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CICLO XXXI

**OPEN BIFOCAL INNOVATION:  
Open Innovation committed to Sustainable Development.  
The Rijksmuseum of Amsterdam case-study**

**Dottorando**

Dott.ssa Erika Cavriani

**Tutore**

Professor Giovanni Masino



*To my Guardian Angel Emmanuel,  
to my better half Leonardus,  
and to my mentor Sergio*

*and  
to my brave friends  
Jenny, Rinaldo and Loris  
doctors in the front-line  
against the Coronavirus Covid-19*

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## Abstract

The European Union Strategy 2020 aims to increase the competitiveness ensuring a sustainable and inclusive growth by enhancing the current knowledge society. This research, through recursive phases of a case-study, explores the dynamics of openness strategized by the (public) Rijksmuseum of Amsterdam pioneering an open-digital-strategy. This research strives to understand frameworks which drive practices for “opening up processes for managing business and societal challenges” by investigating the possibility to link Open Innovation (OI), a pertinent paradigm in complex scenarios, to Sustainable Development (SD).

The first stage (focusing on the specific case-study field of arts management) investigated how a ground-breaking open-digital-strategy could develop new avenues for business and social value, boosting cultural institutions’ competitive advantage and being a possible source of socio-cultural development –by exploring and enhancing the opportunities of the digital-era and of the visual culture, making art and culture more accessible, stimulating people to value Cultural Heritage and unlocking the potential of Culture and Creative Industries (CCIs).

The research aims at showing how open-digital-strategies could be a precondition to develop positive-synergies and alliances that, moving towards the digital, creative economies, catalyse a wide range of spillovers. Thus, it also strives to add knowledge on the topic of innovation in the cross-fertilization territories of the CCIs.

Then, focusing on the resources managed and disseminated, this research addressed the issues of Intellectual Capital (IC) and how organizations can regenerate the wider ecosystem. This stage shows that organizations (no matter whether public, private, profit or non-profit) need to develop new understandings of how to create and exploit their non-financial resources. The OI emerged as an effective booster of processes that enable the improvement of economic and socio-cultural performance by mobilising IC outbound flows that generate “shadow options” for the future.

The last stage focused on the OI-paradigm (extending its implications beyond the field of the research-setting) by gaining insight into the potential benefits and challenges of OI linked to SD – interpreted at a macro-level, thus with an external orientation of the sustainability issue, and as a “responsibility” that each individual organization has of nurturing the ecosystem in which it is nested, for safeguarding the commons for future generations.

An Explorative Conceptual Framework, which describes the dissimilarities between the prevailing firms’ OI-paradigm and the public organization case-study, is proposed. And it is used for thought-provoking issues to link OI to SD claiming the need (1) to recalibrate the main strategic focus of focal organizations, by recalibrating the main profit-maximizing ethos pursuing sustainability not merely as a by-product of the OI-strategy, and by decentralising the firm as the locus of strategic

commitments, and (2) to go beyond the un-exploration of outbound practices, approached merely with an exploitative attitude.

The antecedents of the openness emerged as fundamental for effectively recalibrating the OI main strategic focus and going beyond the un-exploration issue. The Open Bifocal Innovation concept is proposed as a valuable strategic ethos to link OI to SD. For managing SD driven OI strategies it is crucial to explore new paths to capture opportunities of economic value not “simply” elsewhere in the value chain (as the prevailing OI-paradigm postulates), but by radically innovating the value chain –converting the relinquishment of control on critical assets into bifocal innovation paths. Since exploration connects to radical innovation, explorative outbound practises emerged as fundamental to commit OI to SD –thus un-exploration of outbound practices is a limit to link the prevailing OI to SD.

## Estratto

La Strategia 2020 dell'Unione Europea ambisce a incrementare la competitività assicurando una crescita sostenibile e inclusiva valorizzando dell'economia della conoscenza. La ricerca, attraverso una analisi ricorsiva, esplora le dinamiche e i risultati di una pionieristica strategia-digitale-aperta implementata dal Rijksmuseum di Amsterdam, delineando un framework in cui pratiche di Open Innovation (OI) –un paradigma pertinente in scenari complessi– sono in grado di promuovere condizioni di Sviluppo Sostenibile (SD).

La prima fase (focalizzata sull'art management) indaga come una pionieristica strategia digitale aperta può sviluppare percorsi di business e creazione di valore sociale, amplificando il vantaggio competitivo delle istituzioni culturali e offrendo una possibile fonte di sviluppo socioculturale. Emerge che tale strategia ha accelerato l'accesso all'arte di quote addizionali di cittadini, promuovendone la crescita culturale e liberando al contempo il potenziale di crescita delle Industrie Creative e Culturali (CCIs). La ricerca contribuisce a comprendere come le strategie digitali aperte possano essere una precondizione allo sviluppo di sinergie positive e di alleanze in grado di catalizzare una vasta gamma di spillovers, cross-fertilizzando le diverse componenti delle CCIs.

La ricerca affronta poi i temi del Capitale Intellettuale (IC) e della rigenerazione del più ampio ecosistema, che richiede alle organizzazioni –pubbliche e private– una maggiore consapevolezza circa i meccanismi con cui valorizzare la disseminazione di risorse non finanziarie. In questa fase si evidenziano canali lungo i quali l'OI mobilita i flussi di IC allo scopo di contribuire alla rigenerazione del più ampio ecosistema innescando processi di opzioni di crescita in divenire, che potranno maturare in futuro.

L'ultima fase della ricerca estende le implicazioni oltre l'ambito dell'art management, concentrando l'attenzione sulle sfide non meno che sui potenziali benefici dell'integrazione tra le strategie di OI e lo SD –considerato su due piani, ovvero tanto a livello macro (dove l'unità di analisi è costituita da un determinato ecosistema) quanto a livello di una singola organizzazione che deve farsi carico della co-responsabilità di salvaguardare l'integrità dei beni comuni per le generazioni future. La ricerca propone un *Framework Concettuale Esplorativo* che pone in evidenza le differenze tra l'accezione di OI prevalente negli studi di management e quella implementata nel caso studio. Dalle difformità emergono varie riflessioni quali: (1) l'esigenza di riconfigurare lo scopo fondamentale dell'azione organizzativa, ricalibrando l'ethos della massimizzazione del profitto per renderlo compatibile con l'esigenza di contribuire allo SD dell'ecosistema in cui vive l'organizzazione; (2) l'esigenza di cambiare le pratiche *inside-out* di trasferimento di conoscenze e risorse specializzate, sottraendole a



logiche di mero sfruttamento per porle al servizio di investimenti tesi alla creazione di un capitale di opzioni reali potenzialmente utilizzabile in partnership con altri stakeholder.

Gli antecedenti della OI emergono come fondamentali per ricalibrarne efficacemente il principale focus strategico e superare la questione della *non-esplorazione di pratiche outbound*. La nozione di *Open Bifocal Innovation* è proposta come ethos strategico efficace a coniugare processi di OI con lo SD. Per innestare strategie di OI con lo SD è indispensabile esplorare nuovi percorsi per catturare il valore economico non “semplicemente” altrove nella catena del valore (come postulato dall’OI), ma innovandola radicalmente –convertendo il rilascio di controllo su asset critici in percorsi di innovazione bifocale. I processi di esplorazione sospingono innovazione radicale, dunque pratiche di outbound esplorative emergono come fondamentali per *impegnare l’OI allo SD*, la loro non-esplorazione è un limite della dominante OI.

