acts (modulates) appropriately and coherently with the situation, is kind and assertive.		0.55	Single Validation	
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.65	Single Validation	
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.1	Single Validation	

	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	2.2	Single Validation
		Contextualizes and analyzes problems before solving them.	0.55	Single Validation
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation
	Project management	Ensures that resources and skills among staff are available.	1.25	Semi-validated
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.65	Single Validation
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.55	Single Validation
		Develop reasonable performance standards and ways to assess results quality.	0.55	Single Validation
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation
	Teamwork	Shares information, skills and resources with the team.	2.35	Semi-validated
		Helps teammates who ask for support, assistance or need something.	0.55	Single Validation
		Works together with the team to solve problems.	1.1	Single Validation
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.55	Single Validation
		Encourages team to stick together.	1.1	Single Validation

	Full Name	Functioning	Action	Weight	Status
CORDEROS DEL BUEN PASTOR	Fausto Guancarlo Alvarado Cajamarca	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.85	Semi-validated
			Is always open to listen, discuss, negotiate, encourage and motivate others.	1.4	Semi-validated
			Defends the trust and dignity of people, showing respect for their opinions.	1.1	Once validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Once validated
			Finds ways to turn ideal ideas or solutions into reality.	0.3	Once validated
			Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Once validated
		Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Once validated
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.6	Once validated

	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Once validated
	Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Once validated
	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.55	Once validated
Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.4	Semi-validated
	Presents information clearly, concisely and logically, focusing on key points.	0.3	Once validated
	Uses simple language to explain complex or technical concepts.	1.1	Once validated
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.85	Semi-validated
Information management	Examines irrelevant and vague information while maintaining high-quality data.	0.55	Once validated
	Knows where and how to access the right data for a particular use.	0.55	Once validated
	Document clearly the sources and organizes information according to research needs.	0.3	Once validated
Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.85	Semi-validated
	Seek suggestions and ideas from others.	0.3	Once validated
	Values the interests of others through active listening and proposes win-win solutions	0.55	Once validated
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Once validated
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Once validated
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.1	Once validated
	Evaluates proposed actions and timelines against the organization's mission and values.	0.3	Once validated
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Once validated
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.3	Once validated
	Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Once validated
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.55	Once validated
	Contextualizes and analyzes problems before solving them.	0.55	Once validated
Project management	Ensures that resources and skills among staff are available.	0.3	Once validated
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.55	Once validated
	Evaluates the progress and success in comparison with performance standards.	0.3	Once validated
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Once validated
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.3	Once validated

Washington Raimundo Hernández Idrovo	Teamwork	Helps teammates who ask for support, assistance or need something.	0.55	Once validated
		Works together with the team to solve problems.	0.85	Semi-validated
		Shares information, skills and resources with the team.	1.4	Semi-validated
		Encourages team to stick together.	1.1	Once validated
	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.15	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	1.15	Semi-validated
		Defends the trust and dignity of people, showing respect for their opinions.	0.55	Once validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-validated
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.85	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Once validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.3	Once validated
		Uses simple language to explain complex or technical concepts.	1.4	Semi-validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.15	Semi-validated
	Information management	Find trends and relationships between emerging facts.	0.3	Once validated
		Document clearly the sources and organizes information according to research needs.	0.3	Once validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.3	Once validated
		Examines irrelevant and vague information while maintaining high-quality data.	0.55	Once validated
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.85	Semi-validated
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Once validated
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.1	Once validated
		Evaluates proposed actions and timelines against the organization's mission and values.	0.3	Once validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.3	Once validated
	Project management	Evaluates the progress and success in comparison with performance standards.	0.3	Once validated
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.55	Once validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.3	Once validated
	Teamwork	Works together with the team to solve problems.	1.15	Semi-validated
		Shares information, skills and resources with the team.	1.65	Once validated
Encourages team to stick together.		0.55	Once validated	

		Helps teammates who ask for support, assistance or need something.	0.55	Once validated
Mateo Alexander Pizarro Baculima	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.55	Validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.45	Semi-validated
		Defends the trust and dignity of people, showing respect for their opinions.	1.1	Once validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	1.1	Once validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.7	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Once validated
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.3	Validated
		Uses simple language to explain complex or technical concepts.	1.7	Semi-validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.55	Once validated
		Presents information clearly, concisely and logically, focusing on key points.	0.55	Once validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Once validated
	Information management	Knows where and how to access the right data for a particular use.	0.85	Semi-validated
		Find trends and relationships between emerging facts.	0.15	Once validated
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.15	Once validated
		Values the interests of others through active listening and proposes win-win solutions	1.1	Once validated
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Once validated
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.3	Once validated
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Once validated
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.55	Once validated
	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.55	Once validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Once validated
		Evaluates the progress and success in comparison with performance standards.	0.15	Once validated
Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.		0.55	Once validated	
Teamwork	Shares information, skills and resources with the team.	1.95	Semi-validated	
	Works together with the team to solve problems.	1	Validated	

		Encourages team to stick together.	0.55	Once validated
		Helps teammates who ask for support, assistance or need something.	0.55	Once validated

Full Name	Functioning	Action	Weight	Status
Awra Andrea Gabriela Calderón Acosta	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	2	Semi-validated
		Defends the trust and dignity of people, showing respect for their opinions.	1.7	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	1.15	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.6	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.4	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	1.95	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	1.4	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	0.6	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	1.1	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.3	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.8	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.85	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.85	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.85	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.3	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.6	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.55	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	2.25	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.85	Semi-validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.3	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.9	Single Validation
	Information management	Examines irrelevant and vague information while maintaining high-quality data.	1.45	Semi-validated
		Knows where and how to access the right data for a particular use.	3.15	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.95	Semi-validated
		Document clearly the sources and organizes information according to research needs.	0.6	Single Validation
		Find trends and relationships between emerging facts.	0.3	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.1	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	2.25	Semi-validated

			Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.85	Semi-validated		
			Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	1.4	Semi-validated		
			Seek suggestions and ideas from others.	1.1	Single Validation		
			Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.3	Single Validation		
		Planning		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.15	Semi-validated	
				Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.9	Single Validation	
				Evaluates proposed actions and timelines against the organization's mission and values.	0.3	Single Validation	
				Is able to predict the impacts and risks of decisions and actions.	0.3	Single Validation	
				Creates realistic project plans and follows through (accomplishes)	0.6	Single Validation	
		Problem resolution		Contextualizes and analyzes problems before solving them.	1.4	Semi-validated	
				Analyzes problems and identify all facets, including hidden or difficult aspects.	0.85	Semi-validated	
				Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.45	Semi-validated	
				Checks the proposed solutions and possible effects before proceeding with the selection.	0.3	Single Validation	
		Project management		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.85	Semi-validated	
				Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.4	Semi-validated	
				Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.45	Semi-validated	
				Develop reasonable performance standards and ways to assess results quality.	0.9	Single Validation	
				Ensures that resources and skills among staff are available.	1.65	Single Validation	
				Evaluates the progress and success in comparison with performance standards.	0.3	Single Validation	
		Teamwork		Encourages team to stick together.	2.8	Semi-validated	
				Helps teammates who ask for support, assistance or need something.	2.55	Semi-validated	
				Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	2.6	Semi-validated	
				Shares information, skills and resources with the team.	3.95	Semi-validated	
				Works together with the team to solve problems.	0.55	Single Validation	
		Madison Eduardo Herrera Carrión	Buiding positive relationships		Is always open to listen, discuss, negotiate, encourage and motivate others.	2.8	Validated
					Supports and accept the good ideas of others, even if they have a different point of view.	1.55	Validated
					Defends the trust and dignity of people, showing respect for their opinions.	1.4	Semi-validated
					Keeps an open attitude and treats others fairly and respectfully.	0.45	Semi-validated
Creative and innovative thinking			Experiments with new ideas, methodologies and procedures with interest.	1.25	Semi-validated		
			Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.45	Semi-validated		
			Generates unique but viable and useful solutions to complex problems.	0.45	Semi-validated		
			Looks past problems from a new perspective and apply new approaches to solve them.	0.7	Semi-validated		
			Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation		
			Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.15	Single Validation		

	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.55	Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.4	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	0.45	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.7	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.7	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.15	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	3.35	Validated
		Presents information clearly, concisely and logically, focusing on key points.	2.25	Validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.25	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.5	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.7	Semi-validated
	Information management	Knows where and how to access the right data for a particular use.	2.8	Validated
		Examines irrelevant and vague information while maintaining high-quality data.	0.85	Semi-validated
		Find trends and relationships between emerging facts.	1.25	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.7	Semi-validated
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.95	Semi-validated
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.95	Semi-validated
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.7	Semi-validated
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.15	Single Validation
		Seek suggestions and ideas from others.	1.1	Single Validation
	Planning	Is able to predict the impacts and risks of decisions and actions.	1	Validated
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.4	Semi-validated
		Evaluates proposed actions and timelines against the organization's mission and values.	0.85	Semi-validated
		Creates realistic project plans and follows through (accomplishes)	0.45	Semi-validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1	Validated
Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.		1.15	Validated	
Analyzes problems and identify all facets, including hidden or difficult aspects.		0.7	Semi-validated	
Contextualizes and analyzes problems before solving them.		0.7	Semi-validated	
Project management	Evaluates the progress and success in comparison with performance standards.	2.1	Validated	
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.9	Semi-validated	
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.7	Semi-validated	
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.95	Semi-validated	

Erika Viviana Toapanta Bustillos	Teamwork	Develop reasonable performance standards and ways to assess results quality.	0.45	Semi-validated
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.7	Semi-validated
		Ensures that resources and skills among staff are available.	0.55	Single Validation
		Shares information, skills and resources with the team.	4.45	Validated
		Works together with the team to solve problems.	2.1	Validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	2	Validated
		Helps teammates who ask for support, assistance or need something.	1.7	Validated
	Encourages team to stick together.	1.95	Semi-validated	
	Building positive relationships	Keeps an open attitude and treats others fairly and respectfully.	1	Validated
		Defends the trust and dignity of people, showing respect for their opinions.	2.25	Semi-validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.4	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.85	Semi-validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	0.45	Semi-validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.45	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	0.85	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	1.65	Single Validation
	Group leadership	Creates a positive environment in which all people are motivated to do their best.	0.45	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.85	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.85	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.3	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.2	Single Validation
	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	2.4	Validated
Uses simple language to explain complex or technical concepts.		0.85	Semi-validated	
Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.		1.4	Semi-validated	
Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.		1.4	Semi-validated	
Uses appropriate vocabulary and grammar in accordance with the situation.		0.3	Single Validation	
Information management	Knows where and how to access the right data for a particular use.	2.4	Validated	
	Document clearly the sources and organizes information according to research needs.	0.85	Semi-validated	
	Find trends and relationships between emerging facts.	0.85	Semi-validated	
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.85	Semi-validated	
	Examines irrelevant and vague information while maintaining high-quality data.	0.6	Single Validation	
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.1	Single Validation	

		Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.7	Semi-validated
			Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.85	Semi-validated
			Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
			Seek suggestions and ideas from others.	1.65	Single Validation
		Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.7	Semi-validated
			Is able to predict the impacts and risks of decisions and actions.	0.45	Semi-validated
			Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.75	Semi-validated
			Creates realistic project plans and follows through (accomplishes)	0.45	Semi-validated
			Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	2.4	Validated
			Analyzes problems and identify all facets, including hidden or difficult aspects.	0.85	Semi-validated
			Checks the proposed solutions and possible effects before proceeding with the selection.	0.85	Semi-validated
		Project management	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.45	Validated
			Evaluates the progress and success in comparison with performance standards.	0.85	Semi-validated
			Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.85	Semi-validated
			Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.85	Semi-validated
			Develop reasonable performance standards and ways to assess results quality.	0.45	Semi-validated
			Ensures that resources and skills among staff are available.	1.65	Single Validation
			Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.3	Single Validation
		Teamwork	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	2	Validated
			Helps teammates who ask for support, assistance or need something.	1.85	Validated
			Encourages team to stick together.	2.8	Semi-validated
			Works together with the team to solve problems.	0.85	Semi-validated
			Shares information, skills and resources with the team.	4.2	Semi-validated

Full Name		Functioning	Action	Weight	Status
EcoDrím	Saily Yamiled Arana Peñafiel	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	1.1	Single Validation
			Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
			Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
			Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
			Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.55	Single Validation

	Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Information management	Find trends and relationships between emerging facts.	0.55	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	0.55	Single Validation
		Knows where and how to access the right data for a particular use.	1.1	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
		Values the interests of others through active listening and proposes win-win solutions	1.65	Single Validation
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.55	Single Validation
	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.1	Single Validation
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.55	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation
		Ensures that resources and skills among staff are available.	0.55	Single Validation
	Teamwork	Helps teammates who ask for support, assistance or need something.	0.55	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
		Shares information, skills and resources with the team.	1.65	Single Validation

	Full Name	Functioning	Action	Wieght	Status
FARRON Icp ALTERNATIVE	Erika Estefanía Naula Carrión	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	1.65	Single Validation
			Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
			Is always open to listen, discuss, negotiate, encourage and motivate others.	1.1	Single Validation
			Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
		Creative and innovative thinking	Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
			Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Single Validation

		Generates unique but viable and useful solutions to complex problems.	0.55	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.1	Single Validation
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.55	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.55	Single Validation
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
		Presents information clearly, concisely and logically, focusing on key points.	2.2	Single Validation
		Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	2.2	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.55	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	1.1	Single Validation
	Negotiation	Seek suggestions and ideas from others.	1.1	Single Validation
		Values the interests of others through active listening and proposes win-win solutions	1.65	Single Validation
Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.		0.55	Single Validation	
Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.		0.55	Single Validation	
Acts (modulates) appropriately and coherently with the situation, is kind and assertive.		0.55	Single Validation	
Planning	Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation	
	Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation	
	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation	
	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.65	Single Validation	
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.1	Single Validation	

Santiago Iván Pineda Bermeo	Problem resolution	Contextualizes and analyzes problems before solving them.	0.55	Single Validation
		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.65	Single Validation
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation
	Project management	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.1	Single Validation
		Ensures that resources and skills among staff are available.	1.1	Single Validation
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.1	Single Validation
		Develop reasonable performance standards and ways to assess results quality.	0.55	Single Validation
	Teamwork	Encourages team to stick together.	1.65	Single Validation
		Shares information, skills and resources with the team.	3.3	Single Validation
		Helps teammates who ask for support, assistance or need something.	1.1	Single Validation
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.1	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	1.65	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.1	Single Validation
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
		Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
	Creative and innovative thinking	Looks past problems from a new perspective and apply new approaches to solve them.	1.1	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
Finds ways to turn ideal ideas or solutions into reality.		0.55	Single Validation	
Experiments with new ideas, methodologies and procedures with interest.		0.55	Single Validation	
Generates unique but viable and useful solutions to complex problems.		0.55	Single Validation	
Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	1.1	Single Validation	
	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.1	Single Validation	
	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.55	Single Validation	
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation	

	Sees potential in others and seize opportunities to apply and develop this potential.	1.1	Single Validation
	Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.1	Single Validation
	Presents information clearly, concisely and logically, focusing on key points.	1.65	Single Validation
	Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
	Uses simple language to explain complex or technical concepts.	1.65	Single Validation
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.55	Single Validation
Information management	Examines irrelevant and vague information while maintaining high-quality data.	1.1	Single Validation
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Knows where and how to access the right data for a particular use.	1.65	Single Validation
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.55	Single Validation
	Find trends and relationships between emerging facts.	0.55	Single Validation
Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
	Seek suggestions and ideas from others.	0.55	Single Validation
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation
	Values the interests of others through active listening and proposes win-win solutions	1.1	Single Validation
Planning	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.65	Single Validation
	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.65	Single Validation
	Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
	Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
Problem resolution	Contextualizes and analyzes problems before solving them.	1.1	Single Validation
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.1	Single Validation
	Analyzes problems and identify all facets, including hidden or difficult aspects.	1.1	Single Validation
	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.1	Single Validation
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.1	Single Validation
	Ensures that resources and skills among staff are available.	0.55	Single Validation
	Develop reasonable performance standards and ways to assess results quality.	0.55	Single Validation
	Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.55	Single Validation
Teamwork	Shares information, skills and resources with the team.	2.75	Single Validation

Ivonne Carolina Pineda Bermeo		Helps teammates who ask for support, assistance or need something.	1.65	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.1	Single Validation
		Encourages team to stick together.	1.65	Single Validation
	Building positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	3.3	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	2.75	Single Validation
		Supports and accept the good ideas of others, even if they have a different point of view.	1.1	Single Validation
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
	Creative and innovative thinking	Generates unique but viable and useful solutions to complex problems.	0.55	Single Validation
		Experiments with new ideas, methodologies and procedures with interest.	1.65	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	1.65	Single Validation
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.1	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	1.1	Single Validation
	Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	1.1	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	1.1	Single Validation
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.65	Single Validation
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.1	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.2	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.75	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.2	Single Validation
		Presents information clearly, concisely and logically, focusing on key points.	3.3	Single Validation
		Uses appropriate vocabulary and grammar in accordance with the situation.	1.65	Single Validation
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.2	Single Validation
	Information management	Find trends and relationships between emerging facts.	1.1	Single Validation
		Knows where and how to access the right data for a particular use.	2.2	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	1.65	Single Validation
Identifies new lines of search or new data that lead to more complete or successful conclusions.		1.1	Single Validation	

	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.65	Single Validation
	Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
Negotiation	Values the interests of others through active listening and proposes win-win solutions	2.75	Single Validation
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.1	Single Validation
	Seek suggestions and ideas from others.	1.1	Single Validation
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	1.65	Single Validation
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	1.1	Single Validation
Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
	Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	2.75	Single Validation
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	2.2	Single Validation
	Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.1	Single Validation
	Analyzes problems and identify all facets, including hidden or difficult aspects.	1.65	Single Validation
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	2.2	Single Validation
	Contextualizes and analyzes problems before solving them.	1.65	Single Validation
Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.1	Single Validation
	Evaluates the progress and success in comparison with performance standards.	1.1	Single Validation
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.65	Single Validation
	Ensures that resources and skills among staff are available.	0.55	Single Validation
	Develop reasonable performance standards and ways to assess results quality.	0.55	Single Validation
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.1	Single Validation
Teamwork	Helps teammates who ask for support, assistance or need something.	1.65	Single Validation
	Shares information, skills and resources with the team.	4.4	Single Validation
	Encourages team to stick together.	3.3	Single Validation
	Works together with the team to solve problems.	1.1	Single Validation
	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.1	Single Validation