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AIM OF THE RESEARCH, THEORETICAL BACKGROUND AND RESEARCH-SETTING

*“Until one is committed, there is hesitancy, the chance to draw back. ...  
Concerning all acts of initiative (and creation), there is one elementary truth,  
the ignorance of which kills countless ideas and splendid plans:  
that the moment one definitely commits oneself, then Providence moves too”*

*W.H. Murray\**

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\* Evidence of Things Not Seen: A Mountaineer's Tale Hardcover (2002)

## 1. Understanding why Open Innovation committed to Sustainable Development matters

It is substantially beyond discussion that all kinds of organizations –no matter whether public, non-profit or private-profit– are faced with the major challenge of addressing complex and frequently conflicting commitments as a result of operating in an increasingly complex and less munificent environment (Sirmon *et al.*, 2007), characterised by very dynamic and always less predictable scenarios (Reeves *et al.*, 2016), in which the competition for potential markets and scarce tangible and intangible resources is relentless (Wang and Ahmed, 2007). In this sort of environment, in which the increasing complexity together with the globalization have also “led to ... focus on short-term results” (De Wit *et al.*, 2007 cited by Huizingh, 2011: 4) over long-term robustness (Reeves *et al.*, 2016: 49),<sup>1</sup> organizations are pressured to put a premium on sustainable responsiveness to change, for example by becoming increasingly robust and adaptable and better able to learn from experience in order to continually reconfigure themselves (Cohen, 1999; Kogut and Kulatilaka, 2001; Sirmon, *et al.*, 2007; Beinhocker, 1999). In any event, in order to drive sustainable responsiveness paths in such contexts, it is primary to understand that “it is difficult for one single firm to possess all resources needed to develop and sustain current competitive advantages while trying simultaneously to build new ones” (Harrison *et al.*, 2001: 680). In addition, firms are more and more asked to be *sustainable enterprises*, in term of being able to deliver simultaneously economic, social and environmental benefits (Hart and Milstein, 2003; Porter and Kramer, 2006, 2011; Leavy, 2012; Kennedy *et al.*, 2016), thus organizations are also pressured to interpret sustainable responsiveness coherently with a holistic scenario of human development –in which socio-cultural, ecological and economic dimensions are taken into consideration, for safeguarding the commons for future generations<sup>2</sup>.

The scenarios which challenge organizations are evidently far of being linear (Wallner, 1999) and therefore the Complex Adaptive Systems perspective (henceforth CASs; Reeves, *et al.*, 2016; Mirabeau and Maguire, 2014;<sup>3</sup>) is a useful and sustainable theoretical scaffolding for analysing these complex contexts. Among its suggestions it is mentioned that, for not “failing to adapt to the growing complexity of their environment”, “organizations need to look beyond what their firms own or control, monitoring and addressing complexity outside their firms” (Reeves *et al.*, 2016: 49; 48). In more general management terms, it can be asserted that in order to adapt and survive organizations need to look beyond what their firms own or control, to integrate and accumulate the missing

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<sup>1</sup> As Reeves and colleagues claim (2016: 49) “too often ... [firms] pursue approaches to strategy that emphasize short-term performance over long-term robustness”.

<sup>2</sup> As requested by the World Commission on Environment and Development (WCED; 1987, the Brundtland Report; Dyllick and Hockerts, 2002).

<sup>3</sup> But also Cohen, 1999; Dooley, 1996; Choi, *et al.*, 2001.

resources and capabilities (Frankenberger, *et al.*, 2014) with the purpose of improving innovation, competitiveness and strategy flexibility (Brown and Eisenhardt 1998; Shimizu and Hitt, 2004; Sirmon *et al.*, 2007) for sustaining their potential of value creation over time (Sirmon, *et al.*, 2007: 280; Eisenhardt, 1989; Brown and Eisenhardt, 1997; 1998). Interestingly, this suggestion is coherent with the Open Innovation (OI) paradigm, which has its basic premise in *opening-up organizations' (innovation) processes and outcomes* (Huizingh, 2011), having one of its main assumptions in the fact that organizations cannot conduct all activities by themselves to maintain their existence (Gassmann, 2006; van de Vrande *et.al*, 2009). Thus, because OI-strategies' main premise is coherent with the CASs' suggestion of monitoring and addressing complexity outside the firms' boundaries for not failing to survive, it is fair to claim that the OI paradigm represents a possible sustainable path of development for any sort of organization nested in complex, dynamic, hypercompetitive and less munificent environments.

But, additionally, complex systems have another feature that the CASs lens brings out which improves this challenging scenario for contemporary organizations: “business [and socio-cultural] environments are more ... interconnected than ever”. In fact, “local events and interactions among the “agents” ... can cascade and reshape the entire system” and “the system’s new structure then influences the individual agents, resulting in further changes to the overall system. ... [which] continually evolves in hard-to-predict ways, through *a cycle of local interactions, emergence and feedback*” (Reeves *et al.*, 2016: 48)<sup>4</sup>. Whether we observe team dynamics or the evolution of strategies or markets, this “pattern of local interactions, emergence and feedback is apparent” (Reeves *et al.*, 2016: 48-49) and it puts in evidence the relation between each single organization and the ecosystem (the business and socio-cultural environment made of other individual and/or collective agents) in which the organization is nested. Essentially, the CASs perspective points out that each organization is a CAS in itself and is nested in a business and socio-cultural ecosystem, which is likewise nested in the broad societal environment. It points out that each individual organization and the society are *nested systems* in which complexity exists at different, multiple levels –within and without the organizational boundaries– highlighting that “*at each level there is a tension between what is good for the individual agent<sup>5</sup> and what is good for the larger system*” (Reeves *et al.*, 2016: 49; italic added). The above described CASs' *emergence property* suggests basically that organizations need to look beyond what their firms own or control –monitoring and addressing complexity outside them– *not merely* to sustain their strategy flexibility for enhancing their potential of value creation over time (as e.g. the OI paradigm also suggests), *but also to “contribute positively*

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<sup>4</sup> In Italic the CASs' property termed emergence.

<sup>5</sup> The individual agent description depends on the unit of analysis (individual, organization, extra-organization, ...) which defines also the different levels of the tension considered.

to the [broader] system while receiving benefits sufficient to justify participation” (Reeves *et al.*, 2016: 49; italic added)<sup>6</sup>. In fact, as Reeves and co-authors contend, as a consequence of being – organizations and the society– nested systems, companies which fail in creating value for the broader system’s key stakeholders “will eventually be marginalized” (2016: 49).