Full Name	Functioning	Action	Weight	Status
Giftyway Bryam Alexander Arguello Verdugo	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.6	Validated
		Defends the trust and dignity of people, showing respect for their opinions.	1.45	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.45	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.3	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	0.85	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.15	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	0.3	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.3	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	0.3	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.35	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.45	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	0.3	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.3	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.3	Single Validation
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.6	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.6	Validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.3	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.6	Validated
		Presents information clearly, concisely and logically, focusing on key points.	1.75	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.3	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	2.2	Validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.85	Semi-validated
Find trends and relationships between emerging facts.		0.75	Semi-validated	
Document clearly the sources and organizes information according to research needs.		0.75	Semi-validated	
Identifies new lines of search or new data that lead to more complete or successful conclusions.		0.6	Single Validation	

		Examines irrelevant and vague information while maintaining high-quality data.	0.6	Single Validation
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.3	Validated
		Seek suggestions and ideas from others.	1.15	Semi-validated
		Values the interests of others through active listening and proposes win-win solutions	0.9	Single Validation
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.3	Single Validation
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.3	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.45	Semi-validated
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.45	Semi-validated
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.6	Single Validation
		Is able to predict the impacts and risks of decisions and actions.	0.3	Single Validation
		Creates realistic project plans and follows through (accomplishes)	0.3	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.3	Validated
		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.45	Semi-validated
		Contextualizes and analyzes problems before solving them.	0.3	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.3	Single Validation
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.15	Semi-validated
		Ensures that resources and skills among staff are available.	1.15	Semi-validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.45	Semi-validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.6	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.3	Single Validation
		Develop reasonable performance standards and ways to assess results quality.	0.3	Single Validation
	Teamwork	Shares information, skills and resources with the team.	2.5	Validated
		Works together with the team to solve problems.	0.75	Semi-validated
		Encourages team to stick together.	1.45	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.6	Single Validation
		Helps teammates who ask for support, assistance or need something.	0.6	Single Validation

Christian Jose Bermeo Tenesaca	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.75	Semi-validated
		Defends the trust and dignity of people, showing respect for their opinions.	0.6	Semi-validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	0.9	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.15	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.7	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	0.45	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	0.7	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	0.15	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	0.15	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.15	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.2	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.75	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.45	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.15	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.15	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.15	Single Validation
	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	0.75	Semi-validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.9	Semi-validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.75	Semi-validated
		Uses simple language to explain complex or technical concepts.	0.7	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.15	Single Validation
	Information management	Find trends and relationships between emerging facts.	0.45	Semi-validated
		Knows where and how to access the right data for a particular use.	1.05	Semi-validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.45	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.7	Semi-validated
Document clearly the sources and organizes information according to research needs.		0.75	Semi-validated	

	Examines irrelevant and vague information while maintaining high-quality data.	0.3	Single Validation
Negotiation	Seek suggestions and ideas from others.	0.45	Semi-validated
	Values the interests of others through active listening and proposes win-win solutions	0.6	Semi-validated
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.15	Single Validation
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.6	Single Validation
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.15	Single Validation
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.6	Semi-validated
	Evaluates proposed actions and timelines against the organization's mission and values.	0.75	Semi-validated
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.3	Single Validation
	Is able to predict the impacts and risks of decisions and actions.	0.15	Single Validation
	Creates realistic project plans and follows through (accomplishes)	0.15	Single Validation
Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.6	Semi-validated
	Checks the proposed solutions and possible effects before proceeding with the selection.	0.6	Single Validation
	Contextualizes and analyzes problems before solving them.	0.15	Single Validation
Project management	Ensures that resources and skills among staff are available.	0.45	Semi-validated
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.75	Semi-validated
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.45	Semi-validated
	Evaluates the progress and success in comparison with performance standards.	0.75	Semi-validated
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.3	Single Validation
	Develop reasonable performance standards and ways to assess results quality.	0.15	Single Validation
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.15	Single Validation
Teamwork	Encourages team to stick together.	0.6	Semi-validated
	Shares information, skills and resources with the team.	1.8	Semi-validated
	Works together with the team to solve problems.	0.75	Semi-validated
	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.3	Single Validation
	Helps teammates who ask for support, assistance or need something.	0.15	Single Validation

Marco Vinicio Salinas Escobar	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.05	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.75	Semi-validated
		Defends the trust and dignity of people, showing respect for their opinions.	0.75	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.3	Single Validation
	Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	0.45	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	0.85	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.3	Single Validation
		Generates unique but viable and useful solutions to complex problems.	0.3	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	0.3	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.3	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.75	Semi-validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.2	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.45	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.3	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.3	Single Validation
	Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	0.3	Single Validation
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.6	Validated
		Uses simple language to explain complex or technical concepts.	1.6	Validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.05	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	1.05	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.3	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	1.5	Semi-validated
		Find trends and relationships between emerging facts.	0.75	Semi-validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.45	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.4	Semi-validated
Document clearly the sources and organizes information according to research needs.		0.75	Semi-validated	

		Examines irrelevant and vague information while maintaining high-quality data.	0.6	Single Validation
	Negotiation	Seek suggestions and ideas from others.	0.45	Semi-validated
		Values the interests of others through active listening and proposes win-win solutions	0.75	Semi-validated
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.6	Single Validation
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.3	Single Validation
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.3	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.45	Semi-validated
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.75	Semi-validated
		Creates realistic project plans and follows through (accomplishes)	0.3	Single Validation
		Is able to predict the impacts and risks of decisions and actions.	0.3	Single Validation
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.6	Single Validation
	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.75	Semi-validated
		Contextualizes and analyzes problems before solving them.	0.3	Single Validation
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.6	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.3	Single Validation
	Project management	Ensures that resources and skills among staff are available.	0.45	Semi-validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.45	Semi-validated
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.45	Semi-validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.6	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.3	Single Validation
		Develop reasonable performance standards and ways to assess results quality.	0.3	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.3	Single Validation
	Teamwork	Encourages team to stick together.	0.75	Semi-validated
		Shares information, skills and resources with the team.	1.95	Semi-validated
		Works together with the team to solve problems.	0.75	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.6	Single Validation

		Helps teammates who ask for support, assistance or need something.	0.6	Single Validation
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JOBAL	Full Name	Functioning	Action	Weight	Status
		Juan Sebastián Andrade Torres	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55
	Is always open to listen, discuss, negotiate, encourage and motivate others.			0.55	Single Validation
	Keeps an open attitude and treats others fairly and respectfully.			0.55	Single Validation
	Defends the trust and dignity of people, showing respect for their opinions.			0.55	Single Validation
	Creative and innovative thinking		Finds ways to turn ideal ideas or solutions into reality.	1.55	Validated
			Experiments with new ideas, methodologies and procedures with interest.	1.4	Semi-validated
			Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-validated
			Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
			Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Single Validation
	Group leadership		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.55	Validated
			Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
			Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
			Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
	Ideas presentation		Presents information clearly, concisely and logically, focusing on key points.	2.1	Validated
			Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.95	Semi-validated
			Uses simple language to explain complex or technical concepts.	1.4	Semi-validated
			Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.4	Semi-validated
			Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
	Information management		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.55	Validated
			Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.4	Semi-validated
			Examines irrelevant and vague information while maintaining high-quality data.	1.1	Single Validation
			Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Knows where and how to access the right data for a particular use.	1.1	Single Validation	
		Find trends and relationships between emerging facts.	0.55	Single Validation	
	Negotiation	Seek suggestions and ideas from others.	1	Validated	

Adonis Beltrán		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation
		Values the interests of others through active listening and proposes win-win solutions	0.55	Single Validation
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.55	Single Validation
		Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation
		Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
		Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Contextualizes and analyzes problems before solving them.	0.55	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation
	Project management	Ensures that resources and skills among staff are available.	1.55	Validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.55	Single Validation
	Teamwork	Shares information, skills and resources with the team.	2.65	Validated
		Helps teammates who ask for support, assistance or need something.	1.1	Single Validation
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.55	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
		Encourages team to stick together.	0.55	Single Validation
	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	2.2	Single Validation
		Supports and accept the good ideas of others, even if they have a different point of view.	1.65	Single Validation
		Defends the trust and dignity of people, showing respect for their opinions.	1.65	Single Validation
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
	Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	1.85	Validated
		Experiments with new ideas, methodologies and procedures with interest.	1.4	Semi-validated
Expresses and graphically represents potential problems and solutions without the need for "real life" examples.		0.85	Semi-validated	
Looks past problems from a new perspective and apply new approaches to solve them.		0.55	Single Validation	
Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.		0.55	Single Validation	
Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.95	Validated	
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.1	Single Validation	

	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.55	Single Validation
	Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
	Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
	Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	3.5	Validated
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.95	Semi-validated
	Uses simple language to explain complex or technical concepts.	3.05	Semi-validated
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.5	Semi-validated
	Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	2.4	Validated
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.4	Semi-validated
	Document clearly the sources and organizes information according to research needs.	1.65	Single Validation
	Examines irrelevant and vague information while maintaining high-quality data.	1.1	Single Validation
	Knows where and how to access the right data for a particular use.	2.2	Single Validation
	Find trends and relationships between emerging facts.	0.55	Single Validation
Negotiation	Seek suggestions and ideas from others.	2.95	Validated
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.65	Single Validation
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
	Values the interests of others through active listening and proposes win-win solutions	1.65	Single Validation
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.65	Single Validation
	Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation
	Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
	Evaluates proposed actions and timelines against the organization's mission and values.	1.1	Single Validation
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.1	Single Validation
	Contextualizes and analyzes problems before solving them.	0.55	Single Validation
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.55	Single Validation
	Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation
Project management	Ensures that resources and skills among staff are available.	2.95	Validated
	Evaluates the progress and success in comparison with performance standards.	1.65	Single Validation
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.55	Single Validation

Adriel Rodrigo Beltrán Estrada		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.65	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.1	Single Validation
	Teamwork	Shares information, skills and resources with the team.	5.7	Validated
		Helps teammates who ask for support, assistance or need something.	1.1	Single Validation
		Works together with the team to solve problems.	2.2	Single Validation
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.55	Single Validation
		Encourages team to stick together.	1.1	Single Validation
	Building positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	1.65	Single Validation
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.65	Single Validation
		Supports and accept the good ideas of others, even if they have a different point of view.	1.1	Single Validation
	Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	2.8	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.7	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	0.7	Semi-validated
Looks past problems from a new perspective and apply new approaches to solve them.		0.55	Single Validation	
Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.		0.55	Single Validation	
Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.8	Semi-validated	
	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.55	Single Validation	
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.65	Single Validation	
	Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation	
	Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation	
	Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation	
Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.35	Semi-validated	
	Uses simple language to explain complex or technical concepts.	2.35	Semi-validated	
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.35	Semi-validated	
	Presents information clearly, concisely and logically, focusing on key points.	3.9	Semi-validated	
	Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation	
Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.25	Semi-validated	
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.7	Semi-validated	
	Examines irrelevant and vague information while maintaining high-quality data.	1.1	Single Validation	

		Knows where and how to access the right data for a particular use.	3.3	Single Validation	
		Document clearly the sources and organizes information according to research needs.	1.1	Single Validation	
		Find trends and relationships between emerging facts.	1.65	Single Validation	
	Negotiation	Seek suggestions and ideas from others.	2.8	Semi-validated	
		Values the interests of others through active listening and proposes win-win solutions	1.65	Single Validation	
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation	
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.65	Single Validation	
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation	
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.65	Single Validation	
		Evaluates proposed actions and timelines against the organization's mission and values.	1.1	Single Validation	
		Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation	
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation	
		Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation	
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.1	Single Validation	
		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.1	Single Validation	
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation	
		Contextualizes and analyzes problems before solving them.	0.55	Single Validation	
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.1	Single Validation	
		Ensures that resources and skills among staff are available.	2.8	Semi-validated	
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.65	Single Validation	
		Evaluates the progress and success in comparison with performance standards.	1.65	Single Validation	
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.55	Single Validation	
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation	
	Teamwork	Shares information, skills and resources with the team.	5.55	Semi-validated	
		Encourages team to stick together.	1.65	Single Validation	
		Works together with the team to solve problems.	1.65	Single Validation	
		Helps teammates who ask for support, assistance or need something.	1.1	Single Validation	
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.55	Single Validation	
	Santiago Renán García Hernández	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
			Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
Finds ways to turn ideal ideas or solutions into reality.			1	Validated	

		Experiments with new ideas, methodologies and procedures with interest.	0.55	Single Validation
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.55	Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	1	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.1	Single Validation
		Uses simple language to explain complex or technical concepts.	1.1	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.1	Single Validation
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.85	Semi-validated
		Knows where and how to access the right data for a particular use.	0.55	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.55	Single Validation
		Find trends and relationships between emerging facts.	0.55	Single Validation
	Negotiation	Seek suggestions and ideas from others.	1	Validated
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Project management	Ensures that resources and skills among staff are available.	1	Validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
Teamwork	Shares information, skills and resources with the team.	1.25	Semi-validated	
	Works together with the team to solve problems.	0.55	Single Validation	

	Full Name	Functioning	Action	Weight	Status
KISAR	Luis Bravo González	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
			Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
		Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.55	Single Validation
			Uses simple language to explain complex or technical concepts.	1.1	Single Validation

		Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
		Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Gustavo Edison Colcha Moreira	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
			Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
		Information management	Find trends and relationships between emerging facts.	0.55	Single Validation
			Knows where and how to access the right data for a particular use.	0.55	Single Validation
		Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
		Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
Problem resolution		Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation	
Project management		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation	
Teamwork	Works together with the team to solve problems.	0.55	Single Validation		

	Full Name	Functioning	Action	Weight	Status
Mifan: cerveza de arroz	Michelle Estefanía Carpio Moreta	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
			Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
		Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.1	Single Validation
			Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.55	Single Validation
			Uses simple language to explain complex or technical concepts.	0.55	Single Validation
		Information management	Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
			Find trends and relationships between emerging facts.	0.55	Single Validation
			Knows where and how to access the right data for a particular use.	0.55	Single Validation
		Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
		Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Project management	Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
			Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation

Anabel Crespo	Teamwork	Shares information, skills and resources with the team.	0.55	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
	Guiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.1	Single Validation
		Defends the trust and dignity of people, showing respect for their opinions.	1.1	Single Validation
		Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
	Creative and innovative thinking	Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
		Experiments with new ideas, methodologies and procedures with interest.	1.1	Single Validation
	Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.1	Single Validation
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.2	Single Validation
		Presents information clearly, concisely and logically, focusing on key points.	1.1	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.1	Single Validation
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.55	Single Validation
	Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.1	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.1	Single Validation
		Find trends and relationships between emerging facts.	0.55	Single Validation
		Knows where and how to access the right data for a particular use.	1.1	Single Validation
	Negotiation	Seek suggestions and ideas from others.	1.1	Single Validation
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.1	Single Validation
		Values the interests of others through active listening and proposes win-win solutions	0.55	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.1	Single Validation
		Contextualizes and analyzes problems before solving them.	0.55	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation
		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.55	Single Validation
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.55	Single Validation
		Ensures that resources and skills among staff are available.	1.1	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation

Yanela Madeleine Toledo Loaiza	Teamwork	Works together with the team to solve problems.	1.1	Single Validation
		Shares information, skills and resources with the team.	1.65	Single Validation
		Encourages team to stick together.	1.1	Single Validation
		Helps teammates who ask for support, assistance or need something.	0.55	Single Validation
	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.55	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.55	Single Validation
		Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Information management	Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Find trends and relationships between emerging facts.	0.55	Single Validation
		Knows where and how to access the right data for a particular use.	0.55	Single Validation
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
	Teamwork	Works together with the team to solve problems.	0.55	Single Validation
Shares information, skills and resources with the team.		0.55	Single Validation	

Full Name	Functioning	Action	Weight	Status
RUNAI ALIMENTOS FUNCIONALES Edison Rolando Simba Nasimba	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.55	Validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.85	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.3	Single Validation
		Defends the trust and dignity of people, showing respect for their opinions.	1.1	Single Validation
	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	0.45	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.45	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.65	Single Validation
		Generates unique but viable and useful solutions to complex problems.	0.3	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.3	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1	Validated
Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.		2.65	Validated	

			Creates a positive environment in which all people are motivated to do their best.	0.3	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	3.65	Validated
			Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.55	Validated
			Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	3.1	Validated
			Presents information clearly, concisely and logically, focusing on key points.	1.95	Semi-validated
			Document clearly the sources and organizes information according to research needs.	2.1	Validated
		Information management	Knows where and how to access the right data for a particular use.	2.95	Validated
			Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.55	Validated
			Find trends and relationships between emerging facts.	0.45	Semi-validated
			Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.65	Single Validation
			Examines irrelevant and vague information while maintaining high-quality data.	0.3	Single Validation
			Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.55
		Seek suggestions and ideas from others.		1.65	Single Validation
		Values the interests of others through active listening and proposes win-win solutions		1.1	Single Validation
		Planning	Evaluates proposed actions and timelines against the organization's mission and values.	1.55	Validated
			Creates realistic project plans and follows through (accomplishes)	0.3	Single Validation
			Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.1	Single Validation
			Is able to predict the impacts and risks of decisions and actions.	0.3	Single Validation
			Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.3	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	2.1	Validated
			Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.4	Semi-validated
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1	Validated
			Evaluates the progress and success in comparison with performance standards.	1.55	Validated
			Ensures that resources and skills among staff are available.	1.65	Single Validation
			Develop reasonable performance standards and ways to assess results quality.	0.3	Single Validation
			Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.6	Single Validation
			Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.1	Single Validation
		Teamwork	Shares information, skills and resources with the team.	4.85	Validated
			Works together with the team to solve problems.	2.1	Validated
			Encourages team to stick together.	0.55	Single Validation
			Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.6	Single Validation
			Helps teammates who ask for support, assistance or need something.	0.3	Single Validation
		Mayra Vanessa Villegas Valencia	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	0.85
Supports and accept the good ideas of others, even if they have a different point of view.	0.85			Semi-validated	
Defends the trust and dignity of people, showing respect for their opinions.	0.55			Single Validation	