The current research enhances the CASs perspective to understand the potential of the OI paradigm for surviving in complex environments. And it claims that the integration of few suggestions of the CASs perspective into the OI paradigm, lets emerge that for driving sustainable responsiveness in complex scenarios, *organizations need to purposively open-up processes beyond their boundaries* (Chesbrough and Appleyard, 2007), *not merely* to leverage internal and external resources *for their individual success* (the main ethos of the OI)<sup>7</sup>, *but also to spur the growth of their ecosystem* by boosting its overall health as an “*emergent*” *opportunity*<sup>8</sup> to leverage individual organizations’ resources and benefiting society too (Porter & Kramer, 2006). Also Holmes and Smart (2009: 396) highlighted that the economic, social and cultural environment is a potential source of knowledge and tangible resources for all organizations, thus ensuring its overall health is a win-win strategy that benefits both community and companies.

The current research, enhancing this theoretical scaffolding for analysing the complex challenges that organizations are facing, construes the complex commitment of creating value *also* for the *broader system’s key stakeholders* as the Sustainable Development (SD) issue to which contemporary organizations –no matter whether they are business, governmental, public or non-profit organizations– are requested to commit themselves.<sup>9</sup> More specifically, for driving sustainable responsiveness in complex scenarios the research embraces an *external orientation of the sustainability* issue (Baumgartner and Ebner, 2010), interpreting it at a macro-level, enhancing Ebner’s and Baumgartner’s framework of SD (2006). The research depicts the set of “broader system’s key stakeholders as an *elastic category*”, which is gaining greater significance and is more and more embodied in the whole society and the wider community (Chong, 2009: 23; italic added).

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<sup>6</sup> Coherently with the CASs lens and the *cycle of local interaction, emergence and feedback*, Porter and Kramer (2006), referring to ‘*outside-in linkages*’, emphasized that corporate activity affects society and vice versa, external conditions also influence corporations, thus ensuring the health of the competitive context benefits both companies and community. The authors named this “meaningful benefit for society that is also valuable to the business” Shared Value (Porter and Kramer, 2006: 84). In full accordance, also the World Commission of Environment and Development (WCED) sees the “possibility for a new era of economic growth, one that must be based on policies that sustain and expand the environmental resource base. ... believ[ing] such growth to be absolutely essential” (WCED; 1987: 1).

<sup>7</sup> The OI umbrella concept mainly focuses on the *purposively opening-up of the innovation processes* to accelerate these activities and boost their effectiveness to maximise the firm’s (the focal agent) profit (Huizingh, 2011).

<sup>8</sup> The adjective “emergent” refers to the emergent outcomes brought out by Reeves and colleagues (2016: 48), which result from “local events and interactions” of the CASs’ unit of analysis, that shape the overall structure, behaviour and performance of the system and which influence individual agents creating new contexts for their interactions.

<sup>9</sup> Multidimensional in terms of considering also other forms of value than just the economic, monetary one; and multilevel in terms of considering the sustainability as an integration of the different, multiple levels –within and without the organizational boundaries– because “at each level there is the “primary tension between what is good for the individual agent and what is good for the larger system” (Reeves *et al.*, 2016: 49).



It states that nourishing and regenerating the ecosystem in which the organization is nested is a crucial responsibility for each organization (Allee, 2000; Porter and Kramer, 2006; 2011). In particular, by integrating the different perspective of CASs, OI and SD, the research define the SD as the *tension between what is good for the individual agent* (for the setting of the research, the individual organization) *and what is good for the larger system* (the broader system's key stakeholders elastic category), and considers this tension as the primary one by which each individual agent needs to be led, because “without Sustainable Development neither businesses nor societies in which they exist will have a long-run future”, as Payne and Rainborn (2001:159) claim.

In the light of the foregoing, *the research meta objective* is above all, addressing the *research problem* of how organizations – given the scenarios in which they are nested and no matter whether profit or non-profit– can manage this aforementioned primary tension. As a direct consequence of this wider definition of the tension (proposed by the research to define the SD commitment) as above depicted, the sustainable responsiveness challenge to which the focal organization is committed becomes wider, compared with the aim of the prevailing OI paradigm: organizations are requested to sustain over time *also the potential of the –economic and socio-cultural– value creation of the environment* in which they are nested, and “not merely” to boost innovation and competitiveness of the focal organization. Otherwise stated, organizations are also committed to *apportion out multiple kinds of value among the wider ecosystem* in which they are nested.

The CASs scaffolding helps to understand “why” organizations are requested to boost an external orientation of the SD, and the research strives to understand organizations' antecedents of this *wider purposive porosity of their boundaries* and strives to investigate the mechanisms through which organizations (or partnerships between them) overcome the primary (SD) tension between what is good for the individual organization and what is good for the entire environment.

To reach this aim, an explorative case-based research, applying a qualitative-interpretative approach, is employed, through the analysis of an OI-strategy formulation and implementation of a public cultural organization, the Rijksmuseum of Amsterdam, from the moment of its innovation of the strategy, turned into openness<sup>10</sup>. This public museum is considered a leading European museum and an open-digital-strategy best-practise, because of its ground-breaking Rijksstudio *open-source digital-project* (the OI practice *par excellence as claimed by Chesbrough and Appleyard, 2006: 60*)<sup>11</sup>

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<sup>10</sup> There are different rijksmuseums in the Netherlands (in fact “rijks” means imperial, of the kingdom), but hereafter ‘Rijksmuseum’ or Museum will be used as synonymous of ‘the Rijksmuseum of Amsterdam’, which also reflects the meaning of ‘the Rijksmuseum’ in the Netherlands, which has also its own brand “Rijksmuseum”, restyled in occasion of its reopening in 2013.

<sup>11</sup> Open-source are viewed as role-models for OI (Mueller-Seitz and Reger, 2009: 372; Chesbrough 2003, Gassmann, 2006; West and Gallagher, 2006). Moreover, Following Huizingh's (2011) process/outcome matrix, the case-study's OI-strategy began as a *public-innovation* (open outcomes and closed processes) and continued as an *open-source* OI-practice (both open outcomes and processes). Interestingly, analysis of open-source cases on different fields than the hi-tech or implemented by public organizations are not yet available in literature.

and because of the multidimensional spillovers generated by its OI-strategy, both at the focal-organization level and at the level of the surrounding society and the wider community.<sup>12</sup>

Because of the gap in OI literature regarding research-cases investigating OI implemented by public, non-profit organizations (Huizingh, 2011) and because of the multidimensional and multilevel success of Rijksmuseum's OI-strategy, the case-study seems to be "a talking pig" case (Siggelkow, 2007: 20);<sup>13</sup> thus, although it is a single-case-based research enhancing exploration, it also strives to become explanatory (Yin, 1994; 2014), when attempting to understand how the observed OI-strategizing of the focal public organization is leading towards SD.

In the following sections, first of all the theoretical background will be described in paragraph 2, breaking it down into the sustainability issue, the OI Strategy debate, the collaborative-selective openness through partnerships and the Bifocal innovation concept. Thereafter, in paragraph 3, the setting of the research, will be introduced.