	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	0.85	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.85	Semi-validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.85	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
	Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.15	Semi-validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.7	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	1.1	Single Validation
		Uses simple language to explain complex or technical concepts.	0.6	Single Validation
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
	Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.85	Semi-validated
		Find trends and relationships between emerging facts.	0.85	Semi-validated
		Document clearly the sources and organizes information according to research needs.	0.3	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	0.55	Single Validation
		Knows where and how to access the right data for a particular use.	0.3	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.85	Semi-validated
Seek suggestions and ideas from others.		0.55	Single Validation	
Values the interests of others through active listening and proposes win-win solutions		0.55	Single Validation	
Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.		0.55	Single Validation	
Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.		0.55	Single Validation	
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.55	Single Validation	
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation	
	Evaluates proposed actions and timelines against the organization's mission and values.	0.3	Single Validation	
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.85	Semi-validated	
	Contextualizes and analyzes problems before solving them.	0.55	Single Validation	
	Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation	
Project management	Evaluates the progress and success in comparison with performance standards.	0.3	Single Validation	
	Ensures that resources and skills among staff are available.	0.55	Single Validation	
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.3	Single Validation	
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation	

	Teamwork	Shares information, skills and resources with the team.	1.95	Semi-validated
		Works together with the team to solve problems.	0.85	Semi-validated
		Encourages team to stick together.	0.55	Single Validation
		Helps teammates who ask for support, assistance or need something.	0.55	Single Validation

Full Name	Functioning	Action	Weight	Status
Smartlux Pablo Andrés Lupericio Campoverde	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	3.2	Validated
		Defends the trust and dignity of people, showing respect for their opinions.	1.8	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	1.95	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1	Validated
		Experiments with new ideas, methodologies and procedures with interest.	1.55	Validated
		Generates unique but viable and useful solutions to complex problems.	0.55	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	0.15	Single Validation
	Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	0.7	Semi-validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.95	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.95	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.15	Single Validation
	Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.95	Validated
		Uses simple language to explain complex or technical concepts.	3.5	Validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.4	Validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	1.25	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	1.8	Semi-validated
	Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1	Validated
		Knows where and how to access the right data for a particular use.	1.95	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	1.25	Semi-validated
		Document clearly the sources and organizes information according to research needs.	1.4	Semi-validated
		Find trends and relationships between emerging facts.	1.4	Semi-validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.8	Semi-validated
Acts (modulates) appropriately and coherently with the situation, is kind and assertive.		1.95	Semi-validated	

José Fernando Mora Flores		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.7	Semi-validated
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.15	Single Validation
		Seek suggestions and ideas from others.	0.55	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	1.95	Semi-validated
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.7	Semi-validated
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.25	Semi-validated
		Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
		Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
	Problem resolution	Analyzes problems and identify all facets, including hidden or difficult aspects.	0.7	Semi-validated
		Contextualizes and analyzes problems before solving them.	1.25	Semi-validated
		Checks the proposed solutions and possible effects before proceeding with the selection.	1.4	Semi-validated
		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.1	Single Validation
	Project management	Evaluates the progress and success in comparison with performance standards.	1.4	Semi-validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.4	Semi-validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.1	Single Validation
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	0.55	Single Validation
		Develop reasonable performance standards and ways to assess results quality.	0.55	Single Validation
		Ensures that resources and skills among staff are available.	0.55	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.15	Single Validation
	Teamwork	Shares information, skills and resources with the team.	3.2	Validated
		Works together with the team to solve problems.	1.4	Semi-validated
		Encourages team to stick together.	1.25	Semi-validated
		Helps teammates who ask for support, assistance or need something.	0.7	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.1	Single Validation
	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	0.55	Single Validation
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	1.3	Validated	
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.3	Validated	
	Generates unique but viable and useful solutions to complex problems.	0.55	Single Validation	
	Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation	

	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.65	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
	Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	1.85	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.85	Validated
		Uses simple language to explain complex or technical concepts.	1.7	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	1.65	Single Validation
	Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.3	Validated
		Knows where and how to access the right data for a particular use.	1.1	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Find trends and relationships between emerging facts.	0.55	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	0.55	Single Validation
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
		Seek suggestions and ideas from others.	1.1	Single Validation
	Planning	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation
		Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
		Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
		Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.55	Single Validation
Checks the proposed solutions and possible effects before proceeding with the selection.		0.55	Single Validation	
Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation	
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.1	Single Validation	
	Develop reasonable performance standards and ways to assess results quality.	0.55	Single Validation	
	Ensures that resources and skills among staff are available.	0.55	Single Validation	
	Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation	
Teamwork	Works together with the team to solve problems.	0.55	Single Validation	
	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.1	Single Validation	
	Shares information, skills and resources with the team.	1.1	Single Validation	
	Helps teammates who ask for support, assistance or need something.	0.55	Single Validation	

Ta	Full Name	Functioning	Action	Weight	Status
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John Kener Landázuri Cuero	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.3	Single Validation
		Is always open to listen, discuss, negotiate, encourage and motivate others.	0.3	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	0.3	Single Validation
		Presents information clearly, concisely and logically, focusing on key points.	0.3	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	0.3	Single Validation
		Find trends and relationships between emerging facts.	0.3	Single Validation
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.55	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.3	Single Validation
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.3	Single Validation
	Planning	Evaluates proposed actions and timelines against the organization's mission and values.	0.3	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.3	Single Validation
Project management	Ensures that resources and skills among staff are available.	0.3	Single Validation	
Teamwork	Works together with the team to solve problems.	0.3	Single Validation	
	Shares information, skills and resources with the team.	0.3	Single Validation	
Josué Jesús Valencia González	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	3.6	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.45	Semi-validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	3.05	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	1.25	Semi-validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.7	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	1	Validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.45	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	0.7	Semi-validated
		Experiments with new ideas, methodologies and procedures with interest.	0.7	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.25	Semi-validated
	Group leadership	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	2.35	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	0.45	Semi-validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.5	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	1.25	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.25	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.7	Semi-validated
	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	2.4	Validated
Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.		2.5	Semi-validated	
Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.		1.95	Semi-validated	
Uses simple language to explain complex or technical concepts.		3.6	Semi-validated	

	Uses appropriate vocabulary and grammar in accordance with the situation.	0.7	Semi-validated
Information management	Knows where and how to access the right data for a particular use.	4.05	Validated
	Examines irrelevant and vague information while maintaining high-quality data.	1.15	Validated
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.25	Semi-validated
	Document clearly the sources and organizes information according to research needs.	1.8	Semi-validated
	Find trends and relationships between emerging facts.	1.8	Semi-validated
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.7	Semi-validated
	Negotiation	Seek suggestions and ideas from others.	0.7
Acts (modulates) appropriately and coherently with the situation, is kind and assertive.		2.35	Semi-validated
Values the interests of others through active listening and proposes win-win solutions		3.05	Semi-validated
Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.		1.25	Semi-validated
Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.		1.25	Semi-validated
Planning	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	2.25	Validated
	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	2.5	Semi-validated
	Creates realistic project plans and follows through (accomplishes)	0.45	Semi-validated
	Is able to predict the impacts and risks of decisions and actions.	0.45	Semi-validated
	Evaluates proposed actions and timelines against the organization's mission and values.	1.25	Semi-validated
Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	2.8	Validated
	Checks the proposed solutions and possible effects before proceeding with the selection.	1.25	Semi-validated
	Contextualizes and analyzes problems before solving them.	1.25	Semi-validated
	Analyzes problems and identify all facets, including hidden or difficult aspects.	1.25	Semi-validated
Project management	Develop reasonable performance standards and ways to assess results quality.	1	Validated
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.45	Validated
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.25	Semi-validated
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.8	Semi-validated
	Ensures that resources and skills among staff are available.	1.25	Semi-validated
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	2.35	Semi-validated
	Evaluates the progress and success in comparison with performance standards.	1.25	Semi-validated
Teamwork	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.45	Validated
	Helps teammates who ask for support, assistance or need something.	1.7	Validated
	Encourages team to stick together.	3.6	Semi-validated
	Shares information, skills and resources with the team.	6.65	Semi-validated
	Works together with the team to solve problems.	1.8	Semi-validated

Full Name	Functioning	Action	Weight	Status
David Aguirre	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1	Validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1	Validated
		Keeps an open attitude and treats others fairly and respectfully.	1.8	Semi-validated
		Defends the trust and dignity of people, showing respect for their opinions.	0.55	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2.65	Validated
		Experiments with new ideas, methodologies and procedures with interest.	2.65	Validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	1.25	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	0.7	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	0.55	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	1.8	Semi-validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.7	Semi-validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.15	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.55	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.55	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	3.65	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	3.35	Validated
		Presents information clearly, concisely and logically, focusing on key points.	1.8	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	2.65	Validated
	Information management	Knows where and how to access the right data for a particular use.	1.4	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	1.8	Semi-validated
		Document clearly the sources and organizes information according to research needs.	0.15	Single Validation
		Find trends and relationships between emerging facts.	0.15	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.45	Semi-validated
	Negotiation	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.55	Single Validation
		Values the interests of others through active listening and proposes win-win solutions	0.55	Single Validation
Creates realistic project plans and follows through (accomplishes)		1.8	Semi-validated	
Planning	Is able to predict the impacts and risks of decisions and actions.	1.25	Semi-validated	
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.25	Semi-validated	
	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.55	Single Validation	

	Problem resolution	Evaluates proposed actions and timelines against the organization's mission and values.	0.15	Single Validation
		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	0.7	Semi-validated
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.15	Single Validation
		Contextualizes and analyzes problems before solving them.	0.55	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.55	Single Validation
	Project management	Develop reasonable performance standards and ways to assess results quality.	0.7	Semi-validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.95	Semi-validated
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.55	Single Validation
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation
		Ensures that resources and skills among staff are available.	0.55	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.15	Single Validation
	Teamwork	Works together with the team to solve problems.	0.7	Semi-validated
		Shares information, skills and resources with the team.	1.8	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	2.5	Semi-validated
		Helps teammates who ask for support, assistance or need something.	2.35	Semi-validated
Encourages team to stick together.		0.55	Single Validation	
Gabriela Álvarez	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	2.25	Validated
		Defends the trust and dignity of people, showing respect for their opinions.	3.9	Validated
		Supports and accept the good ideas of others, even if they have a different point of view.	1	Validated
		Keeps an open attitude and treats others fairly and respectfully.	1.25	Semi-validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2.1	Validated
		Experiments with new ideas, methodologies and procedures with interest.	3.2	Validated
		Looks past problems from a new perspective and apply new approaches to solve them.	1.25	Semi-validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.7	Semi-validated
	Group leadership	Finds ways to turn ideal ideas or solutions into reality.	2.9	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	2.1	Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	3.05	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	1.25	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	1.25	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.7	Semi-validated
	Ideas presentation	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.15	Single Validation
Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.		3.9	Validated	
Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.		3.9	Validated	
	Uses simple language to explain complex or technical concepts.	3.35	Validated	

		Presents information clearly, concisely and logically, focusing on key points.	4.85	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	1.25	Semi-validated
Information management		Knows when more information is needed and when enough has been gathered to reach a conclusion.	2.65	Validated
		Knows where and how to access the right data for a particular use.	2.4	Validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	2.9	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	1.4	Semi-validated
		Find trends and relationships between emerging facts.	0.15	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.15	Single Validation
	Negotiation		Values the interests of others through active listening and proposes win-win solutions	3.9
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.7	Semi-validated
		Seek suggestions and ideas from others.	2.9	Semi-validated
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	1.25	Semi-validated
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.15	Single Validation
Planning		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	2.8	Validated
		Is able to predict the impacts and risks of decisions and actions.	0.7	Semi-validated
		Creates realistic project plans and follows through (accomplishes)	0.7	Semi-validated
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.25	Semi-validated
		Evaluates proposed actions and timelines against the organization's mission and values.	0.15	Single Validation
Problem resolution		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.55	Validated
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.7	Semi-validated
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.45	Semi-validated
		Contextualizes and analyzes problems before solving them.	1.25	Semi-validated
Project management		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	2.65	Validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.8	Semi-validated
		Ensures that resources and skills among staff are available.	2.35	Semi-validated
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.7	Semi-validated
		Evaluates the progress and success in comparison with performance standards.	0.15	Single Validation
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation
Teamwork		Shares information, skills and resources with the team.	6.4	Validated
		Encourages team to stick together.	3.9	Validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.8	Semi-validated
		Helps teammates who ask for support, assistance or need something.	2.5	Semi-validated
		Works together with the team to solve problems.	0.7	Semi-validated
Patricio Bolagay Molina	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.95	Semi-validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.4	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation

Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	0.85	Semi-validated
	Experiments with new ideas, methodologies and procedures with interest.	1.65	Single Validation
	Finds ways to turn ideal ideas or solutions into reality.	0.3	Single Validation
	Experiments with new ideas, methodologies and procedures with interest.	0.55	Single Validation
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.65	Single Validation
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.95	Semi-validated
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.1	Single Validation
	Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation
	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.3	Single Validation
Ideas presentation	Uses simple language to explain complex or technical concepts.	4.15	Semi-validated
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	3.05	Semi-validated
	Presents information clearly, concisely and logically, focusing on key points.	0.85	Semi-validated
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	3.6	Semi-validated
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	0.55	Single Validation
	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.55	Single Validation
Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.85	Semi-validated
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.1	Single Validation
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.65	Single Validation
	Find trends and relationships between emerging facts.	1.65	Single Validation
	Knows where and how to access the right data for a particular use.	1.65	Single Validation
	Document clearly the sources and organizes information according to research needs.	1.1	Single Validation
Negotiation	Seek suggestions and ideas from others.	0.85	Semi-validated
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.1	Single Validation
	Seek suggestions and ideas from others.	0.3	Single Validation
Planning	Evaluates proposed actions and timelines against the organization's mission and values.	1.4	Semi-validated
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.1	Single Validation
Project management	Ensures that resources and skills among staff are available.	0.85	Semi-validated
	Evaluates the progress and success in comparison with performance standards.	1.65	Single Validation
	Ensures that resources and skills among staff are available.	0.3	Single Validation
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.1	Single Validation
Teamwork	Shares information, skills and resources with the team.	2.8	Semi-validated
	Works together with the team to solve problems.	1.4	Semi-validated
	Helps teammates who ask for support, assistance or need something.	0.55	Single Validation
	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	0.55	Single Validation
	Defends the trust and dignity of people, showing respect for their opinions.	1.7	Validated

Shanonn Cárdenas	Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	0.85	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.7	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.15	Single Validation
	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	1.55	Validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.15	Single Validation
		Finds ways to turn ideal ideas or solutions into reality.	1.25	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.8	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	0.15	Single Validation
		Generates unique but viable and useful solutions to complex problems.	0.15	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.85	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.25	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	0.7	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.15	Single Validation
		Sees potential in others and seize opportunities to apply and develop this potential.	0.15	Single Validation
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.15	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.8	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	2.8	Validated
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.5	Semi-validated
		Presents information clearly, concisely and logically, focusing on key points.	1	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.15	Single Validation
	Information management	Knows where and how to access the right data for a particular use.	1.7	Validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.25	Semi-validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	0.7	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	0.3	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.15	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.7	Validated
		Seek suggestions and ideas from others.	0.7	Semi-validated
Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.		0.15	Single Validation	
Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.		0.15	Single Validation	
Acts (modulates) appropriately and coherently with the situation, is kind and assertive.		0.15	Single Validation	
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.7	Validated	
	Creates realistic project plans and follows through (accomplishes)	0.7	Semi-validated	
	Is able to predict the impacts and risks of decisions and actions.	0.15	Single Validation	
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.3	Single Validation	
	Evaluates proposed actions and timelines against the organization's mission and values.	0.15	Single Validation	

	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.7	Validated
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.15	Single Validation
		Analyzes problems and identify all facets, including hidden or difficult aspects.	0.15	Single Validation
		Contextualizes and analyzes problems before solving them.	0.15	Single Validation
	Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.55	Validated
		Ensures that resources and skills among staff are available.	0.7	Semi-validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.85	Semi-validated
		Develop reasonable performance standards and ways to assess results quality.	0.15	Single Validation
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.15	Single Validation
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.15	Single Validation
	Teamwork	Encourages team to stick together.	1.7	Validated
		Shares information, skills and resources with the team.	3.1	Validated
		Helps teammates who ask for support, assistance or need something.	0.85	Semi-validated
		Works together with the team to solve problems.	0.7	Semi-validated
Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.		1.4	Semi-validated	
Paola Carrera	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	4.45	Validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	2.65	Validated
		Keeps an open attitude and treats others fairly and respectfully.	1.8	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	3.05	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	1.8	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.8	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2.5	Semi-validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	1.8	Semi-validated
		Generates unique but viable and useful solutions to complex problems.	1.1	Single Validation
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	2.65	Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.65	Validated
		Creates a positive environment in which all people are motivated to do their best.	1.8	Semi-validated
		Conveys confidence in a group's ability to face challenges and achieve goals.	1.8	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	1.65	Single Validation
		Presents information clearly, concisely and logically, focusing on key points.	5.7	Validated
	Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	3.75	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	3.75	Validated
		Uses simple language to explain complex or technical concepts.	3.05	Semi-validated

		Uses appropriate vocabulary and grammar in accordance with the situation.	1.8	Semi-validated
Information management		Knows where and how to access the right data for a particular use.	5	Validated
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	3.05	Semi-validated
		Examines irrelevant and vague information while maintaining high-quality data.	3.3	Single Validation
		Document clearly the sources and organizes information according to research needs.	0.55	Single Validation
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.65	Single Validation
		Find trends and relationships between emerging facts.	0.55	Single Validation
	Negotiation		Values the interests of others through active listening and proposes win-win solutions	4.45
		Seek suggestions and ideas from others.	2.1	Validated
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	1.8	Semi-validated
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	1.8	Semi-validated
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.55	Single Validation
Planning		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	3.05	Semi-validated
		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	4.15	Semi-validated
		Creates realistic project plans and follows through (accomplishes)	1.8	Semi-validated
		Is able to predict the impacts and risks of decisions and actions.	1.65	Single Validation
		Evaluates proposed actions and timelines against the organization's mission and values.	0.55	Single Validation
Problem resolution		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	3.75	Validated
		Contextualizes and analyzes problems before solving them.	1.8	Semi-validated
		Analyzes problems and identify all facets, including hidden or difficult aspects.	1.65	Single Validation
		Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
Project management		Ensures that resources and skills among staff are available.	2.1	Validated
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	2.65	Validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	3.05	Semi-validated
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.8	Semi-validated
		Develop reasonable performance standards and ways to assess results quality.	1.1	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.55	Single Validation
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
Teamwork		Encourages team to stick together.	4.3	Validated
		Shares information, skills and resources with the team.	7.1	Validated
		Helps teammates who ask for support, assistance or need something.	3.6	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	3.05	Semi-validated
		Works together with the team to solve problems.	0.55	Single Validation
Daniel Endara	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	2.35	Semi-validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.25	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.8	Semi-validated

Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	2.9	Semi-validated	
	Finds ways to turn ideal ideas or solutions into reality.	1.65	Single Validation	
Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.35	Semi-validated	
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.1	Single Validation	
Ideas presentation	Uses simple language to explain complex or technical concepts.	3.6	Semi-validated	
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.5	Semi-validated	
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	3.05	Semi-validated	
	Presents information clearly, concisely and logically, focusing on key points.	1.1	Single Validation	
Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	2.9	Semi-validated	
	Knows where and how to access the right data for a particular use.	1.25	Semi-validated	
	Document clearly the sources and organizes information according to research needs.	0.7	Semi-validated	
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.65	Single Validation	
	Find trends and relationships between emerging facts.	1.1	Single Validation	
Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	1.25	Semi-validated	
	Seek suggestions and ideas from others.	1.1	Single Validation	
Planning	Evaluates proposed actions and timelines against the organization's mission and values.	1.65	Single Validation	
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.25	Semi-validated	
Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.25	Semi-validated	
	Ensures that resources and skills among staff are available.	1.65	Single Validation	
	Evaluates the progress and success in comparison with performance standards.	1.1	Single Validation	
Teamwork	Works together with the team to solve problems.	1.8	Semi-validated	
	Shares information, skills and resources with the team.	2.9	Semi-validated	
Victoria Izquieta	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	1.7	Validated
		Defends the trust and dignity of people, showing respect for their opinions.	3.05	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.45	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	1.1	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.55	Validated
		Experiments with new ideas, methodologies and procedures with interest.	1.25	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.25	Semi-validated
		Looks past problems from a new perspective and apply new approaches to solve them.	1.25	Semi-validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
	Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	1.25	Semi-validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.85	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.8	Semi-validated
Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.		0.15	Single Validation	

	Creates a positive environment in which all people are motivated to do their best.	1.1	Single Validation
	Sees potential in others and seize opportunities to apply and develop this potential.	0.55	Single Validation
Ideas presentation	Uses simple language to explain complex or technical concepts.	3.65	Validated
	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	2.1	Validated
	Presents information clearly, concisely and logically, focusing on key points.	1.95	Semi-validated
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	3.05	Semi-validated
	Uses appropriate vocabulary and grammar in accordance with the situation.	1.25	Semi-validated
Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	2.5	Semi-validated
	Knows where and how to access the right data for a particular use.	1.8	Semi-validated
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.25	Semi-validated
	Examines irrelevant and vague information while maintaining high-quality data.	1.1	Single Validation
	Document clearly the sources and organizes information according to research needs.	0.15	Single Validation
	Find trends and relationships between emerging facts.	0.15	Single Validation
Negotiation	Values the interests of others through active listening and proposes win-win solutions	3.05	Semi-validated
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	1.25	Semi-validated
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	1.25	Semi-validated
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.7	Semi-validated
	Seek suggestions and ideas from others.	1.25	Semi-validated
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	3.05	Semi-validated
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	1.25	Semi-validated
	Creates realistic project plans and follows through (accomplishes)	1.1	Single Validation
	Is able to predict the impacts and risks of decisions and actions.	0.55	Single Validation
Problem resolution	Analyzes problems and identify all facets, including hidden or difficult aspects.	0.7	Semi-validated
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1.25	Semi-validated
	Contextualizes and analyzes problems before solving them.	1.25	Semi-validated
	Checks the proposed solutions and possible effects before proceeding with the selection.	0.15	Single Validation
Project management	Ensures that resources and skills among staff are available.	1.25	Semi-validated
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.25	Semi-validated
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.25	Semi-validated
	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation
	Evaluates the progress and success in comparison with performance standards.	0.15	Single Validation
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.65	Single Validation
Teamwork	Works together with the team to solve problems.	1	Validated
	Shares information, skills and resources with the team.	4.3	Semi-validated
	Helps teammates who ask for support, assistance or need something.	1.8	Semi-validated

Anthony Fabricio Loyaga Suntaxi		Encourages team to stick together.	3.05	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.65	Single Validation
	Building positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	2.65	Validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	1.25	Semi-validated
		Supports and accept the good ideas of others, even if they have a different point of view.	0.7	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	1.1	Single Validation
	Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	0.7	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
		Experiments with new ideas, methodologies and procedures with interest.	1.1	Single Validation
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	0.55	Single Validation
	Group leadership	Creates a positive environment in which all people are motivated to do their best.	1.1	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.7	Semi-validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.65	Single Validation
	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	0.85	Semi-validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	0.55	Single Validation
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	1.1	Single Validation
		Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	0.55	Single Validation
		Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Information management	Document clearly the sources and organizes information according to research needs.	0.7	Semi-validated
		Knows where and how to access the right data for a particular use.	1.8	Semi-validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
		Knows when more information is needed and when enough has been gathered to reach a conclusion.	1.1	Single Validation
		Examines irrelevant and vague information while maintaining high-quality data.	0.55	Single Validation
		Find trends and relationships between emerging facts.	0.55	Single Validation
	Negotiation	Values the interests of others through active listening and proposes win-win solutions	2.1	Validated
		Seek suggestions and ideas from others.	0.85	Semi-validated
		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	0.15	Single Validation
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
	Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	1.55	Validated
		Creates realistic project plans and follows through (accomplishes)	1.1	Single Validation
Is able to predict the impacts and risks of decisions and actions.		0.55	Single Validation	
Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.		0.55	Single Validation	
Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1	Validated	
	Checks the proposed solutions and possible effects before proceeding with the selection.	0.15	Single Validation	
Project management	Ensures that resources and skills among staff are available.	1	Validated	

		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.55	Validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation
		Evaluates the progress and success in comparison with performance standards.	0.15	Single Validation
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	0.55	Single Validation
	Teamwork	Shares information, skills and resources with the team.	3.05	Semi-validated
		Encourages team to stick together.	1.95	Semi-validated
		Works together with the team to solve problems.	0.7	Semi-validated
		Helps teammates who ask for support, assistance or need something.	1.65	Single Validation
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.65	Single Validation
Cristian Ron	Buiding positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	2.1	Validated
		Defends the trust and dignity of people, showing respect for their opinions.	5.3	Validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	4.2	Validated
		Keeps an open attitude and treats others fairly and respectfully.	1.95	Semi-validated
	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	5.95	Validated
		Looks past problems from a new perspective and apply new approaches to solve them.	1.8	Semi-validated
		Finds ways to turn ideal ideas or solutions into reality.	1.8	Semi-validated
		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	5.1	Semi-validated
		Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	1.65	Single Validation
		Generates unique but viable and useful solutions to complex problems.	1.1	Single Validation
	Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	2.1	Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	3.35	Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	2.1	Validated
		Links the mission, vision, values, objectives and strategies to the daily work in the organization.	2.9	Semi-validated
		Creates a positive environment in which all people are motivated to do their best.	1.95	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	1.8	Semi-validated
	Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	6.95	Validated
		Uses simple language to explain complex or technical concepts.	7.75	Validated
		Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	7.05	Validated
		Presents information clearly, concisely and logically, focusing on key points.	5.85	Validated
		Uses appropriate vocabulary and grammar in accordance with the situation.	2.1	Validated
	Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	5.95	Validated
		Knows where and how to access the right data for a particular use.	6.1	Validated
		Identifies new lines of search or new data that lead to more complete or successful conclusions.	2.1	Validated
		Examines irrelevant and vague information while maintaining high-quality data.	3.45	Semi-validated
		Find trends and relationships between emerging facts.	1.8	Semi-validated

		Document clearly the sources and organizes information according to research needs.	1.1	Single Validation
Negotiation		Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	2.1	Validated
		Values the interests of others through active listening and proposes win-win solutions	5.3	Validated
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	2.1	Validated
		Seek suggestions and ideas from others.	2.1	Validated
		Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	1.8	Semi-validated
Planning		Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	4.15	Semi-validated
		Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	2.9	Semi-validated
		Evaluates proposed actions and timelines against the organization's mission and values.	1.8	Semi-validated
		Is able to predict the impacts and risks of decisions and actions.	1.95	Semi-validated
		Creates realistic project plans and follows through (accomplishes)	1.65	Single Validation
Problem resolution		Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	4.3	Validated
		Checks the proposed solutions and possible effects before proceeding with the selection.	1.25	Semi-validated
		Analyzes problems and identify all facets, including hidden or difficult aspects.	1.8	Semi-validated
		Contextualizes and analyzes problems before solving them.	1.8	Semi-validated
Project management		Evaluates the progress and success in comparison with performance standards.	1.55	Validated
		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	2.1	Validated
		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	3.2	Validated
		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	2.1	Validated
		Integrates the ideas and needs of others in developing viable strategies to achieve goals.	3.05	Semi-validated
		Ensures that resources and skills among staff are available.	1.8	Semi-validated
		Develop reasonable performance standards and ways to assess results quality.	1.1	Single Validation
		Encourages team to stick together.	5.3	Validated
Teamwork		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	8.35	Validated
		Helps teammates who ask for support, assistance or need something.	4.05	Validated
		Works together with the team to solve problems.	2.1	Validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	3.35	Semi-validated
Paula Salazar Costa	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	2.25	Validated
		Is always open to listen, discuss, negotiate, encourage and motivate others.	0.7	Semi-validated
		Keeps an open attitude and treats others fairly and respectfully.	0.55	Single Validation
	Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	0.55	Single Validation
		Looks past problems from a new perspective and apply new approaches to solve them.	0.15	Single Validation
	Group leadership	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	0.7	Semi-validated
		Sees potential in others and seize opportunities to apply and develop this potential.	0.15	Single Validation
		Conveys confidence in a group's ability to face challenges and achieve goals.	0.15	Single Validation
		Creates a positive environment in which all people are motivated to do their best.	0.55	Single Validation

	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	0.7	Semi-validated
	Uses appropriate vocabulary and grammar in accordance with the situation.	0.7	Semi-validated
Information management	Knows where and how to access the right data for a particular use.	0.45	Semi-validated
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Examines irrelevant and vague information while maintaining high-quality data.	0.55	Single Validation
Negotiation	Values the interests of others through active listening and proposes win-win solutions	1.7	Validated
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	0.7	Semi-validated
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	0.55	Single Validation
	Seek suggestions and ideas from others.	0.55	Single Validation
Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	0.6	Semi-validated
	Creates realistic project plans and follows through (accomplishes)	0.55	Single Validation
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	0.55	Single Validation
Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	1	Validated
	Contextualizes and analyzes problems before solving them.	0.7	Semi-validated
	Analyzes problems and identify all facets, including hidden or difficult aspects.	0.15	Single Validation
Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1	Validated
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	0.7	Semi-validated
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	1.1	Single Validation
Teamwork	Encourages team to stick together.	1.55	Validated
	Shares information, skills and resources with the team.	1.4	Semi-validated
	Helps teammates who ask for support, assistance or need something.	1.25	Semi-validated
	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	1.1	Single Validation
Building positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	3.2	Validated
	Is always open to listen, discuss, negotiate, encourage and motivate others.	4.45	Validated
	Supports and accept the good ideas of others, even if they have a different point of view.	2.65	Validated
	Keeps an open attitude and treats others fairly and respectfully.	2.2	Single Validation
Creative and innovative thinking	Finds ways to turn ideal ideas or solutions into reality.	3.2	Validated
	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	4.45	Semi-validated
	Experiments with new ideas, methodologies and procedures with interest.	5	Semi-validated
	Looks past problems from a new perspective and apply new approaches to solve them.	1.8	Semi-validated
	Connects ideas, events, circumstances that are apparently unrelated, to find global solutions to individual problems.	2.2	Single Validation
	Generates unique but viable and useful solutions to complex problems.	1.1	Single Validation
Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	5.7	Validated
	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	2.35	Semi-validated

	Conveys confidence in a group's ability to face challenges and achieve goals.	1.8	Semi-validated
	Sees potential in others and seize opportunities to apply and develop this potential.	1.8	Semi-validated
	Creates a positive environment in which all people are motivated to do their best.	2.2	Single Validation
	Links the mission, vision, values, objectives and strategies to the daily work in the organization.	1.65	Single Validation
Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	6.8	Validated
	Presents information clearly, concisely and logically, focusing on key points.	7.75	Validated
	Uses simple language to explain complex or technical concepts.	7.65	Validated
	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	7.5	Semi-validated
	Uses appropriate vocabulary and grammar in accordance with the situation.	1.8	Semi-validated
Information management	Knows where and how to access the right data for a particular use.	6.25	Validated
	Find trends and relationships between emerging facts.	2.65	Validated
	Identifies new lines of search or new data that lead to more complete or successful conclusions.	3.2	Validated
	Knows when more information is needed and when enough has been gathered to reach a conclusion.	4.45	Semi-validated
	Examines irrelevant and vague information while maintaining high-quality data.	4.55	Semi-validated
	Document clearly the sources and organizes information according to research needs.	2.35	Semi-validated
Negotiation	Seek suggestions and ideas from others.	2.65	Validated
	Values the interests of others through active listening and proposes win-win solutions	3.2	Validated
	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	2.1	Validated
	Presenta sus propios intereses e ideas de una manera que ayuda a otros a entender y resolver problemas.	2.35	Semi-validated
	Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.	1.8	Semi-validated
Planning	Evaluates proposed actions and timelines against the organization's mission and values.	2.65	Validated
	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.	4.3	Validated
	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	3.45	Semi-validated
	Creates realistic project plans and follows through (accomplishes)	2.75	Single Validation
	Is able to predict the impacts and risks of decisions and actions.	2.2	Single Validation
Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	3.2	Validated
	Analyzes problems and identify all facets, including hidden or difficult aspects.	1.8	Semi-validated
	Contextualizes and analyzes problems before solving them.	2.35	Semi-validated
	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	3.05	Semi-validated
Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	2.65	Validated
	Ensures that resources and skills among staff are available.	3.2	Validated
	Evaluates the progress and success in comparison with performance standards.	2.35	Semi-validated
	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	1.4	Semi-validated
	Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	1.8	Semi-validated
	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	3.3	Single Validation

		Develop reasonable performance standards and ways to assess results quality.	1.1	Single Validation
	Teamwork	Shares information, skills and resources with the team.	10.7	Validated
		Encourages team to stick together.	3.2	Validated
		Works together with the team to solve problems.	2.1	Validated
		Helps teammates who ask for support, assistance or need something.	5.1	Semi-validated
		Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	3.85	Single Validation

Appendix 2: reTHOS functioning validation status

Participants validation status


Functioning assessment by participants

Status	Last Name	Name	Team	Functionings									Total		
				Building positive relationships	Group leadership	Information management	Project management	Negotiation	Creative and innovative thinking	Planning	Ideas presentation	Problem resolution		Teamwork	
Validated	Alcivar	Xiomara	AF2 Labs			1			2		3				6
	Arguello Verdugo	Bryam Alexander	Giftyway	1					1		3		1	1	7
	Herrera Carrión	Madison Eduardo	Awra	2	1		1				2		1	1	8
	Lupercio Campoverde	Pablo Andrés	Smartlux			1				2		3			6
	Mora Flores	José Fernando	Smartlux			1				2		2			5
	Pizarro Baculima	Mateo Alexander	Cordero Del Buen Pa.	1								1		1	3
	Salinas Escobar	Marco Vinicio	Giftyway									2			2
	SIMBA NASIMBA	EDISON ROLANDO	RUNAI ALIMENTOS ...	1	2	3	2		1		1	3	1	2	16
	Alvarado Cajamarca	Fausto Guancarlo	Cordero Del Buen Pa.	2					1			2		2	7
	Andrade Torres	Juan Sebastian	JOBAL			1				2		3			6
Semi-validated	Arguello Verdugo	Bryam Alexander	Giftyway	1	2	4	1			2	1			1	12
	Beltran	Adonis	JOBAL			1				2		3			6
	Beltrán Estrada	Adriel Rodrigo	JOBAL			1				2		3			6
	Bermeo Tenesaca	Christian Jose	Giftyway	2	2	4	2			2	1	3		2	18
	Calderón Acosta	Andrea Gabriela	Awra	1	1	1				2		1			6
	Campoverde Torres	Marcela Azucena	Apícola Campoverde.			1					3				4
	Fernández Chacón	Renzo Daniel	AF2 Labs			1				2		3			6
	FUENTES MERCHANT	CARLOS ERICK	AF2 Labs			1				1		2			3
	Hernandez Idrovo	Washington Raimun.	Cordero Del Buen Pa.	2	1				1	1		2		1	8
	Herrera Carrión	Madison Eduardo	Awra		1	3	1	1	1	1	1	1		1	10
Single validation	Jordán Guillén	Jaime Omar	Apícola Campoverde.			1				1		3			5
	Lupercio Campoverde	Pablo Andrés	Smartlux	2	2	3	2	1		1		1	1	2	14
	Mora Flores	José Fernando	Smartlux								1				1
	Pizarro Baculima	Mateo Alexander	Cordero Del Buen Pa.	1	1					1		1		1	5
	Salinas Escobar	Marco Vinicio	Giftyway	2	2	4	1			1	1	1		2	14
	SIMBA NASIMBA	EDISON ROLANDO	RUNAI ALIMENTOS ...	1		1				2					4
	TOAPANTA BUSTILL	ERIKA VIVIANA	Awra	2	1	3	2			2		3	1	2	16
	Valencia González	Josué Jesús	Takyt Ecuador	2	2	4	2	1		2	1	3	1	2	20
	VILLEGAS VALENCIA	MAYRA VANESSA	RUNAI ALIMENTOS ...	1	1	2			1	2		2	1	2	12
	Alcivar	Xiomara	AF2 Labs	2		2			1			1	1	2	8
Single validation	Alvarado Cajamarca	Fausto Guancarlo	Cordero Del Buen Pa.		2	1	2			1	1	1	1		9
	Andrade Torres	Juan Sebastian	JOBAL	1	2	3	2			1		1	1	2	12
	Arana Peñafiel	Sally Yamiled	EcoDrim	1		3			1		1	1			8
	Beltran	Adonis	JOBAL	2	2	3	2	1			1		1	2	14
	Beltrán Estrada	Adriel Rodrigo	JOBAL	2	2	3	2	1			1		1	2	14
	Bermeo Tenesaca	Christian Jose	Giftyway			1				1			1		2
	Bravo González	Luis	KISAR	2	2					1		2	1		9
	Cabrera Villa	Luciano Javier	Apícola Campoverde.	1								1		1	3
	Calderón Acosta	Andrea Gabriela	Awra	1	1	3	1	1			1	2	1	2	13
	Campoverde Torres	Marcela Azucena	Apícola Campoverde.	2	1	1	1			2					8
Carpio Moreta	Michelle Estefania	Mifan: cerveza de ar.	2	2	3	2	1			1	3	1	2	17	
Colcha Moreira	Gustavo Edison	KISAR	2		2	1	1			1	1	1	1	10	
Crespo	Anabel	Mifan: cerveza de ar.	2	2	4	2	1		1	1	3	1	2	19	
Fernández Chacón	Renzo Daniel	AF2 Labs	1		1	2	1							7	
FUENTES MERCHANT	CARLOS ERICK	AF2 Labs	2		2	1			1		1		2	9	
García Hernández	Santiago Renán	JOBAL	2	2	4	2	1		2	1	3	1	2	20	
Hernandez Idrovo	Washington Raimun.	Cordero Del Buen Pa.		1	3	2				1		1	1	9	
Herrera Carrión	Madison Eduardo	Awra			1					1				2	
Jordán Guillén	Jaime Omar	Apícola Campoverde.	2	2		1	1	1				1	1	9	
LANDAZURI CUERO	JOHN KENER	Takyt Ecuador	2		4					1	1	1	2	12	
Mora Flores	José Fernando	Smartlux	2	2	3	2	1			1		1	2	14	
Naula Carrión	Erika Estefania	FARRON Icp ALTERN	2	2	3			1	1	1	2	1	2	15	
PINEDA BERMEO	IVONNE CAROLINA	FARRON Icp ALTERN	2	2	4	2	1		2	1	3	1	2	20	
Pineda Bermeo	Santiago Ivan	FARRON Icp ALTERN	2	2	3	2	1		1		3	1	2	17	
Pizarro Baculima	Mateo Alexander	Cordero Del Buen Pa.			2	2	1	1		1	1			8	
Salinas Escobar	Marco Vinicio	Giftyway				1	1	1		1			1	4	
TOAPANTA BUSTILL	ERIKA VIVIANA	Awra			1	1				1				4	
Toledo Loaliza	Yanela Madeleine	Mifan: cerveza de ar.	2	2	3	2	1			1	3	1	2	17	
VILLEGAS VALENCIA	MAYRA VANESSA	RUNAI ALIMENTOS ...	1	1	2	2				1	1			8	