Subsequently, in chapter 2, 3 and 4 three different but recursive phases of the research, will be presented. More specifically, chapter 2 –"Everyone's collections at Art Museums: ground-breaking digital business strategy as cornerstone for synergies"– focuses on understanding the mechanisms of the digital culture and of a ground-breaking digital strategy in boosting the economic sustainability of a public (cultural) organization, although its primary pursuit of creating *public value*, apportioning out economic, social and cultural capitals among the society. The level of analysis is the organization. The stage proposed in chapter 3 –"Public cultural organizations leveraging in- and out-bound flows of IC "for the larger good": the ecosystem's re-generation"– strives to understand which kinds of assets have been exchanged through the Museum's outflow processes and which are the impacts of these exchange processes, which mobilised the Intellectual Capital (IC) of the Rijksmuseum, expanding its boundaries into the wider ecosystem. This phase strives also to shift the research towards a multilevel perspective. Chapter 4 –"Open Innovation in a Public (cultural) Organization: towards a Sustainable Development ethos"– definitely strives to enhance the OI literature to understand how to commit the OI perspective with SD by enhancing the analysis of a paradigmatic case-study in the OI research landscape. The innovation of the strategy formulated and implemented by the Rijksmuseum is definitely an OI practise implementation. This phase of the research aims to have a better insight about the content, the dynamics and mechanisms that have been activated by the Museum's open strategizing, both at organizational and extra-organizational level.

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<sup>12</sup> The society and the wider community viewed by the research "as an *elastic stakeholder category*, which is gaining greater significance" (Chong, 2010: 23; italic added) considering the growing importance of the sustainability commitment and, moreover, with the type of organization (public) which leads to a strong commitment and a more challenging mandate (Chong, 2010) of performing a role in society by producing *value* for the community with the resources entrusted thereto (Moore, 1995:12).

<sup>13</sup> A single case-study investigation could have generalization limits, but as Siggelkow claims "A single case can be a very powerful example", just "make sure you have a talking pig" (Siggelkow, 2007: 20).

This third stage aims to propose theoretical implications on the debate about how to link OI with sustainability by analysing the specific antecedents, mechanisms and dynamics of the OI implemented in another than profit field and contrasting them with the prevailing OI (implemented in firms). The research makes the effort of going beyond the findings of practical implications for managers of arts organizations only, proposing theoretical and practical implications for managers in general to commit OI to SD. At the end, discussion, conclusions and further research will be treated in chapter 5.

## 2. The theoretical background

The CASs perspective is a theoretical scaffolding which helps to analyse and drive the complex contexts in which modern organizations are facing complex challenges, and helps to understand in which sense organizations and the society are nested systems and why it is fundamental that each *organization purposively opens-up processes beyond its boundaries*, not merely to leverage internal and external resources for their individual success (as the OI pronely boosts), but also to spur the growth of their ecosystem, boosting its overall health as an “*emergent*” *opportunity* to leverage individual organizations’ resources and benefiting society too (Porter & Kramer, 2006). In doing such organizations to some extent driven what Moore identifies as *Public Value* (1995), what Porter and Kramer (2006, 2011) identify as *Shared Value* and what Edvinsson (2013: 169) suggests as a *capital in waiting*<sup>14</sup>.

### 2.1 The sustainability issue

Although in an increasingly uncertain and less munificent environment “globalization has led ... to focus on short term results” (Huizingh, 2011: 4)<sup>15</sup> as Leavy (2012: 12, 716) evocatively wrote, it is time to essentially “getting back to what matters” by “restoring authenticity to the role of corporate management” and lead with the higher ambition of involving social and cultural concerns besides the economic ones, in order to create a long-term economic and social value. Both private and public organizations face many complex and interconnected challenges, but one issue in particular is shared by all of them, the 21<sup>st</sup> century mantra of sustainability.

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<sup>14</sup> The issue of “how organizations can improve their economic and socio-cultural performance, *having at the same time a regenerative impact on the ecosystem in which they are nested*” embraces Edvinsson’s encouragement to “keep looking for those invisible opportunity spaces, which [he] think[s] of as *capital in waiting*”, “hidden values and future impact” (Edvinsson 2013: 166, 169) emphasis added). The creation of society’s *capital in waiting* is a strategic approach of SD which “concentrates on building strong economic, social and environmental eco-systems, where healthy organizations can flourish”, instead of concentrating merely “on building strong organizations” (Dumay, 2013: 8).

<sup>15</sup> “Eroding established (primarily national) institutions and procedures of governance” (Scherer and Palazzo, 2007: 1096).

In the last years the sustainability debate has strongly intensified, and its terminology has broadened enormously (Ebner and Baumgartner, 2006). Sustainability is the key concept to every corporate social responsibility (CSR), corporate responsibility (CR) and Sustainable Development (SD) framework. In fairly simplistic but broadly accepted general terms, the sustainability issue is defined as the ability to “meet the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 8; the Brundtland Report), but the breadth and depth of the sustainability issue is quite complex and creates for all types of organizations complex challenges in the management of their commitments and logics of action (Payne and Raiborn, 2001). The framework of CSR has been defined in the 1950s as “... an obligation to pursue policies to make decisions and to follow lines of action which are compatible with the objectives and values of society” (Douglas *et al.*, 2004). The social responsibility issue assumes that firms’ “economic and legal duties should be extended by certain responsibilities to society” (McGuire, 1963 cited by Ebner and Baumgartner, 2006: 2). The World Business Council for Sustainable Development (WBCSD) actively took part in the discussion about sustainability, defining the CSR as a business commitment to contribute to sustainable economic development by integrating social and environmental concerns into their business on a voluntary basis (Ebner and Baumgartner, 2006).

Anyhow, SD is an “holistic scenario of human development with a socio-cultural, ecological and economic dimension” (Wallner, 1999: 49) which strives to frame the relation between business and society, therefore between organizations and the larger systems in which they are nested. SD claims that regenerating the ecosystem in which the organization is nested is fundamental for integrating the short-term with the long-term aspects of driving sustainability (Dyllick and Hockerts, 2002). As defined in a clear, visual manner by Ebner and Baumgartner (2006), the SD considers sustainability also at a macro-level. In particular Ebner’s and Baumgartner’s (2006: 13; fig. 2) framework, that analyses the relationship between SD and CSR, described figuratively the SD as three rectangles representing the three dimensions of the sustainability concept –economic, ecological and social sustainability<sup>16</sup>. At the micro-level they conceive the CR/CSR, but all three rectangles also overflow through their impacts (namely spillovers) into the macro-level wider system in which the focal unit of analysis is nested. These spillovers of multidimensional value that represent the individual organization’s creation and dissemination (apportioning-out) of value among the larger system, conceive the sustainability at the macro-level and thus depict the SD as a commitment *with an external orientation to sustainability* (Baumgartner and Ebner, 2010). This externally-oriented description of sustainability is coherent with the CASs’ cycle of local interaction, emergence and feedback and with the connected recommendation of looking to contribute positively to the larger

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<sup>16</sup> The authors refer to the three pillars of the triple-bottom-line perspective.

system (by creating value for the key stakeholders, viewed as the society and the wider community), required if organizations do not want to be eventually marginalized and failing for survival (Reeves *et al.*, 2016).