Note. Source Creaminka

Teams' validation status

Functioning assessment by teams



Status	Team	Functionings										Total general
		Building positive relationships	Group leadership	Information management	Project management	Negotiation	Creative and innovative thinking	Planning	Ideas presentation	Problem resolution	Teamwork	
Validated	A2F Labs.			1			2		3			6
	Awra	3	1	2	2			2	4	3	6	23
	Cordero Del Buen Pa..	1							1		1	3
	Giftyway	1		1		1			5	1	1	10
	JOBAL		3	2	3	3	3		3		2	19
	RUNAI ALIMENTOS ..	1	2	3	2	1		1	3	1	2	16
	Smartlux	1		2			4		5		1	13
	Takyt Ecuador			2	2		1	1	1	1	2	10
Semi-validated	A2F Labs.	3	3	6	3	3	3	3	8	3	9	44
	Apícola Campoverde..		1	3	1	1	2		7		2	17
	Awra	8	11	9	12	8	11	8	8	7	8	90
	Cordero Del Buen Pa..	5	2	1		2	2		5		4	21
	Giftyway	8	8	13	10	5	8	6	7	3	8	76
	JOBAL		1	5	1	1	7		10		2	27
	RUNAI ALIMENTOS ..	3	2	3		1	4		3	2	2	20
	Smartlux	2	3	4	2	3		3		3	3	26
Takyt Ecuador	4	6	4	5	5	5	4	4	3	3	43	
Single validation	A2F Labs.	8	11	7	11	10	10	8	4	7	6	82
	Apícola Campoverde..	6	7	4	8	4	6	2	4	4	6	51
	Awra	1	5	7	6	6	7	5	3	1	1	42
	Cordero Del Buen Pa..	3	8	8	11	8	4	8	5	6	7	68
	EcoDrim	3	3	5	3	4	1	3	1	1	3	27
	FARRON Icp ALTERN..	12	18	16	19	15	16	14	14	12	15	151
	Giftyway	3	10	4	10	9	10	9	3	7	6	71
	JOBAL	14	15	16	16	12	8	16	6	12	13	128
	KISAR	4	2	2	1	2		2	3	2	1	19
	Mifan: cerveza de ar..	7	8	11	8	5	3	4	10	6	8	70
	RUNAI ALIMENTOS ..	3	3	6	8	6	5	7	3	2	5	48
	Smartlux	4	5	6	10	4	5	6	1	3	5	49
	Takyt Ecuador	2		4	1	1		1	2	1	2	14

Note. Source Creaminka

Mentors validation status

Functioning assessment by mentors

Status	Name	Last Name	Functionings								Total general		
			Building positive relationships	Group leadership	Information management	Project management	Negotiation Negociación	Creative and innovative thinking	Planning	Ideas presentation		Problem resolution	Teamwork
Validated	Aguirre	David	1		1			2		3			7
	Alvarez	Gabriela	2		1			2		3			8
	Cárdenas	Shanonn						1		2			3
	Carrera	Paola								2			2
	Izquieta	Victoria	1					1		2		1	5
	Ron	Cristian	2	1	1	2	1	1		3		1	12
	Villacis Sanchez	Jhony	2	1	2	1	1		1	2	1	2	13
Semi-validated	Aguirre	David	1				1					2	4
	Alvarez	Gabriela								1		2	3
	Bolagay Molina	Patricio	2						1	3		2	8
	Cárdenas	Shanonn	1		1			1		1		2	6
	Carrera	Paola	1		1			2		1			5
	Endara	Daniel	2	1	3	1	1	2		3	1	2	16
	Izquieta	Victoria	1		1		1	1		1			5
	Loyaga Suntaxi	Anthony Fabricio	2		1							2	5
	Ron	Cristian		1	2			1	1		1	1	7
	Villacis Sanchez	Jhony		1	2	1		2		1			7
Single validation	Aguirre	David		2	3	2			1		1		9
	Alvarez	Gabriela		2	3	2	1		1				9
	Bolagay Molina	Patricio		2	4	2	1	2			1		12
	Cárdenas	Shanonn	1	2	1	2	1		1		1		9
	Carrera	Paola	1	1	3	2	1		1		1	2	12
	Endara	Daniel		1	1	1			1				4
	Galán	Jorge			1			2		3			6
	Izquieta	Victoria		2	2	2					1	1	8
	Loyaga Suntaxi	Anthony Fabricio			3	2	1	2		3	1		12
	Ron	Cristian			1								1
	Sánchez Nacato	María Fernanda			1			2		3			6

Note. Source Creaminka

Appendix 3: reCREATE Bootcamp Teams final rubric.

Team Name	Challenge definition	Interview design	Generating questions	Ideation	Prototype	Total
Rikudou [gray]	25	25	25	25	24	24.8
Team Yellow 1	17	18	17	16	0	13.6
Confortem [blue]	25	25	25	25	25	25
Kawsay Natura [Purple 2]	25	25	25	25	25	25
Charla y Café [Green 2]	22	23	23	22	25	23
Team Green 4	20	19	0	0	0	7.8
Brasmart [Red]	23	23	23	23	24	23.2
Team purple 3	25	25	18	21	0	17.8
Oxinergy [SkyBlue]	25	24	22	24	25	24
Caffeto [Green 1]	23	24	25	24	23	23.8
BioCrok [Green 3]	19	22	24	23	25	22.6

Appendix 4: reCREATE Teams members and mentors functionings assessment results

	Full Name	Functioning	Action	Weight	Status
BioCrok [Green 3]	Christopher Andres Alvarez Mera	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.85	Semi-Validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-Validated
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.85	Semi-Validated
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.85	Semi-Validated
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.85	Semi-Validated
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.3	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems	0.85	Semi-Validated
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.3	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.3	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.85	Semi-Validated
	Teamwork	Works together with the team to solve problems.	0.85	Semi-Validated	
		Recognizes and celebrate the achievement of teammates.	0.85	Semi-Validated	
	Cristina Gabriela Naranjo Aguilar	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.45	Semi-Validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.15	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.45	Semi-Validated
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.45	Semi-Validated
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.45	Semi-Validated
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.15	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems	0.45	Semi-Validated
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.45	Semi-Validated

		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.45	Semi-Validated
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.45	Semi-Validated
		Teamwork	Recognizes and celebrate the achievement of teammates.	0.45	Semi-Validated
	Works together with the team to solve problems.		0.15	Single Validation	
	Byron Simba Taco	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.3	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.56	Single Validation
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.57	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.58	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.59	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems	0.6	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.61	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.62	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.63	Single Validation
		Teamwork	Works together with the team to solve problems.	0.64	Single Validation
Recognizes and celebrate the achievement of teammates.			0.65	Single Validation	
Denisse Pareja Zaldumbide	Did not complete the assessment				

	Full Name	Functioning	Action	Weight	Status
Brasmart [Red]	Josue Sebastian Mosquera Jumbo	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.15	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.15	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.15	Single Validation
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.15	Single Validation

		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.15	Single Validation	
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.15	Single Validation	
		Negotiation	Is open to many approaches to address needs or solve problems	0.15	Single Validation	
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.15	Single Validation	
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.15	Single Validation	
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation	
		Teamwork	Works together with the team to solve problems.	0.15	Single Validation	
			Recognizes and celebrate the achievement of teammates.	0.15	Single Validation	
	Tania Noelia Toaza Muñoz		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.9	Single Validation
			Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.9	Single Validation
			Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.45	Semi-Validated
			Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.15	Semi-Validated
			Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.9	Single Validation
			Ideas presentation	Uses simple language to explain complex or technical concepts.	0.9	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.45	Semi-Validated	
		Negotiation	Is open to many approaches to address needs or solve problems	1.45	Semi-Validated	
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.9	Single Validation	
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.45	Semi-Validated	
		Teamwork	Works together with the team to solve problems.	0.9	Single Validation	
			Recognizes and celebrate the achievement of teammates.	0.9	Single Validation	
Allison Villacreses		Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation	
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation	
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation	
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation	

	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Is open to many approaches to address needs or solve problems	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
	Teamwork	Recognizes and celebrate the achievement of teammates.	0.55	Single Validation
		Works together with the team to solve problems.	0.55	Single Validation
Emilio Chulca	Did not complete the assessment			

	Full Name	Functioning	Action	Weight	Status
Caffeto [Green 1]	Lili Camila Castillo Serrano	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.7	Semi-Validated
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.7	Semi-Validated
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.15	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.7	Semi-Validated
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.7	Semi-Validated
		Negotiation	Is open to many approaches to address needs or solve problems	0.15	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.15	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.15	Single Validation
		Teamwork	Works together with the team to solve problems.	0.7	Semi-Validated
	Recognizes and celebrate the achievement of teammates.		0.7	Semi-Validated	
	Mara Anais Garrido Palacios	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.1	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
Information management		Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.1	Single Validation	
Negotiation		Is open to many approaches to address needs or solve problems	0.55	Single Validation	

		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.1	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.1	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
		Teamwork	Recognizes and celebrate the achievement of teammates.	1.1	Single Validation
	Works together with the team to solve problems.		1.1	Single Validation	
	Nicole Leticia Zavala Lucas	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.15	Semi-Validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.7	Semi-Validated
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.7	Semi-Validated
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.7	Semi-Validated
		Ideas presentation	Uses simple language to explain complex or technical concepts.	1.15	Semi-Validated
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.7	Semi-Validated
		Negotiation	Is open to many approaches to address needs or solve problems	1.7	Semi-Validated
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.15	Semi-Validated
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.7	Semi-Validated
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.7	Semi-Validated
Teamwork		Works together with the team to solve problems.	1.7	Semi-Validated	
	Recognizes and celebrate the achievement of teammates.	1.7	Semi-Validated		
Valeria Carrera	Did not complete the assessment				

Charla y Café [Green 2]	Full Name	Functioning	Action	Weight	Status
	Bryan Alexis Vergara Iza	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.3	Validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.75	Semi-Validated
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.75	Semi-Validated
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.75	Semi-Validated
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.75	Semi-Validated
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.3	Validated

		Negotiation	Is open to many approaches to address needs or solve problems	1.3	Validated	
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.75	Semi-Validated	
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.3	Validated	
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.3	Validated	
		Teamwork	Works together with the team to solve problems.	1.15	Semi-Validated	
			Recognizes and celebrate the achievement of teammates.	1.3	Validated	
	Genesis Zambrano		Ideas presentation	Uses simple language to explain complex or technical concepts.	1.85	Validated
			Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.85	Validated
			Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.3	Validated
			Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.85	Validated
				Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.3	Validated
			Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.85	Validated
			Negotiation	Is open to many approaches to address needs or solve problems	1.85	Validated
			Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.3	Validated
			Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.3	Validated
			Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.85	Validated
		Teamwork	Works together with the team to solve problems.	1.85	Validated	
			Recognizes and celebrate the achievement of teammates.	1	Validated	

	Full Name	Functioning	Action	Weight	Status
Conforteem [Blue]	Astrid María Alvarez Blacio	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.6	Validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.6	Validated
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.6	Validated
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.05	Semi-Validated
		Ideas presentation	Uses simple language to explain complex or technical concepts.	1.6	Validated
		Information management	Identifies new lines of search or new data that lead to more	1.6	Validated

		complete or successful conclusions.		
	Negotiation	Is open to many approaches to address needs or solve problems	1.6	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.6	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.45	Semi-Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.6	Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.6	Validated
Works together with the team to solve problems.		1.6	Validated	
Ariana Mercedes Cedeño Lasso	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.9	Validated
	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.6	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.9	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.35	Semi-Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.35	Semi-Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.05	Semi-Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.9	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.9	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.6	Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.6	Validated
	Teamwork	Works together with the team to solve problems.	1.9	Validated
		Recognizes and celebrate the achievement of teammates.	1.9	Validated
Anthony Christopher Matute Arichabala	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.6	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.6	Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.6	Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.6	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.6	Validated

	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.6	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.6	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.6	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.6	Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.6	Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.6	Validated
Works together with the team to solve problems.		1.6	Validated	

	Full Name	Functioning	Action	Weight	Status
Kawsay Natura [Purple 2]	Kelly Yaharia Guallichico Escobar	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.6	Validated
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.6	Validated
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.6	Validated
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.05	Semi-Validated
		Ideas presentation	Uses simple language to explain complex or technical concepts.	1.6	Validated
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.6	Validated
		Negotiation	Is open to many approaches to address needs or solve problems	1.6	Validated
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.6	Validated
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.6	Validated
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.6	Validated
		Teamwork	Works together with the team to solve problems.	2.15	Validated
			Recognizes and celebrate the achievement of teammates.	1.6	Validated
	Freddy Gualoto	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.3	Validated
Creative and innovative thinking		Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.6	Single Validation	
Group leadership		Identifies how to improve activities and results, trying a new	1.3	Validated	

		approach or a new goal and communicates it.		
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.85	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.15	Semi-Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.3	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.85	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.75	Semi-Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.6	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.75	Semi-Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.3	Validated
		Works together with the team to solve problems.	1.85	Validated
Santiago Rafael Buyancela Quezada	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	2.95	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.6	Validated
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	2.7	Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.6	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.7	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.6	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	3.25	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	2.15	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	2.15	Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	2	Semi-Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	2.7	Validated
		Works together with the team to solve problems.	3.25	Validated
	Andrés Ávila	Did not complete the assessment		

Oxi	Full Name	Functioning	Action	Weight	Status
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Paola Elizabeth Tonguino Espinoza	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.05	Semi-Validated
	Teamwork	Works together with the team to solve problems.	1.6	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.6	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.45	Semi-Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.05	Semi-Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.6	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.6	Validated
	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.6	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.6	Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.9	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.05	Semi-Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.6	Validated
Daniela Gonzalez	Did not complete de assessment			
Jazmín Játiva	Did not complete de assessment			
Jennifer Morales	Did not complete de assessment			

	Full Name	Functioning	Action	Weight	Status
Rikudou [Gray]	Gandhi Josue Bonilla Yáñez	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
	Mateo Agustín Cabrera Salas	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems	0.55	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
		Teamwork	Recognizes and celebrate the achievement of teammates.	0.55	Single Validation
		Teamwork	Works together with the team to solve problems.	0.55	Single Validation
	Katherine Arlem Chica Santos	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.1	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.1	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.1	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems	1.1	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in	1.1	Single Validation

		order to achieve the overall mission.		
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.1	Single Validation
	Teamwork	Works together with the team to solve problems.	0.55	Single Validation
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.1	Single Validation

	Full Name	Functioning	Action		Weight	Status
Team Green 4	Luis Patricio Lanchi Lucero	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.		0.55	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.		0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.		0.3	Single Validation
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.		0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.		0.55	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.		0.55	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems		0.55	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.		0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.		0.55	Single Validation
		Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.		0.55	Single Validation
		Teamwork	Works together with the team to solve problems.		0.55	Single Validation
	Recognizes and celebrate the achievement of teammates.			0.55	Single Validation	
	Henry Paul Quizhpi Juca	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.		0.55	Single Validation
		Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.		0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.		0.55	Single Validation
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.		0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.		0.55	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.		0.55	Single Validation
		Negotiation	Is open to many approaches to address needs or solve problems		0.3	Single Validation

	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
	Teamwork	Works together with the team to solve problems.	0.55	Single Validation
Recognizes and celebrate the achievement of teammates.		0.55	Single Validation	

Team Purple 3	Full Name	Functioning	Action	Weight	Status
	María José Masapanta Calvachi	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
		Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
		Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Teamwork	Works together with the team to solve problems.	0.55	Single Validation
Melisa Rueda	Did not complete the assessment				
Emily Silva	Did not complete the assessment				

Team Yellow 1	Full Name	Functioning	Action	Formula	Status
	Patrick Alexander Rocha Ortiz	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
		Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
		Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
		Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
		Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
		Teamwork	Works together with the team to solve problems.	0.55	Single Validation
Sebastian Mite	Did not complete the assessment				

Full Name	Functioning	Action	Weight	Status
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Gabriela Álvarez	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	2.35	Semi-Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.8	Semi-Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.8	Semi-Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.8	Semi-Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.8	Semi-Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.8	Semi-Validated
	Negotiation	Is open to many approaches to address needs or solve problems	2.35	Semi-Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	2.35	Semi-Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.25	Semi-Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.8	Semi-Validated
	Teamwork	Works together with the team to solve problems.	1.25	Semi-Validated
		Recognizes and celebrate the achievement of teammates.	1.8	Semi-Validated
Paola Carrera	Building positive relationships	Checks the proposed solutions and possible effects before proceeding with the selection.	0.75	Semi-Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.75	Semi-Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.75	Semi-Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.6	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	0.75	Semi-Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.75	Semi-Validated
	Negotiation	Is open to many approaches to address needs or solve problems	0.75	Semi-Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.75	Semi-Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.6	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.75	Semi-Validated
	Teamwork	Works together with the team to solve problems.	0.75	Semi-Validated
		Recognizes and celebrate the achievement of teammates.	0.75	Semi-Validated
Nicolás Grijalva	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	2.1	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	1.4	Semi-Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.1	Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.55	Validated

	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.1	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	2.1	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	2.1	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.55	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.95	Semi-Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.4	Semi-Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	2.1	Validated
		Works together with the team to solve problems.	2.1	Validated
Victoria Izquieta	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.8	Semi-Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.7	Semi-Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.25	Semi-Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.25	Semi-Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.25	Semi-Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.8	Semi-Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.65	Single Validation
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.1	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.8	Semi-Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.25	Semi-Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.8	Semi-Validated
		Works together with the team to solve problems.	1.25	Semi-Validated
Anthony Fabricio Loyaga Suntaxi	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.85	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.45	Semi-Validated
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	1.4	Semi-Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	1.3	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.85	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.55	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.3	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	1.85	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	1.55	Validated

	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.4	Semi-Validated
	Teamwork	Works together with the team to solve problems.	1.3	Validated
		Recognizes and celebrate the achievement of teammates.	1.85	Validated
Ivonne Carolina Pineda Bermeo	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.4	Semi-Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.85	Semi-Validated
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.85	Semi-Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.85	Semi-Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	1.4	Semi-Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	1.4	Semi-Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.4	Semi-Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.85	Semi-Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.85	Semi-Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.4	Semi-Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	1.4	Semi-Validated
		Works together with the team to solve problems.	0.85	Semi-Validated
Cristian Ron	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	2.95	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2.95	Validated
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.95	Validated
		Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	2.5	Semi-Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.95	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	2.95	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	2.95	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	2.95	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	2.95	Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	2.95	Validated
	Teamwork	Works together with the team to solve problems.	2.95	Validated
		Recognizes and celebrate the achievement of teammates.	2.95	Validated
Paula Salazar	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	3.2	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2.65	Validated

	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	3.75	Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	3.75	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	3.2	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	3.75	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	3.75	Validated
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	3.2	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	3.75	Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	3.2	Validated
	Teamwork	Works together with the team to solve problems.	3.2	Validated
Recognizes and celebrate the achievement of teammates.		3.2	Validated	
Ivonne Vaca Suquillo	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	0.55	Single Validation
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	0.55	Single Validation
	Negotiation	Is open to many approaches to address needs or solve problems	0.55	Single Validation
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	0.55	Single Validation
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	0.55	Single Validation
	Teamwork	Works together with the team to solve problems.	0.55	Single Validation
		Recognizes and celebrate the achievement of teammates.	0.55	Single Validation
Jhony Villacís	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	1.55	Validated
	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	2.1	Validated
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	2.1	Validated
		Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	2.1	Validated
	Ideas presentation	Uses simple language to explain complex or technical concepts.	2.1	Validated
	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	2.1	Validated
	Negotiation	Is open to many approaches to address needs or solve problems	1.55	Validated

	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	2.1	Validated
	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	2.1	Validated
	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	1.55	Validated
	Teamwork	Recognizes and celebrate the achievement of teammates.	2.1	Validated
		Works together with the team to solve problems.	2.1	Validated
Diego Zhindon	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	0.55	Single Validation
	Group leadership	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	0.55	Single Validation
	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	0.55	Single Validation
	Ideas presentation	Uses simple language to explain complex or technical concepts.	0.55	Single Validation
	Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	0.55	Single Validation
	Teamwork	Recognizes and celebrate the achievement of teammates.	0.55	Single Validation

Appendix 4: reCREATE functioning validation status.

Participants validation status

Functioning assessment by participants

Status	Last Name	Name	Functionings										Total	
			Building positive relationships	Group leadership	Information management	Project management	Negotiation	Creative and innovative thinking	Planning	Ideas presentation	Problem resolution	Teamwork		
Validated	Alvarez Blacio	Astrid Maria	1	1	1	1	1	1	1	1	1	1	2	10
	Buyancela Quezada	Santiago Rafael	1	2	1	1	1	1	1	1	1	1	2	11
	Cedeño Lasso	Ariana Mercedes	1	1	1	1	1	1	1	1	1	2	8	
	Gualichico Escobar	Kelly Yaharia	1	1	1	1	1	1	1	1	1	2	11	
	Gualoto	Freddy	1	2	1	1	1	1	1	1	1	2	7	
	Matute Arichabala	Anthony Cristopher	1	2	1	1	1	1	1	1	1	2	12	
	Tonguino Espinoza	Paola Elizabeth	1	1	1	1	1	1	1	1	1	2	7	
	Vergara Izs	Bryan Alexis	1	1	1	1	1	1	1	1	1	1	6	
	Zambrano	Genesis	1	2	1	1	1	1	1	1	1	2	12	
	Semi-validated	Alvarez Blacio	Astrid Maria	1	1	1	1	1	1	1	1	1	2	2
Alvarez Mera		Cristopher Andres	1	2	1	1	1	1	1	1	1	2	9	
Buyancela Quezada		Santiago Rafael	1	1	1	1	1	1	1	1	1	1	1	
castillo serrano		lili camila	1	1	1	1	1	1	1	1	1	2	6	
Cedeño Lasso		Ariana Mercedes	1	1	1	1	1	1	1	1	1	1	3	
Gualichico Escobar		Kelly Yaharia	1	1	1	1	1	1	1	1	1	1	1	
Gualoto		Freddy	1	1	1	1	1	1	1	1	1	1	3	
Molina		Jennifer	1	1	1	1	1	1	1	1	1	1	6	
Naranjo Aguilar		Cristina Gabriela	1	2	1	1	1	1	1	1	1	1	9	
toaza Muñoz		tania noelia	1	1	1	1	1	1	1	1	1	1	5	
Single validation	Tonguino Espinoza	Paola Elizabeth	1	1	1	1	1	1	1	1	1	1	4	
	Vergara Izs	Bryan Alexis	1	2	1	1	1	1	1	1	1	1	6	
	Zavala Lucas	Nicole Leticia	1	2	1	1	1	1	1	1	1	2	12	
	Alvarez Mera	Cristopher Andres	1	1	1	1	1	1	1	1	1	1	3	
	Ionilla Yáñez	Gandhi Josue	1	1	1	1	1	1	1	1	1	1	5	
	Cabrera Salas	Mateo Agustín	1	2	1	1	1	1	1	1	1	2	12	
	Carrión	Andrés	1	2	1	1	1	1	1	1	1	2	12	
	castillo serrano	lili camila	1	1	1	1	1	1	1	1	1	1	5	
	Cedeño Lasso	Ariana Mercedes	1	1	1	1	1	1	1	1	1	1	1	
	Chica Santos	Katherine Ariem	1	2	1	1	1	1	1	1	1	2	11	
	CHICAIZA	VINICIO	1	2	1	1	1	1	1	1	1	2	12	
	Cobos Betancourt	Mario Ismael	1	2	1	1	1	1	1	1	1	2	12	
	Contreras Valarezo	Angie Julissa	1	2	1	1	1	1	1	1	1	2	12	
	Corozo Arroyo	Gary Antonio	1	1	1	1	1	1	1	1	1	2	8	
	Faicán Vasquez	Bryam Leonardo	1	2	1	1	1	1	1	1	1	2	12	
	Garrido Palacios	Mara Anais	1	1	1	1	1	1	1	1	1	2	11	
	Gualoto	Freddy	1	1	1	1	1	1	1	1	1	1	2	
	I	I	1	2	1	1	1	1	1	1	1	2	12	
	Lanchi Lucero	Luis Patricio	1	2	1	1	1	1	1	1	1	2	12	
	Masapanta Calvachi	Maria José	1	1	1	1	1	1	1	1	1	1	7	
Molina	Jennifer	1	2	1	1	1	1	1	1	1	2	6		
Montalvan Chumy	Juan Francisco	1	2	1	1	1	1	1	1	1	2	12		
Mosquera Jumbo	Josue Sebastian	1	2	1	1	1	1	1	1	1	2	12		
Naranjo Aguilar	Cristina Gabriela	1	1	1	1	1	1	1	1	1	1	3		
Ochoa Delgado	Byron Andrés	1	2	1	1	1	1	1	1	1	1	9		
Proaño Proaño	Martín Alejandro	1	2	1	1	1	1	1	1	1	2	12		
Quizhpi Juca	Henry Paul	1	2	1	1	1	1	1	1	1	2	12		
rocha ortiz	patrick alexander	1	2	1	1	1	1	1	1	1	1	8		
Simba Taco	Byron	1	2	1	1	1	1	1	1	1	2	12		
SIMBAÑA GUALAVISÍ	VERÓNICA ELIZABET	1	2	1	1	1	1	1	1	1	2	12		
toaza Muñoz	tania noelia	1	2	1	1	1	1	1	1	1	2	7		
Tonguino Espinoza	Paola Elizabeth	1	1	1	1	1	1	1	1	1	1	1		
Villacreses	Allison	1	1	1	1	1	1	1	1	1	2	10		
Yunga Ortiz	Marcos Andrés	1	2	1	1	1	1	1	1	1	2	12		

Note. Source Creaminka

Mentors validation status

Functioning assessment by mentors

Status	Name	Last Name	Functionings										Total general
			Building positive relationships	Group leadership	Information management	Project management	Negotiation	Creative and innovative thinking	Planning	Ideas presentation	Problem resolution	Teamwork	
Validated	Grijalva-Borja	Nicolas	1	2	1		1		1	1		2	9
	Loyaga Suntaxi	Anthony Fabricio	1	1	1		1		1	1	1	2	9
	Ron	Cristian	1	1	1	1	1	1	1	1	1	2	11
	Salazar Costa	Paula	1	2	1	1	1	1	1	1	1	2	12
	Villacis Sanchez	Jhony	1	2	1	1	1	1	1	1	1	2	12
Semi-validated	Alvarez	Gabriela	1	2	1	1	1	1	1	1	1	2	12
	Carrera	Paola	1	1	1	1	1	1	1	1	2	10	
	Grijalva-Borja	Nicolas				1		1			1		3
	Izquieta	Victoria	1	2	1	1		1		1	1	2	10
	Loyaga Suntaxi	Anthony Fabricio		1		1		1					3
	PINEDA BERMEO	IVONNE CAROLINA	1	2	1	1	1	1	1	1	1	2	12
	Ron	Cristian		1									1
Single validation	Carrera	Paola		1							1		2
	Izquieta	Victoria					1		1				2
	Vaca Suquillo	Ivonne	1	2	1	1	1	1	1	1	1	2	12
	Zhindón Mestanza	Diego Andrés		2				1	1	1		1	6

Note. Source Creaminka

Appendix 5: interviews result matrix¹²⁰

Participants

Interviewee	Interviewee presentation	Q1: How did you join StartUPS	Q2: Your project timeline	Q3: Do you think you have enhance your capabilities	Q4: Have you connect with other entrepreneurs	Q5: What is Coworking StartUPS for you	Final Message
Samuel Suárez	UPS digital business student. In 2014 she studied management and leadership but had to be absent from the country and returned to start a new career. Leader and founder of the Employment Project Liam.	When the startup project has just begun, he went to space to know what it was and his perception was that it was more for engineering areas. In 2021, Getti's initiative was born within coworking and was how it was linked to the spaces.	It is inspired through a volunteer that performs in 2017. From there, Treno is born, which focuses on international trade issues with the aim of generating income. He considers Liam as a house with many projects. Operates by departments and provides various services to entrepreneurs	Networking skills, communication are developed. There is openness to explain ideas , listen, understand and generate alliances. I have learned agile methodologies that save a long time. Decisions in a more assertive way and taking into account the available information	Yes, with Awra, I Cann, Vulcaflex, activities with classmates Awra: working Work tables to interact and analyze the possibility of export. I CANN, Marketing support and exchange of products for fairs Trying to make university work help ventures in the digital and	It is an entrepreneurship space that also gives you a community. It is a favorable entrepreneurship ecosystem, an articulator, point to develop alliances and also where co-responsibility is practiced.	Develop projects with socio - environmental impact, innovacr in management, always be open to listen, understand, open the mind. Experiences enrich the people, generate community and you have to look for spaces such as coworking where there is

¹²⁰ Participant interview registration: https://estliveupsedu-my.sharepoint.com/:f:/g/personal/pcarrera_ups_edu_ec/Eo9T9SKJgnxBgSlv-pFHtsIB0m3s61ds9N0JVe62I6kE5g?e=t8CTzG

					communication part		land to sow seeds, abort it and harvest the fruits.
Estefanía Abarca	Biotechnology graduate of the UPS. She works in her veency entrepreneurship, she produces fruit wines	She got to know the spaces thanks to Biotechnology, and has been part of the community since 2021.	The idea was born for business administration work when it was in 5th semester. Since she started working on the spaces, wine production has increased from 6 liters to 10, improve the production process and is also waiting for health notification	Yes, technical capacities through mentoring, about accounting. Space allows you to generate networks and contacts . Before she was very shy now she knows how to communicate , dialogue, she is safer and also has the mentors for the resolution of conflicts . I have been able to grow, learn and generate networks .	Yes, the space at a meeting point and has been able to work with Chocandes and with a cosmetics entrepreneur who is trying to develop a serum based on a Veency wine	It is a place where values such as internal companions, between entrepreneurs, with mentors; where everyone can come. It is also accessible, it is well equipped and provides opportunities to people because it is a personalized treatment	You might think about opening at other times such as Saturdays, as many entrepreneurs during the week cannot access this service.

<p>Bryam Argüello</p>	<p>Student. He is in the fifth semester of mechatronics in the UPS. One of the founders of Giftyway, an online platform to offer products and services</p>	<p>Economic need together with the graduation thesis of a partner led him to the world of entrepreneurship projects and his participation in the incubation program.</p>	<p>They were accepted in rETHOS and it was like a map to follow. They developed their business model and the MVP was one of the key parts. He is currently in Stand By because they realized that it was not going to be scalable and the context is not prepared for such a proposal, as they are more traditional businesses.</p>	<p>He did not know how to work and monetize, being a team leader learned to work better, to exercise leadership, communicate better and be more organized. He has lost his fear and now knows how to manage a project, not only for commercial purposes but also social. I learned to handle frustration, it was the main challenge as a team leader</p>	<p>Yeah!. Farron IP made the diffusion through Giftyway. But there are also other collaborations "give and give to win"</p>	<p>Space where you learn to manage knowledge, namely what and how to ask. A learning source. Although the project did not result, it feels satisfied with what has been achieved and how what has been learned allowed one of its members to apply knowledge in their current work.</p>	<p>Always answer what you are doing something and enjoy the process because all effort has its reward. You have to risk, leave the comfort zone and change the mindset. Never forget to develop as a person because we live in society</p>
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<p>Alex Vergara</p>	<p>Biotechnology graduate of the UPS. He was always interested in the development of products from plants, he began experimenting with Guayusa for his energizing properties and trying to find a mixture that is also relaxing. It currently has its I CANN entrepreneurship project that decides to develop products from the medical cannabis (CBD).</p>	<p>A friend took him to visit Startlabs and began to develop processes for contamination control and increased production of gummies.</p>	<p>He graduated from the university and his employment situation was complex for what he decided to undertake, with an initial investment of \$ 25.00. He manufactured gummies to be able to sleep and started researching the entire legal context when working with medical cannabis</p>	<p>Of course. He considers himself an introverted person and have been able to learn to value all the activities.) He has learned to communicate better with suppliers, customers, in meetings. He feel more self-confident</p>	<p>It is a meeting place where healthy competition is generated and you collaborate all the time.</p>	<p>Provide security for your entrepreneurship and as an entrepreneur you attract various learning, continuous improvement, training. They receive you in a friendly way, they drive you and motivate you to continue</p>	<p>You always have to keep fighting, never give up. There are times that you have to take another direction and pivot, but you have to go out and fight</p>
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<p>Josue Valencia</p>	<p>Law graduate in 2021 from UPS. His venture is Takyt, which consists of providing legal services through assistive technology and software.</p>	<p>He participated in the Global Entrepreneurship Student Award (GSEA Ecuador) and there they recommended the UPS incubation program and contacted the coworking of the Girón campus.</p>	<p>Takyt was born as a ground to be able to have something of your own and power, on the one hand to give job opportunities to other people so that they can acquire experience and knowledge and on the other to help, provide a quality service in legal matters to whoever needs it. Charges based on customer resources. It currently has about 500 cases within the platform and it is projected to have 13,000 cases by 2024</p>	<p>Definitely. It has better development, structuring, organization and more vision of its business. He highlights communication, now he is a school teacher. He learned about business, how to distribute his time and be persevering.</p>	<p>He has been able to provide advice to entrepreneurs from the rethos and UPS. In addition, he does not charge when there are vulnerable cases, since it is his way of contributing with a grain of sand compared to everything he has received.</p>	<p>He considers that it is a lifestyle, since he is more organized, he acquired knowledge and it has encouraged him to continue studying and learning more.</p>	<p>That there are more initiatives like rethos because it can serve more people, it helps to generate connections, learn new things, monetize ideas and you have people who motivate and drive you. Look for Takyt to reach the entire national territory and that can help attract and promote young talent.</p>
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<p>Julia Oña</p>	<p>UPS student of agriculture, in eighth semester. Her work with bees began as a hobby. And being part of startUPS activities made her realized that it was not just finding a name and positioning the brand, but that the previous work is key for it to grow.</p>	<p>He came to coworking for a workshop that was held in Cayambe and since then she has been in virtual mentoring processes and working on the development of his entrepreneurship project</p>	<p>Initially she sold her honey as a private label to Natures Heart, Nestle and other companies, later she realized that she could generate her own brand and derived products. Currently, despite sometimes feeling pressure to return to her previous business model, she works day by day, she has learned to better organize finances, marketing, markets, sales, and mentoring has undoubtedly guided her throughout this process.</p>	<p>Of course. Creativity, persistence. The main contribution that she considers is on the subject of marketing, customer relations, sales channels and more effective strategies. She didn't know anything and now she functions much</p>	<p>Yes, thanks to coworking StartUPS she met Liam, an entrepreneurship project that helped her strengthen the knowledge in marketing, in exchange for supporting other entrepreneurs who need it in areas in which she has experience. This represented a relief because marketing courses are expensive. It also took away her selfishness and fear of cooperating and collaborating.</p>	<p>Coworking is a family, a support group, a place where I can ask questions without fear, where they always encourage you and tell you that you can, to keep going.</p>	<p>That any business idea can be good, don't be afraid, the important thing is to go to the right place to get help. Undertaking helps you grow and develop, when you have people and teams that guide you. She feels that she has grown in various areas, professional, personal, financial.</p>
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				<p>better, she has lost her fear of speaking and interacting. She is no longer afraid to start her own business, she has become more receptive to criticism, she seeks constant growth to improve and overcome obstacles that arise</p>			
<p>Chistopher Matute</p>	<p>Architect graduated from the Catholic University of Cuenca. He is currently working on the development of alternative construction systems. For example, environmentally friendly coating.</p>	<p>They got involved with the space because they were part of Juventud Activa, a network of entrepreneurs who talked to them about the entrepreneurial spaces at UPS and that's how they got involved,</p>	<p>The project of his interest to investigate new techniques for working with wood was born. She participated in various university contests, won an Active Youth award and with the participation in the recreate they realized that they needed to</p>	<p>It has contributed to his personal growth, leadership, project management, creative thinking, problem solving. Space is an opportunity to learn to work</p>	<p>It has been possible to meet mentors who have been an important guide, as well as people from other contexts, professions and projects.</p>	<p>Coworking is an opportunity, experience, growth of people as leaders who make a difference, technical-business as well. It puts you to the test and contributes to your training and learning</p>	<p>Consider that coworking is a starting point, an awakening that allows you to connect with the outside world. That people always seek constant training and training, that</p>