Concretely, Ebner's and Baumgartner's framework of SD strives to frame the relation between business and society, likewise between organizations and the larger socio-cultural and business systems in which individual organizations are nested, and it confirms the statement that nourishing and regenerating the larger system in which the organizations are nested is a crucial responsibility for any kind of organization, given that, as Payne and Raiborn (2001: 159) claim, "neither businesses nor the societies in which they exist will have a long term future without pursuing the Sustainable Development". On the same wavelength, Kok and co-authors (2001: 287) argue that "the justification for the existence of any corporation is that it serves its purpose: to benefit society", claiming that any firm has the obligation "to use its resources in ways to benefit society, through committed participation as a member of society". This approach of "explicitly"<sup>17</sup> strategizing the SD, takes into account the *chain of effects* from immediate to long-term strategic consequences, for the focal-organization and the ecosystem in which the organization is nested; thus, it enhances the integration between the short-term and the long-term aspects of driving sustainability (Dyllick and Hockerts, 2002), consistently with the main conceptual, ethical substructure of sustainability boosted by the Brundtland report. Paraphrasing Kok and colleagues (2001: 287), any organization needs to take into account the society as a whole and to improve its welfare at large, "independently of direct gains of the company"<sup>18</sup>. Also Allee (2000) claims that "everyone single organization" is engaged to promote a societal evolution in the direction of a more equitable and wealthier world, in which socio-cultural achievements, cultural heritages and the natural environment are preserved for future generations (Dyllick and Hockerts, 2002). And as a consequence of this engagement for social equity beside economic growth, private organizations are asked to "proactively think about the effects of the business on society at large" (Kok *et al.*, 2001: 31) and "even in areas not directly related to their business" (Scherer and Palazzo, 2007: 1096). In other words, they are challenged to become *sustainable enterprises* by delivering simultaneously economic, socio-cultural and environmental benefits (Hart and Milstein, 2003: 56; Whetten *et al.*, 2002; Dyllick and Hockerts, 2002; Kennedy *et al.*, 2016; Frynas and Stephens, 2015; Frynas and Yamahaki, 2016<sup>19</sup>), contributing to the human development in the surrounding community and to the SD of the ecosystems in which they are

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<sup>17</sup> Baumgartner and Ebner (2010) claim that often the sustainability issue seems to be pursued coincidentally, it happens by a coincidence, but not because of a clear focused strategy that committed participation in benefit society as a member of the community.

<sup>18</sup> More specifically, this is their definition of corporate social responsibility.

<sup>19</sup> But also coherently with the Porter and Kramer requested for the creation of shared value to firms (2006, 2011) or with the relation between business and society claimed by Scherer and Palazzo (2007), or the Leavy's request for getting back to the creation of long-term economic and social value (2012).

nested<sup>20</sup>. On the other hand, public organizations are asked to show and prove their accountability, increasing their legitimacy in obtaining public funds and, as a result of the economic tensions amplified by the 2008 crisis and the connected intensification of spending reviews (Talbot, 2011), they are requested for economic sustainability and thus for relying less on public funds<sup>21</sup>.

In analysing these challenges, the current research embraces the statement that for managing this increasing complexity *in a sustainable way*<sup>22</sup> it has become imperative to consider individuals, organizations, business and societal environments as nested systems, thus characterised by what the CASS' termed emergence property. Consequently, it has also become imperative to look beyond what the individual organizations own or control, monitoring and addressing complexity outside their boundaries, for "contribut[ing] positively to the [larger] system while receiving benefits sufficient to justify participation" (Reeves, *et al.*, 2016: 49). As a direct consequence the research supports the statement that each individual agent of the system<sup>23</sup> is engaged in commitments which need to confront a *primary tension between what is good for the individual agent and what is good for the larger system* (Reeves, *et al.*, 2016), in which *the larger system* in general terms means the broader system's key stakeholders –considered as an *elastic stakeholder category* which is gaining more and more attention and that could be identified in the society, the wider community or the entire environment (Chong, 2010). The research construes the SD commitment of creating and apportioning out a multidimensional value (economic as well as socio-cultural, human and so on) also among the broader system's key stakeholders as the complex, multidimensional and multilevel commitment of contemporary organizations.

In particular, the SD commitment is construed by the research as the challenge of handling the above-mentioned primary tension –between what is good for the individual agent and what is good for the larger system. And the strategies and mechanisms by which this tension is run and led (the dynamics of the SD) are of interest for the research in order to have insight about how organizations could drive SD. In order to clarify the sustainability concept investigated by the current research, it is also necessary to highlight that, enhancing its specific setting (the culture and creative industries; CCIs), it interprets the sustainability issue according to its economic and socio-cultural

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<sup>20</sup> Porter and Kramer (2006) referred to it as the outside-in linkages, with respect to which corporate activity affects society and vice versa, external conditions also influence corporations. This statement is also well explained by the complex adaptive systems' (CAS) cycle of local interaction, emergence and feedback (Reeves, Levin and Ueda, 2016; Dooley, 1996; Cohen, 1999; Choi, Dooley and Rungtusanatham, 2001; Mirabeau and Maguire, 2014) - that entails "a more organic, living systems view of the world of value" (Allee, 2000: 29). This level of analysis is suggested by the current research-phase as an implication for future research.

<sup>21</sup> Governments, and public organizations in general, are historically more involved in the creation of value for the society, but actually in this era of spending review and economies, they are facing more and more pressure for economical sustainability (Talbot, 2011), that is being accountable for the management of the received public funds (answerable for actions, decisions and performance) and, besides, able to boost an increasing economical self-standing capacity.

<sup>22</sup> In this statement *sustainable way*, means pursuing approaches to strategy that emphasize the long-term robustness (Reeves, *et al.*, 2016).

<sup>23</sup> For the current research each individual organization.

strand, –disregarding the ecological dimension of the Sustainable Development (SD)– but interestingly, Ebner and Baumgartner (2006) stress that the social dimension of SD is still the weakest pillar, neglected in discussions in comparison to the other two aspects.

Thus, summing up, the research considers an *externally-oriented*, complex, multilevel, social and cultural sustainability integrated with the economic one, and it considers this complex commitment as a “responsibility” that each individual organization has of nourishing the ecosystem in which it is nested (Allee, 2000 Porter and Kramer, 2006; 2011), by regenerating its various forms of capital (Elkington, 2001)<sup>24</sup>. And last but not least, the sustainability issue is put forward by the research as the *main strategic goal* –not merely as a by-product of the strategy– that every kind of organization needs to pursue *explicitly* through a clear strategy and not coincidentally (Baumgartner and Ebner; 2010).

The CASs scaffolding highlights that it is essential for all kinds of organizations to face the increasing complexity by considering themselves, business and societal environment as *nested systems* in an increasingly complex world; thus in this scenario both private and public organizations are engaged in complex commitments characterized by the above-mentioned *primary tension*.