		participated in recreate 2021 and came in 4th place.	do a broader market study to see the feasibility of their idea.	better as a team.			they persevere
Astrid Álvarez	Environmental engineer graduated from the University of Cuenca, she focuses on all the environmental part of design	She liked that a group allows you to connect with a third party. And he considers that the space is very positive because it allows you to work and also the StartLabs	He always wanted to have his own company with something related to his profession. For her it was not just winning an award and recognition, but going further and making it happen. All these contests, workshops [bootcamps] encourage you and push you to continue.	Yes, mainly in the management of information and documents, receiving constructive criticism to improve the product and service, teamwork, problem solving. From her participation, she was able to identify the area in which she is good at leading.	Diversity is key and they were able to meet the new member of the team who is a graphic designer. The key to multidisciplinary	Coworking is a challenge, integrating into a larger group that makes you question things. It helps you believe in yourself, that you are capable, and the mindset that you can do it. He has taken something for his future	No matter how old you are, the first step is the most important thing and you have to do it. Look for spaces to start, because you find people with an entrepreneurial mentality who motivate you

Naty Zumba	Environmental engineering graduate from UPS. She started with ChocoAndes with the objective of creating cocoa-based products and through these transmitting the culture of Ecuador.	She learned about the UPS spaces in a Women Leaders training that she received from MIPRO in April 2022. She began to attend the spaces and realized that it is the first university to provide these services to the public, not just students.	The idea was born in 2017 when she went on a trip abroad. In 2021 she receives a donation of machines and begins to produce cocoa bars. Beginning of 2022 the phase of testing and sales at fairs. Currently, it is about to receive the health notification and wants to expand the local and national commercialization.	Being part of this space has allowed her to get out of her comfort zone, wake up to a process of improving her products, communicate better with different audiences, take risks	In space, alliances and friendships develop, exchanges take place, with collaboration and connection. She has exchanged and collaborated with I CANN	It is a space for the creation of ideas, inspiration, that does not set limits. It gives you the opportunity to make mistakes and learn new things. You can experience unity because it is a meeting place, being part of a group that includes diverse people and helps	Thanks to the Salesian community for projects that help the community, promote ideas and help generate employment directly and indirectly. She feels proud to be a Salesian
Viviana Toapanta	Social communication graduate with mention in development from UPS. When she was in the 4th semester of the university she participated in a	Awra was one of the teams selected for the incubation program and this is how he joined for the second time, with a different vision and is part of the	It began in a very traditional and basic way, they lacked tools to technify production. At the time of applying for the call, the first challenges arise when having to	Yes, for two reasons. The first, by being in the space, connect with people from whom you learn and strengthen your professional and human	In coworking, exchanges of products and services are generated between entrepreneurs as a way of supporting each other. It is a circle where	It is an space where you feel the freedom to be and to do. It allows you to expand through the diversity of knowledge and also connect with others and	It invites people to be more curious, to share ideas, to be receptive and to take advantage of opportunities. Start a nbusiness not

	<p>first meeting within the StartUPS coworking but she did not like it. However, she was always active with her career projects. She joins Awra, a dried fruit entrepreneurship project made up of an environmental engineer, a mechatronics engineer, and herself as a communicator.</p>	<p>entrepreneurial community</p>	<p>define why and for what. During the program they had access to information and tools that allowed them to broaden their minds and better organize the project, especially in the financial field. Later, the feedback received helped them to have strategies aimed at expanding distribution points, improving their communication channels and continuing to increase their sales.</p>	<p>skills. The second is that you open your mind, you learn technical topics or not from your field of training and communication has been key to knowing how to reach different audiences. I have learned to ask for help and solve problems better within the work team</p>	<p>you give without expecting to receive anything in return, but all the people who are there have that mentality. It reminds you of the Andean philosophy of the ayni.</p>	<p>by connecting to grow.</p>	<p>only in the field of technology, but also with a social conscience, as an opportunity to connect with other realities and contribute.</p>
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Mentors

Interviewee	Interviewee presentation	Q1: How you joined startUPS	Q2: What does it mean to be a mentor?	Q3: Have you experienced soft skills/capabilities development within startUPS activities	Q4: Your main contribution to the project	Q5: The main thing you have received from the space	Q5: What is Coworking StartUPS for you	Q6: Final message
Cristian Ron	UPS systems engineer, he has worked on various projects such as KMS, Vucaflex and Liam. He currently maintains his ventures and is coordinator of coworking spaces Campus Giron Quito	He joined coworking in 2018 in the rethos, then to recreate and later he was part of the School of Mentoría and Change Management. Always participating actively.	It allows to strengthen knowledge more the experience that has been experienced. You transmit knowledge, you provide support and help. It represents a vision of reciprocity and contribution with cooperative and collaborative	From the beginning, he learn about management and entrepreneurship, generation of new ideas, being efficient and agile in hierarchical environments, having a more operational leadership and contributing positive relationships. We live in a world of uncertainty to which we have to adapt.	My main contribution has been through workshops, knowledge transmission. He is considered an articulator and always takes care of his deal with others because that can have a negative impact on someone's life	Tools, perspectives, people, an environment to constantly improve, skills development and have more self-confidence. Opportunities that go beyond salary	Space to interact with other people who think differently to you, skills development, networking spaces, free themselves from the perception of failure and strengthen weaknesses.	Do not give up, be close to someone to guide you and give back to the ecosystem. Always have openness, be willing to collaborate and cooperate having your purposes as bases.

			networks. It is important to exercise it with empathy.					
Victoria Izquieta	She is director of entrepreneurship and innovation at the Guayaquil campus. She actively participated in the startUPS project, as graduate, entrepreneur, coworking coordinator and currently as department director.	She applied with a friend to participate in a national bootcamp in Cuenca in 2015 and she liked it because she had a different, dynamic experience that opened her mind. For her, attending the event was the first step to do something different, connect with other	Being a guide and accompanying is someone who shares experiences, guides and accompanies, providing the tools and it depends on the person how they apply it.	Without a doubt, she has learned to work as a team and that is reflected in the growth in the community. He considers that he has been able to develop leadership, creativity and enthusiasm. The advantages of being in a transdisciplinary environment contributes to expanding knowledge.	My contribution has been to guide them, be a mentor and motivate them to use their full potential to positively impact	I have received opportunities to grow, study and strengthen the project.	It is a community of people, entrepreneurs or not, share a passion. It is an independent, inclusive, horizontal and free space. Where they teach you to learn to learn, how to put together strategies in the face of a challenge and resilience in the face of change	Entrepreneurship and innovation must continue working, it is a flourishing ecosystem and the challenge is how to strengthen it, the role of the academy, the key actors, articulate the initiatives, generate more strategies and give main attention to the transfer of technology and knowledge

		people and fight against the cultural conception that you have to graduate from university and get a stable job.						
Jhony Villacís	Electronics graduate from UPS, he has been part of the robotics club, campus party and other events. He started his business AGROSCAN to incorporate technology and digitization in the agricultural sector. He has been linked to coworking as an entrepreneur, coordinator of	He participated in the first events, activities and in the generation of the community from the beginning of the project. He currently contributes as an external mentor.	Better help entrepreneurs so that their learning curves are less. You share your experiences and provide them with tools. Also when you explain something you learn more.	Coworking changed his life, he had to make difficult decisions, postpone her studies, but he did a 360 turn. Soft skills have allowed him to have an accelerated learning curve. The ones that stand out the most are teamwork, learning to communicate, creating a community, going out to sell and getting up	Help the entrepreneurial community because the success of one is the success of all. It is a place to share not only entrepreneurial issues but also life.	Opportunity to see the world with different eyes while being students. Create work instead of searching. The development of skills that have positively impacted their professional life and interpersonal relationship	It is a community, without people there is nothing to do, it would not make sense.	Find a strategy for everyone to know, transfer knowledge and increase the probability of success for many entrepreneurs.

	the space and of StartLabs			after failure. They have allowed him to have emotional intelligence, empathy and be resilient		s through networking.		
Gabriela Álvarez	Economist graduated from the University of Azuay (UDA). She was a student representative and was always linked to the organization of spaces for students. She started working at the business observatory and was told about a possibility to work for 3 months at UPS. She	Some students from the UDA participated in the challenge and returned to the UDA to ask that there be similar spaces for the students. This is how she found out about the StartUPS project and she ended up working	It is a challenging challenge because each idea is different. As a guide you have to be prepared to answer questions. The most important thing is to connect with people, motivate them through follow-up and understand how what the	Yes, it changes your life because you access more opportunities. She considered himself an outgoing but not assertive person and having access to social tools improves interaction. When you enter the process you are one and you begin to live differently. She highlight leadership, teamwork, empathy,	I have contributed to the management of space, processes, structure. Despite being disruptive, you have to give it a direction, and also the relationship with other departments within the university	Infinite. Learn to work with different agents and actors, be empathetic, develop skills and resolve conflicts in a better way	It is a space that changes lives for everyone: managers, students, entrepreneurs, teachers. You find yourself in spaces, you grow and you see how you grow.	Passion allows you to grow, when you find your passion you do what you love and love what you do. You have to transform the negative into positive and always continue.

	entered the vice-rectorate for research, after three months she took charge of the projects of the Bank of Ideas, later she worked at the JOPEM foundation and is currently Director of Entrepreneurship and innovation of the CUenca campus	until now, directing the department at Cuenca.	entrepreneur does becomes his life project.	problem solving.				
Patricio Bolagay	Management and leadership graduate from UPS. He has always been curious and had many projects since he was a student: e-commerce site, AGROSCAN member, vending	He got involved in 2015 because the physical coworking space caught his attention. Then he started to participate in many activities including	Being a mentor is helping people not to make your same mistakes, you give them guidelines and their learning does not have so	Of course! On his first pitch he froze and now he is very good at exposing. You interact with people all the time and you feel the need to overcome your fears. He developed skills that are perceived by	Accompany and support everything, events, workshops, bootcamps. Being there with people, exchanging and helping	Has received experiences, knowledge, use of space and networking	It is a community in which those who contribute their skills and knowledge to generate synergies. It leads you to grow and develop products and services	Don't be afraid to learn, you have to always fight because time is yours. Being independent takes years but it's worth it. Managing your time is a great advantage

	<p>machines, etc. After a long journey as an entrepreneur, he can say that it is not easy, but it is worth the whole journey.</p>	<p>the bootcamps. I was progressively learning to speak in public, develop a project and do networking. When they opened on the South campus, he felt more empowered and excited to contribute to this collaborative space.</p>	<p>many setbacks.</p>	<p>others and that have led to a change of roles within his company. You learn to discern, to change time for time, exchange of products and services</p>			<p>with all the knowledge that is there</p>	
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Professor-mentors

Interviewee	Interviewee presentation	Q1: How you joined startUPS	Q2: What does it mean to be a mentor?	Q3: Have you experienced soft skills/capabilities development within startUPS activities	Q4: Motivation to join and participate	Q5: A project that you remember	Q5: Application in teaching	Q6: Final message
Jorge Fajardo	Director of the mechanical engineering career in UPS-Cuenca, professor and researcher	He joined startUPS project as a mentor by invitation to the first bootcamp and also participated in a workshop called From Teacher to Mentor	It is the raison d'être of Salesianity. It allows you to be close to students, understand their life perspectives and contribute to their learning.	It has been two-way, it is a win-win relationship and learn by learning. New agile techniques and methodologies, the importance of validation and losing the fear of failure	Everything that someone does adds up, you contribute with something that he did not have when he was a student, because before they prepared you to fill out resumes and not to be managers of your own company.	He had the opportunity to mentor DETFUG, the winning team of the 2019 challenge. He understood that the idea you are born with is not the one you end up with, but seeing his students leading work areas thanks to projects like this fills him with	It is a space where students, mentors, actors, and methodologies come together. This has allowed him to learn about the conditions to undertake and to motivate students to participate in these meetings.	You have to take risks, fear must be overcome with action. His fellow teachers are motivated to activate the potential mentor because it is a process of accompanying, guiding and linking you with people.

						satisfaction. There is a broader vision of life.		
Mónica Huerta	Strated working at UPS within the Prometeo program and is currently a senior professor in the area of Engineering.	By the invitations made from StartUPS collaborators to participate in the events. The first was challenges and he saw it as an opportunity to support students	Knowledge transfer, learning within events, developing soft skills for technical subjects	Yes, It is a very dynamic space where new methodologies are learned Skills help to be better people, professionals and leaders. The ones that stand out the most are teamwork, leadership, conflict resolution, financing and speaking better to sell the idea or project. She has seen how students manage to function without	They see it as a volunteer, they like to help others to guide their project and be able to contribute something.	Hackaton 2018: shelter managemen t as a mechanism to save lives with social and economic impact Cricket protein: contributed to the automation of the production process Early alarms for harassment on public transport:	He motivates his students to participate in various events and activities: e.g. StratUPS, IEEE. After joining startUPS, he shares videos and topics related to communication in his classes to present projects.	To your colleagues, if you really want to bond, come over and ask. It is a space where you learn how to optimize processes and resources and perform better; let them know more about the advantages of being part and how it is a win-win for all. Considers

				fear, breaking down barriers to approach, speak, request or ask.		Contributed with an improvement in technology to make the process more discreet.		that innovation should be one of the university functions
Ivonne Vaca	Biotechnology Professor at UPS. Strongly believes that study field has an enormous capacity of resources, so students can research and develop products.	Invitation to be a mentor of a challenge and since then she has been linked as a mentor.	It means listening to ideas, supporting development, helping projects grow	Definitely yes. It is an experiential experience that allows you to learn from the students and contribute. In the space, experiences are exchanged, people with different profiles are met and everything contributes to professional life.	She believes in the growth capacity of students and likes to see them dream.	Yogurt elaboration and sunfo tea from a project developed in class and then participated in rethos. Sunfo is an andean medicinal plant useful for altitude sickness	It allows you to tell the experiences of real cases and motivate students to apply the knowledge in the commercial world.	He considers that the space should be made more known, communicate to teachers, generate meetings and make visible the opportunities that teachers have when linked to the space. Call on students to get involved and create ventures because the area of

								biotechnology is rich in natural resources.
Interviewee 19	Automotive professor, he has worked at UPS since 2015 but has been a professor since 1996.	In his classes, he identifies students with entrepreneurial spirit. He formed the ASU de Electrica group and when he started the StartUPS Coworking project he became involved in the activities and since then has participated as a mentor.	His commitment is to ensure comprehensive education as he has a responsibility to change lives. The word mentor means to guide, it implies more than just being a professor, it has an added value.	Yes, it is not a mandatory space and taking advantage of the opportunities, including the development of skills, depends on who wants to participate. It is important to awaken this need in students and that it may have more reach. Each activity contributes to human development, to the humanization of the person	His commitment to comprehensive education and also being able to provide support with his contributions. Students express their gratitude	Coliving, because it considers that the human part is the most important	Learn different methodologies to integrate into the didactic task. Motivates to try to see the system in another way, with a creative look	Education has no borders. A study says that in professional life you do not apply more than 30% of what you learn in university, that is why the skills prepare so that people have the ability to be entrepreneurs