## **2.2 OI-strategy: going beyond the hype and getting down to SD and not merely to business**

To drive sustainable responsiveness in less munificent, complex, hypercompetitive and increasingly uncertain environments, it is of prime importance to be aware that “it is difficult for one single firm to possess all resources [and capabilities] needed to develop and sustain current competitive advantages while trying simultaneously to build new ones” (Harrison *et al.*, 2001: 680). Thus, given that organizations cannot conduct all activities by themselves to maintain their existence (Sirmon, *et al.*, 2007: 280), they “need to look beyond what their firms own or control, monitoring and addressing complexity outside their firms” (Reeves *et al.*, 2016: 49) to integrate and accumulate the missing resources and capabilities (Frankenberger, Weiblen and Gassmann, 2014) with the purpose of improving their capacity to innovate, develop competitiveness and boost strategy flexibility (Brown and Eisenhardt 1998; Shimizu and Hitt, 2004; Sirmon *et al.*, 2007). Interestingly, as Gassmann (2006) and van de Vrande and colleagues (2009) highlight, the fact that organizations cannot conduct all activities by themselves to maintain their existence is one of the main assumptions at the heart of the Open Innovation (OI) paradigm, which has its basic premise in the *purposively opening-up of the innovation processes* in order to accelerate these activities and boost their effectiveness (Huizingh, 2011). Therefore, although there can be various motivations for a limited

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<sup>24</sup> Which are: social, human, cultural, economic, natural and so on (Elkington, 2001).

use of OI practices,<sup>25</sup> it is reasonable to affirm that OI-strategy (Chesbrough and Appleyard, 2007) represents a possible sustainable path of development for any type of organization in complex, dynamic, hypercompetitive and less munificent environments. The OI paradigm has been developed analysing firms-case-studies strategizing openness mainly in the R&D processes and in any case looking for maximizing the focal-firm's competitiveness. Chesbrough in his new book "Open Innovation Results. Going beyond the hype and getting down to business" states that OI "can really help improve business performance" (2019: 67), but interestingly the current research uses this paradigm as the most important theoretical scaffolding to analyse the formulation and implementation of an innovation of a strategy in a public cultural organization –the Rijksmuseum of Amsterdam– which is strategizing openness definitely to develop its economic sustainability<sup>26</sup>. But, differently from the main firm-centered OI-goals, it is primordially looking to perform a role in society by creating and disseminating socio-cultural and economic value into the community (Moore, 1995), and in general into the societal and business environment in which it is nested. Thus, enhancing this exceptional<sup>27</sup> OI practises-implementation case, the research strives to understand whether OI can help to improve the SD performance, aiming to getting down not merely to business, but mostly to SD (paraphrasing the title of Chesbrough's book, 2019).

Rijksmuseum's integration of these multilevel commitments (of the focal-organization's sustainability and of the larger system's sustainability<sup>28</sup>) makes this case-study interesting and powerful (Siggelkow, 2007) to critically examine the main OI paradigm, striving to re-frame existing business and management OI-practises, for proposing "responsible" logics of action able to conceive strategies driven by the SD issue. Through this perspective of openness it is possible to capture the potential benefits of OI-strategy *of a fairly large magnitude*<sup>29</sup>, conceived by the research as the SD goal.

The OI paradigm (Dahlander & Gann, 2010; Huizingh, 2011; West & Bogers, 2014; Antons *et al.*, 2016; Randhawa *et al.*, 2016; West and Bogers 2017; Chesbrough, 2003a,b,c; 2006,a,b) describes

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<sup>25</sup> Huizingh (2011) stresses that some colleagues (e.g. Lichtenthaler and Ernst, 2009 and De Wit *et al.*, 2007) found a limited use of OI practices because "globalization has led ... to focus on short term results", cutting costs for long-term innovation research and for transaction-cost in using external knowledge (Huizingh, 2011: 4). Moreover, especially companies of smaller size or non-profit organizations have also fewer resources to build and maintain *relational capital* for harnessing collaborative networks (Huizingh, 2011).

<sup>26</sup> Interestingly, as written in the Rijksmuseum annual report of 2012 but also on the website of the Dutch Ministry of Education, Culture and Science, Dutch cultural organizations (specifically "culture producing organizations" but it does not include the theatres, considered "podiumkunstinstituten and festivals" –on-stage art institutions– which are requested to a higher percentage of self-financing currently 25,5%) have a specific duty for their economic self-financing the "*eigen inkomstennorm*" (own-revenue norm), which in 2012 was 17,5%, increasing yearly by 1% until 2017 when it was frozen at 21,5%.

<sup>27</sup> Exceptional interpreted in its meaning of being and exception, thus being uncommon (especially in contrast with the prevailing main paradigm) but also in its meaning of being well above average, thus extraordinary for its performance.

<sup>28</sup> The main firm-centered OI approaches "examine the ability of organizations *to sustain themselves economically* with an open approach to innovation" (Chesbrough and Appleyard; 2007)" (Appleyard and Chesbrough, 2017: 310, italic added).

<sup>29</sup> According to Huizingh (2011; but also, Papa *et al.*, 2017; p 135; Bianchi *et al.*, 2011 Chesbrough and Crowther, 2006) empirical studies showed that firms perform more inbound than outbound activities thus they "fail to capture potential benefits ... of a fairly large magnitude" (Huizingh, 2011: 3).



practices which have roots far back in history (Huizingh, 2011) before Chesbrough proposed this umbrella concept which, not surprisingly, is rich of different definitions, depending on the research focus (Huizingh, 2011; Dahlander and Gann, 2010). Chesbrough and Bogers (2014), proposing “new frontiers in Open Innovation”, refined the concept of OI as “a *distributed innovation process* based on *purposively* managed *flows across organizational boundaries*, using pecuniary and non-pecuniary mechanisms *in line with the organization’s business model*.”<sup>30</sup> (Chesbrough and Bogers, 2014:17 and 27; italic added). OI-practices represent a possible effective path of development in complex, hypercompetitive and less munificent environments for any type of organization, private, profit and public, non-profit. In fact for “making strategic sense of innovation communities, networks and ecosystems, the approach of organizations towards strategy needs to be an ‘open strategy’, based on promoting porosity in organizational boundaries rather than on the importance of constructing barriers” (Chesbrough and Appleyard; 2007:58). But OI has its basic premise in *purposively opening-up innovation processes* to boost their effectiveness (Huizingh, 2011) in maximizing the focal firms’ profits, therefore *it has a firm-centered profit-maximizing ethos* (West and Bogers, 2017).

Different authors (West and Bogers, 2014: 44; West *et al.*, 2014) highlight that Chesbrough developed the OI perspective heavily influenced by the “profiting from innovation framework of Teece” (1986) and coherently with the foremost *logic of action* of the innovation management’s primary pursuit, which historically has mostly been to develop companies’ competitive advantages and connected profits.<sup>31</sup> Also Gassmann and Enkel (2004: 14) aver that OI “can be summarized as an approach that enriches companies’ innovativeness ...to gain them competitive advantage”.

In the light of spending reviews and economic tensions, particularly acute since the 2008 crisis which has increased the quest for public organizations’ economic sustainability (Talbot, 2011), the research agrees with West and Bogers (2017: 44) that “the business model premise that underlies the definition of OI could be extended to public, non-profit organizations “because of their need to create and capture value to maintain their existence”; however public organizations also have their specific, main goal of performing a role in society by disseminating public value into the wider community in which they are nested (Moore, 1995).

Although OI-strategy has always been pronely implemented to perform firms’ profits-maximization, in the early stage of the case-study –during the inquiry into the antecedents and logics of action of the public museum’s innovation of the strategy– it became self-evident that the *initial motivations* to

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<sup>30</sup> “In this definition, *innovation* refers to the development and commercialization of new or improved products, processes, or services, while the *openness* aspect is represented by the knowledge flows across the permeable organizational boundary” (Chesbrough and Bogers, 2014:17,27; italic added).

<sup>31</sup> And in fact, the innovation management literature has mostly focused on understanding how to translate innovation into commercial applications, thus into an “appropriable rent for innovators in so far as imitation is deferred” (van der Have and Rubalcaba, 2016: 1931; Schumpeter, 1949; Dawson and Daniel, 2010).

adopt OI, the *drivers behind the decisions of openness*, were different from the main *firm-centered profit-maximizing logic* and also from the typical *defensive* or *offensive* motives to openness (Huizingh, 2011).

Moreover, the *primary tension* (conflicting commitments) addressed by firms which challenge the openness “rests with the need to secure an economic return in the face of relinquishing control over critical assets and capabilities” (Appleyard and Chesbrough 2017: 310; Barney, 1991; Chesbrough *et al.*, 2014). Appleyard and Chesbrough (2017:310) stress that “the reconciliation of this tension is how ... [they] define Open Strategy: a firm’s justification for participating in an open initiative, including its ability to capture value from the initiative”. Although the ability to capturing value from the initiative of openness remains an important commitment in every kind of organization (also public, non-profit), the perspectives of how to conceptualize the loci of value creation and capture need to be, in a way, of a wider scope in public organizations as a consequence of their main institutional issue of creating public value for the society and the wider community in which they are nested (Moore, 1995). This core institutional-commitment creates dissimilarities in the content of the public organizations OI-commitments and in the evaluation of its effectiveness, which becomes *multi-dimensional* and *multilevel*. It emerged from data analysis that these dissimilarities also have an impact on the public organization’s primary tension, which is of a wider scope and manifests itself in the challenge of integrating *what is good for the individual agent* (for the research-setting the individual organization) *and what is good for the larger system* (for the research-setting the broader system’s key stakeholders or, put differently, the society and the wider community) (Reeves *et al.*, 2016). And this tension is coherent with the engagement to the SD commitment, by the research interpreted and investigated at a macro-level and described as the reconciliation of this latter wider tension. Within this development perspective, the public organization takes on the responsibility for SD as the organization’s main issue and in doing so, it strives to contribute positively to the system while receiving benefits sufficient to justify participation, boosting positive synergies in the CASs’ cycle. Thus the investigation of this case-study which has this different focus of the main challenging tension to be managed through an OI-strategy shall provide thought-provoking considerations about how it is possible to capture potential benefits of OI-strategy *of a fairly large magnitude*, conceived by the research as the SD commitment.

### ***2.3 Openness to the community as a whole and selective openness: collaborating with partners***

The strategy of opening up processes and/or outcomes<sup>32</sup> can be implemented by activating two primary trajectories: (1) by opening up to the society and the wider community as a whole the processes (lead/user centered innovation; von Hippel 1988, 2005, 2010), the outcomes (public innovation; Huizingh, 2011; Chesbrough and Appleyard, 2007) or both the processes and the outcomes (open-source; common innovation, Swann, 2017; democratic innovation, von Hippel, 2005) and (2) by opening up in a selective manner the processes –to specific, selected actors: business, non-profit organizations or governmental institutions– and also the outcomes among the selected agents (private OI).

The second trajectory introduces the topic of collaborations, concerning partnerships which co-create value. The co-developed, *collaborative value* could be defined as “the transitory and [or] enduring benefits relative to the costs that are generated due to the interaction of the collaborators and that accrue to organizations, individuals, and society” (Austin and Seitanidi, 2012: 728). This organizational modality of driving innovation and creating value is a paradigmatic OI activity, as the public innovation or the open-source are OI-practices *par excellence* (Chesbrough and Appleyard, 2006: 60; West and Gallagher, 2006)<sup>33</sup>.

The CFO of the Rijksmuseum Erik van Ginkel, in the interview on 27 January 2020, highlighted that their strategizing strives to balance the creation of economic value, for the economic sustainability of the museum, with the creation of socio-cultural, public value for the society and the community as a whole, stressing that being a public organization they do not have shareholders to whom distribute dividend, but they do have the society as the main stakeholder to whom they look to unleash value –which they take into consideration as a complex concept of value–, and they do have 600 employees<sup>34</sup>, thus 600 families that economically depend on their capacity to be financially sustainable. Van Ginkel explained that the museum’s partnering strategy, through the Development Department, strives to fulfill the goal of Converting the Collection (the most important part of their structural capital) into Connections and thus into the Creation of different kinds of value, which need to be partly monetary, but they also look for intangibles and multidimensional value.

To analyze the *collaborative value* created by the museum together with its partners, the current research enhances the Collaborative Value Creation Spectrum proposed by Austin and Seitanidi

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<sup>32</sup> Reference is to Huizingh’s matrix of different kinds of OI, depending on closed or open, processes and outcomes.

<sup>33</sup> The Rijksmuseum of Amsterdam has innovated its strategy by starting with a public innovation, but in which nevertheless some processes were conducted in collaboration with other organizations (e.g. with telecommunication company KPN), and then continuing through the open-source, the common innovation, the user centered innovation and the creation of a constellation of partnerships with which the Museum is co-developing projects, managed by the Development Department, that integrates all the different types of OI-strategy as schematized in table 3.

<sup>34</sup> And around 100 in outsourcing.

(2012) which, distinguishing between a *sole creation* (the value created by the independent actions of one of the partners) and a *co-creation* (the value created by the conjoined actions of the partners), provides four potential sources of co-created value, identifies four types of *collaborative value*<sup>35</sup>, thus proposes a multidimensional concept of value, and suggests four stages of the collaboration continuum.

The four potential sources of co-created value indicated by the authors are: resource complementarity, resource nature, resource directionality and use, and linked interests.

*Resource complementarity* leads to “obtaining access to needed resources different than those one possesses” (Austin and Seitanidi, 2012: 729), leading back to the previously introduced concept that (due to the complexity and lower munificence of the scenario) it is difficult for one single firm to possess all resources and capabilities needed to develop and sustain current competitive advantages while trying simultaneously to build new ones. The authors claim that the effectiveness of resource complementarity depends on the achievement of *organizational fit*. The current research agrees that organizational compatibility supports the overcoming of barriers in the cross-partnering, but integrates this framework claiming that the *organizational values fit*<sup>36</sup> (*alignment of the values*) between partners is a crucial factor to consolidate collaborations over time, to overcome unsuccessful collaboration-projects, and to drive innovation development through the abatement of what the current research labels as *cross-fertilization stickiness* (Cavriani, 2019). This claim is confirmed by van Wijk, Jansen and Lyles (2008) which stressed that *shared visions* facilitate knowledge transfer (Hult *et al.*, 2004). The *cross-fertilization stickiness* concept derives from the information stickiness concept enucleated by von Hippel (1994)<sup>37</sup>. Of particular interest for analyzing cross-fertilization co-development paths, is von Hippel (1994: 5; italic added) stressing that “information stickiness can also vary due to other attributes of an information *transmitter* and *receiver*. ... And, of course, the decisions of information possessors as to the pricing of access to proprietary information also directly

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<sup>35</sup> The authors use as synonymous collaborative value and co-created value.