Appendix 6: assessment and interview comparison

Participants in events

	Interviewee	Interview results	reTHOS functioning assessment					
GIFTYWAY	Bryam Alexander Arguello Verdugo	He did not know how to work and monetize, being a team leader learned to work better, to exercise leadership, communicate better and be more organized. He has lost his fear and now knows how to manage a project , not only for commercial purposes but also social. I learned to handle frustration, it was the main challenge as a team leader		Buiding positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	Validated		
			✓	Ideas presentation	Uses simple language to explain complex or technical concepts.	Validated		
					Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	Validated		
						Information management	Knows where and how to access the right data for a particular use.	Validated
						Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	Validated
					✓	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	Validated
						Teamwork	Shares information, skills and resources with the team.	Validated
TAKYT	Josué Jesús Valencia González	Definitely. It has better development, structuring, organization and more vision of its business. He highlights communication , now he is a school teacher. He learned about business, how to distribute his time and be persevering.		Creative and innovative thinking	Generates unique but viable and useful solutions to complex problems.	Validated		
			✓	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	Validated		
			✓	Information management	Knows where and how to access the right data for a particular use.	Validated		
					Examines irrelevant and vague information while maintaining high-quality data.	Validated		
			✓	Planning	Evaluates progress in relation to program goal, adapting it to emerging challenges and opportunities.	Validated		
				Problem Resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	Validated		
			✓	Project management	Develop reasonable performance standards and ways to assess results quality.	Validated		
					Integrates the ideas and needs of others in developing viable strategies to achieve goals.	Validated		
	Teamwork	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	Validated					
		Helps teammates who ask for support, assistance or need something.	Validated					
AWRA	Viviana Toapanta	Yes, for two reasons. The first, by being in the space, connect with people from	✓	Buiding positive relationships	Keeps an open attitude and treats others fairly and respectfully.	Validated		
			✓	Ideas presentation	Presents information clearly, concisely and logically, focusing on key points.	Validated		

		whom you learn and strengthen your professional and human skills . The second is that you open your mind , you learn technical topics or not from your field of training and communication has been key to knowing how to reach different audiences. I have learned to ask for help and solve problems better within the work team	✓	Information management	Knows where and how to access the right data for a particular use.	Validated
			✓	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	Validated
				Project management	Integrates the ideas and needs of others in developing viable strategies to achieve goals.	Validated
			✓	Teamwork	Reconoce y apoya el trabajo y los resultados de los compañeros de equipo.	Validated
					Helps teammates who ask for support, assistance or need something.	Validated
Interviewee	Interview results	reCREATE functioning assessment				
Conforteem [Blue]	Astrid María Alvarez Blacio	Yes, mainly in the management of information and documents, receiving constructive criticism to improve the product and service, teamwork , problem solving . From her participation, she was able to identify the area in which she is good at leading .	✓	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	Validated
				Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	Validated
			✓	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	Validated
			✓	Ideas presentation	Uses simple language to explain complex or technical concepts.	Validated
			✓	Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	Validated
				Negotiation	Is open to many approaches to address needs or solve problems	Validated
				Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	Validated
				Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	Validated
			✓	Team work	Recognizes and celebrate the achievement of teammates.	Validated
Works together with the team to solve problems.	Validated					
Cristopher Matute Arichabala	It has contributed to his personal growth , leadership , especially team and project management , creative thinking , problem solving . Space is an opportunity to learn to work better as a team .	✓	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	Validated	
		✓	Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.	Validated	
		✓	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	Validated	
				Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	Validated	

				Ideas presentation	Uses simple language to explain complex or technical concepts.	Validated
				Information management	Identifies new lines of search or new data that lead to more complete or successful conclusions.	Validated
				Negotiation	Is open to many approaches to address needs or solve problems	Validated
				Planning	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.	Validated
			✓	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	Validated
			✓	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	Validated
			✓	Team work	Recognizes and celebrate the achievement of teammates.	Validated
			Works together with the team to solve problems.		Validated	
Charla y Café	Alexis Vergara Iza	<p>He considers himself an introverted person and have been able to learn to value his work (value all the activities.) He has learned to communicate better with suppliers, customers, in meetings. He feels more self-confident</p>	✓	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view.	Validated
			✓	Group leadership	Identifies new lines of search or new data that lead to more complete or successful conclusions.	Validated
			✓	Negotiation	Is open to many approaches to address needs or solve problems	Validated
			✓	Problem resolution	Checks the proposed solutions and possible effects before proceeding with the selection.	Validated
			✓	Project management	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	Validated
			✓	Team work	Recognizes and celebrate the achievement of teammates.	Validated

Entrepreneurs

Project	Interviewee	Interview results	Functioning relation
VEENCY	Estefanía Abarca	Technical capabilities through mentoring, on accounting and financial aspects. The space allows you to generate networks and contacts . Before she was very shy now she knows how to communicate, dialogue , she is safer and also has the mentors for the resolution of conflicts . She has been able to grow, learn and generate networks.	<input checked="" type="checkbox"/> Building positive relationships
			<input checked="" type="checkbox"/> Creative and innovative thinking
			<input checked="" type="checkbox"/> Group leadership
			<input checked="" type="checkbox"/> Ideas presentation
			<input checked="" type="checkbox"/> Information management
			<input checked="" type="checkbox"/> Negotiation
			<input checked="" type="checkbox"/> Planning
			<input checked="" type="checkbox"/> Problem resolution
ALEX BEES	Julia Oña	Of course. Creativity , persistence. The main contribution that she considers is on the subject of marketing, customer relations, sales channels and more effective strategies. She didn't know anything and now she functions much better, she has lost her fear of persistence. The main contribution that she considers is on the subject of marketing, customer relations, sales channels and more effective strategies . She didn't know anything and now she functions much better, she has lost her fear of speaking and interacting . She is no longer afraid to start her own	<input checked="" type="checkbox"/> Building positive relationships
			<input checked="" type="checkbox"/> Creative and innovative thinking
			<input checked="" type="checkbox"/> Group leadership
			<input checked="" type="checkbox"/> Ideas presentation
			<input checked="" type="checkbox"/> Information management
			<input checked="" type="checkbox"/> Negotiation
			<input checked="" type="checkbox"/> Planning
			<input checked="" type="checkbox"/> Problem resolution
CHOCOANDES	Naty Zumba	Being part of this space has allowed her to get out of her comfort zone , wake up to a process of improving her products, communicate better with different audiences, take risks	<input checked="" type="checkbox"/> Building positive relationships
			<input checked="" type="checkbox"/> Creative and innovative thinking
			<input checked="" type="checkbox"/> Group leadership
			<input checked="" type="checkbox"/> Ideas presentation
			<input checked="" type="checkbox"/> Information management
			<input checked="" type="checkbox"/> Negotiation
			<input checked="" type="checkbox"/> Planning
			<input checked="" type="checkbox"/> Problem resolution
LIAM	Samuel Suárez	Networking skills, communication are developed. There is openness to explain ideas , listen, understand and generate alliances. I have learned agile methodologies that save a long time. Decisions in a more assertive way and taking into account the available information .	<input checked="" type="checkbox"/> Building positive relationships
			<input checked="" type="checkbox"/> Creative and innovative thinking
			<input checked="" type="checkbox"/> Group leadership
			<input checked="" type="checkbox"/> Ideas presentation
			<input checked="" type="checkbox"/> Information management
			<input checked="" type="checkbox"/> Negotiation
			<input checked="" type="checkbox"/> Planning
			<input checked="" type="checkbox"/> Problem resolution
<input checked="" type="checkbox"/> Project management			
<input checked="" type="checkbox"/> Team work			

Mentors

Interviewee	Interview results	Functioning	reTHOS functioning assessment	reCREATE functioning assessment
Cristian Ron	From the beginning, he learns about management and entrepreneur <input checked="" type="checkbox"/>	Building positive relationships	Supports and accept the good ideas of others, even if they have a different point of view. Defends the trust and dignity of people, showing respect for their opinions.	Supports and accept the good ideas of others, even if they have a different point of view.

<p>ship, generation of new ideas, being efficient and agile in hierarchical environments, having a more operational leadership and contributing positive relationships. As we live in a world of uncertainty to which we have to adapt.</p>			Is always open to listen, discuss, negotiate, encourage and motivate others.	
	✓	Creative and innovative thinking	Experiments with new ideas, methodologies and procedures with interest.	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.
		Group leadership	Conveys confidence in a group's ability to face challenges and achieve goals.	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.
			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	
			Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.	
		Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	Uses simple language to explain complex or technical concepts.
			Uses simple language to explain complex or technical concepts.	
			Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience.	
			Presents information clearly, concisely and logically, focusing on key points.	
	✓		Uses appropriate vocabulary and grammar in accordance with the situation.	
		Information management	Knows when more information is needed and when enough has been gathered to reach a conclusion.	Identifies new lines of search or new data that lead to more complete or successful conclusions.
			Knows where and how to access the right data for a particular use.	
✓	Identifies new lines of search or new data that lead to more complete or successful conclusions.			
	Negotiation	Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	Is open to many approaches to address needs or solve problems	
		Values the interests of others through active listening and proposes win-win solutions		
		Earns the trust of others who recognize honesty, respect, and sensitivity to their needs.		
✓		Seek suggestions and ideas from others.		

			Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.	Checks the proposed solutions and possible effects before proceeding with the selection.
		<input type="checkbox"/>	Project management	Evaluates the progress and success in comparison with performance standards.	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.
		<input checked="" type="checkbox"/>		Clarifies related roles and responsibilities, final results, milestones, scope for independent decision making, needs and desires of major stakeholders/customers.	
		<input type="checkbox"/>		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	
		<input checked="" type="checkbox"/>		Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	
		<input type="checkbox"/>	Teamwork	Encourages team to stick together.	Works together with the team to solve problems.
		<input checked="" type="checkbox"/>		Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	
		<input type="checkbox"/>		Helps teammates who ask for support, assistance or need something.	Recognizes and celebrate the achievement of teammates.
		<input checked="" type="checkbox"/>		Works together with the team to solve problems.	
			Planning	n/a	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.
Jhony Villacís	Coworking changed his life , he had to make difficult decisions, postpone his studies, but he did a 360 turn. Soft skills have allowed him to have an accelerated learning curve . The ones that stand out the most are teamwork , learning to communicate , creating a community, going out to sell and getting up after failure . They have allowed him	<input checked="" type="checkbox"/>	Buiding positive relationships	Defends the trust and dignity of people, showing respect for their opinions.	Supports and accept the good ideas of others, even if they have a different point of view.
				Is always open to listen, discuss, negotiate, encourage and motivate others.	
				Supports and accept the good ideas of others, even if they have a different point of view.	
					Creative and innovative thinking
		<input checked="" type="checkbox"/>	Group leadership	Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.	Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively.
		<input checked="" type="checkbox"/>			Identifies how to improve activities and results, trying a new approach or a new goal and communicates it.
		<input checked="" type="checkbox"/>	Ideas presentation	Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.	Uses simple language to explain complex or technical concepts.














	to have emotional intelligence, empathy and be resilient .			Presents information clearly, concisely and logically, focusing on key points.			
				Uses simple language to explain complex or technical concepts.			
		✓	Information management			Knows where and how to access the right data for a particular use.	Identifies new lines of search or new data that lead to more complete or successful conclusions.
						Find trends and relationships between emerging facts.	
						Identifies new lines of search or new data that lead to more complete or successful conclusions.	
		✓	Negotiation			Seek suggestions and ideas from others.	Is open to many approaches to address needs or solve problems
						Values the interests of others through active listening and proposes win-win solutions	
						Acts (modulates) appropriately and coherently with the situation, is kind and assertive.	
		✓	Problem resolution			Checks the proposed solutions and possible effects before proceeding with the selection.	Checks the proposed solutions and possible effects before proceeding with the selection.
		✓	Project management			Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.	Ensures deadlines are met and keeps stakeholders informed about the status of the project/program.
Ensures that resources and skills among staff are available.							
✓	Teamwork			Shares information, skills and resources with the team.	Recognizes and celebrate the achievement of teammates.		
				Encourages team to stick together.			
				Works together with the team to solve problems.	Works together with the team to solve problems.		
	Planning			Evaluates proposed actions and timelines against the organization's mission and values.	Integrates the current plan with other plans as a need arises in order to achieve the overall mission.		
				Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.			
Victoria Izquieta	Without a doubt. She has learned to work as a team and that is reflected in the growth in the community. Se considers that has been able to	✓	Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others.	The mentor reports semi-validated and single validation actions for reCREATE 2021		
				✓		Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples.
						Ideas presentation	Uses simple language to explain complex or technical concepts.

	develop leadership, creativity and enthusiasm. The advantages of being in a transdisciplinary environment contributes to expanding knowledge.			Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact.		
		✓	Team work	Works together with the team to solve problems.		
Gabriela Álvarez	Yes, it changes your life because you access more opportunities . She considered herself an outgoing but not assertive person and having access to social tools improves interaction. When you enter the process you are one and you begin to live differently. She highlight leadership, teamwork, empathy, problem solving.		Building positive relationships	Is always open to listen, discuss, negotiate, encourage and motivate others. Defends the trust and dignity of people, showing respect for their opinions. Supports and accept the good ideas of others, even if they have a different point of view.	The mentor reports semi-validated actions for reCREATE 2021	
			Creative and innovative thinking	Expresses and graphically represents potential problems and solutions without the need for "real life" examples. Experiments with new ideas, methodologies and procedures with interest.		
		✓	Group leadership	Links the mission, vision, values, objectives and strategies to the daily work in the organization.		
			Ideas presentation	Vary the content, style, and form to suit the topic, purpose, and needs of a diverse audience. Captures and holds the attention of others, using language, inflection, pausing, and body language for maximum impact. Uses simple language to explain complex or technical concepts.		
				Information management		Knows when more information is needed and when enough has been gathered to reach a conclusion. Knows where and how to access the right data for a particular use.
						Negotiation
			Planning	Identifies activities sequence and resources needed to achieve goals, prioritizing key action phases.		
		✓	Problem resolution	Generates a range of solutions and identifies actions with benefits, costs, and risks associated with each solution or action.		

			Project management	Ensures that goals, scope and criteria for the success of the project/program are clearly defined.	
		✓	Team work	Shares information, skills and resources with the team.	
				Encourages team to stick together.	
Patricio Bolagay	Of course! On his first pitch he froze and now he is very good at exposing. You interact with people all the time and you feel the need to overcome your fears . He developed skills that are perceived by others and that have led to a change of roles within his company. You learn to discern, to change time for time , exchange of products and services	✓	Mentor reports semi-validated and single validation actions		

Professors-Mentors

Interviewee	Interview results	Functioning Relation	
Jorge Fajardo	It has been two-way, it is a win-win relationship and learn by learning . New agile techniques and methodologies , the importance of validation and losing the fear of failure	✓ ✓ ✓	Building positive relationships
			Creative and innovative thinking
			Group leadership
			Ideas presentation
		✓	Information management
			Negotiation
			Planning
		✓	Problem resolution
		✓	Project management
			Team work
Mónica Huerta	Yes, It is a very dynamic space where new methodologies are learned. Skills help to be better people,	✓	Building positive relationships
			Creative and innovative thinking

	professionals and leaders . The ones that stand out the most are teamwork, leadership, conflict resolution , financing and speaking better to sell the idea or project . She has seen how students manage to function without fear, breaking down barriers to approach, speak , request or ask.	   	Group leadership Ideas presentation Information management Negotiation Planning Problem resolution Project management Team work	
Interviewee 19	Yes, it is not a mandatory space and taking advantage of the opportunities, including the development of skills, depends on who wants to participate. It is important to awaken this need in students and that it may have more reach. Each activity contributes to human development, to the humanization of the person	   	Building positive relationships Creative and innovative thinking Group leadership Ideas presentation Information management Negotiation Planning Problem resolution Project management Team work	
Interviewee	Interview results	reCREATE functioning assessment		
Ivonne Vaca	Definitely yes. It is an experiential experience that allows you to learn from the students and contribute . In the space, experiences are exchanged , people with different profiles are met and everything contributes to professional life .	    	Creative and innovative thinking Ideas presentation Group Leadership Ideas presentation Information management Negotiation Planning Problem resolution Project management Teamwork	Supports and accept the good ideas of others, even if they have a different point of view. Expresses and graphically represents potential problems and solutions without the need for "real life" examples. Defines goals and expectations of the group in a clear, meaningful, demanding and achievable way, and shares them collaboratively. Identifies how to improve activities and results, trying a new approach or a new goal and communicates it. Uses simple language to explain complex or technical concepts. Identifies new lines of search or new data that lead to more complete or successful conclusions. Is open to many approaches to address needs or solve problems Integrates the current plan with other plans as a need arises in order to achieve the overall mission. Checks the proposed solutions and possible effects before proceeding with the selection. Ensures deadlines are met and keeps stakeholders informed about the status of the project/program. Works together with the team to solve problems. checks the proposed solutions and possible effects before proceeding with the selection.

GLOSSARY OF TERMS

Alternative Food Networks (AFN)

Association for the Maintenance of Peasant Agriculture (AMAP, French Acronym)

Behavioral Economics (BE)

Business School Lausanne (BSL)

Capability Approach (CA)

Catholic University of Costa Rica (UCAT)

Common Pool Resource (CPR)

Community Supported Agriculture (CSA)

Economy for the Common Good (ECG)

Ecuadorian Higher Education, Science, Technology and Innovation Secretary (SENESCYT, Spanish acronym)

European Union (EU)

Gross Domestic Product (GDP)

Gross National Income (GNI)

Gross National product (GNP)

Higher Education Capability (HEC)

Human Development Index (HDI)

Human Development: (HDI)

Information and Communication Technologies (ICTs)

Innovation and Entrepreneurship Ecosystem (IEE)

Institutional Analysis and Development (IAD)

Integral Humanist Ecology Index: (IEIH)

International Labor Organization (ILO)

International Project Management Association (IPMA)

Key Performance Indicator (KPI)

Latin American Center for Competitiveness and Sustainable Development (CLACDS)

Laudato Sí Observatory (OLS, Spanish acronym)

Minimum Viable Product (MVP)

National Agency for Quality Assessment and Accreditation (ANECA, Spanish acronym)

Organization for Economic Cooperation and Development (OECD)

Overseas Development Council (ODC)

Physical Quality of Life Index (PQLI)

Working With People (WWP)

University Common Good Research Group (GIUB, Spanish acronym)
Politecnica Salesiana University (UPS, Spanish Acronym)
Project Base Learning (PBL)
Rumiñahui General Bank (BGR, Spanish acronym)
Social Progress Imperative (SPI)
StartLabs: UPS laboratory of prototype and production
StartUPS: UPS Entrepreneurship and innovation project
The Corporation for Economic Promotion (CONQUITO, Spanish acronym)
The Educational Innovation Groups (GIE, Spanish acronym)
The Research Groups (RG, Spanish acronym)
The Salesian University Associationism (ASU, Spanish acronym)
Union of Soviet Socialist Republics (USSR)
United Nations Children's Fund (UNICEF)
United Nations Development Program (UNDP)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United States of America (USA)
University Social Responsibility (RSU, Spanish acronym)
University Twinning and Networking (UNITWIN)
Volatile, Uncertain, Complexity and Ambiguity (VUCA)
World Bank (WB)
World Robot Olympiad (WRO)