<sup>36</sup> In Intellectual Capital (IC) literature the *organizational values* concept, together with the *corporate culture* and the *management philosophy*, are part of the IC *culture assets* component (Marr *et al.*, 2004).

<sup>37</sup> “The information needed to innovate... is widely distributed” (von Hippel, 2005: 14), and it has become evident that “neither the locus of innovation nor [the locus of its] exploitation need [to] lie within companies ‘own boundaries’” (von Hippel, 1988; Enkel *et al.*, 2009: 2). The need to transfer information from its point of origin to a specified problem-solving site will not affect the locus of [an innovation-related] problem-solving activity when that information can be shifted at no or little cost. However, when information [used by innovators in the course of their problem-solving work] is costly to acquire, transfer [from place to place], and use - is, in our terms, “sticky””. Some reasons which advanced for assessing why information might be sticky “have to do with the nature of the information itself, some with the amount of information that must be transferred, and some with attributes of the seekers and providers of the information” (von Hippel; 1994: 2).

affect the stickiness of that information.” Coherently, literature claims that OI is underexploited because of the resistance of the different agents (in the research setting different organizations) to transfer resources, the power to take decisions and the power to manage the outcomes of the collaboration (Gambardella and Panico, 2014). The alignment in the values could reduce ("unsticking") the cross-fertilization stickiness<sup>38</sup>.

The *nature of the resource* mobilized and leveraged by the collaboration could be generic (owned by the majority of companies) or more organization-specific (distinctive competences as e.g. specific knowledge, capabilities, infrastructure, and also relationships key to the organization's success). Also the *resource directionality and use* are important when analyzing the value creation. In fact, how resources are deployed, and the resource-flow features, are both analyzed to characterize the typical outbound, inbound and coupled processes of OI. In particular Austin and Seitanidi (2012) remember that a resource flow can be a unilateral or a bilateral and reciprocal exchange; moreover it can be parallel, thus separate, but also a *conjoined intermingling of complementary* (hopefully distinctive) resources –this latter more appropriate to co-create new products, services or activities “that neither the organization could have created alone or in parallel co-created new value” (Austin and Seitanidi, 2012: 730).

In proposing the potential sources of collaborative value, Austin and Seitanidi (2012: 730) remember that “self-interest –organizational or individual– is a powerful shaper of behavior” also in collaborations, and they claim that, when the self-*interests* of the partners engaged in the collaboration are perceived as “*linked* to the value they create for each other and for the larger social good”, the potential to co-create value is greater (Austin and Seitanidi, 2012: 730). The authors emphasized that for boosting the collaborative value development, it is essential “to reconcile any divergent value creation frames; and ... to perceive the value exchange as fair” (Austin and Seitanidi, 2012: 730).<sup>39</sup> Moreover, they claim that “the greater the perceived fairness in the sharing of that value [the one the collaborators create], the greater the potential for cocreating value” (Austin and Seitanidi, 2012: 730).

The current research embraces other two potential sources of collaborative value, which are suggested by the CASs lens and are only partially considered in the last two sources of co-development suggested by Austin and Seitanidi<sup>40</sup>: the *fostering of trust* and of *reciprocity* in the ecosystem in which the organizations are nested and collaborate (Reeves *et al.*, 2016). Lane (*et al.*, 2001) and Szulanski (*et al.*, 2004) argued that trust between partners determines organizational

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<sup>38</sup> “Organizations’ efforts will sometimes be directed toward investing in “unsticking” or reducing the stickiness of information held at some sites” (von Hippel; 1994: 2). The data of the case corroborate that values fit, in particular regarding the goal of creating social innovation besides economic results, drives a “generous” transfer of information and resources.

<sup>39</sup> This statement is coherent with findings of the current research: the partners alignment in the *organizational values* is an antecedent for perceiving the value exchange as fair.

<sup>40</sup> Perceiving the value exchange as fair, fosters trust across organizations and the presence of linked interests between collaborators, fosters the perception of *reciprocity* in the value created by each partner for other partners and for the social good.

knowledge transfer. Trust “reflects the belief that a partner’s word or promise is reliable and that a partner will fulfill its obligations in the relationship” (Inkpen, 2000: 1027). It makes the transfer of organizational knowledge possible by increasing “partners’ willingness to commit to helping partners understand new external knowledge” (Van Wijk *et al.*, 2008: 835). And they continue claiming that “trustworthy and strong relations enable firms and units to transfer knowledge” and that for tying “strength and trust, *relational capital* is arguably the most important network-level driver of organizational knowledge transfer both within and across organizations” (Van Wijk *et al.*, 2008: 845).

Austin and Seitanidi (2012) also proposed four different types of value: *associational* value, which considers benefits deriving “simply” from having a collaborative relationship with other organizations; *transferred resource* value; *interaction* value, intangibles which derive from the processes of partners that are working together<sup>41</sup>; and *synergistic* value.<sup>42</sup> The positive synergistic value –which refers to the fact that combining partners’ resources enables to achieve the creation of a greater value than they could have achieved separately– is analyzed specifically in the first phase of the current research at the organization-level and in the last phase at the extra-organizational level. Interestingly, Austin and Seitanidi (2012) assert that the collaborative creation of social (or environmental) value can generate economic value and vice versa, thereby boosting virtuous value circles. Moreover, they remember that innovation –which they describe as the creation of completely new forms of change thanks to the combination of the partners’ distinctive resources and capabilities– is a driver of synergetic value creation. And they stress that for this reason the synergistic value holds “the potential for significant [multilevel] organizational and systematic transformation and advancement” (Austin and Seitanidi, 2012: 731).

This framework has been used to analyze how the partnerships of the Rijksmuseum with business organizations co-create value, and which kind of value. And several findings corroborated and enlarged this framework. Also the Collaboration Stages framework proposed by Austin and Seitanidi (2012), which are in order philanthropic, transactional, integrative and transformational, has been used by the research to understand the characteristics of the case-study collaborations. In particular the collaborations which are most effective: in boosting a multilevel engagement, in driving the co-creation of a multidimensional and synergetic value, and in enhancing external-system-changes by creating social innovation besides business innovation –where these latter outcomes are coherent with the SD commitment as proposed by the current research.

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<sup>41</sup> E.g. the most important intangibles which emerged from the case-study data are: reputation, trust, relational capital, learning, knowledge, communication, transparency, inclusiveness, accountability.

<sup>42</sup> The spectrum of value creation proposes a multidimensional and multilevel type of value, thus is evidently coherent with the statement of the research that looks for the creation of SD.

Interestingly, from the first data analysis emerged that the Rijksmuseum is a public organization and a non-profit one which is not lacking neither in funds nor in distinctive resources and capabilities, and thus, most of its collaborations are different from just philanthropic ones (very typical in public cultural institutions), described by Austin and Seitanidi as the ones in which “the business is the funder and the nonprofit is the doer” (2012: 738). The museum definitely focuses on strategizing collaborations which drive a wide potential of transferred value and interactional value and concentrates its efforts on boosting *transformational collaborations*<sup>43</sup> to lead synergetic value and business and social innovation for external systematic change.

The magnitude and complexity of the SD commitment, in a less munificent and less predictable scenario that worldwide communities are facing, “transcend capacities of individual organizations and sectors to deal with adequately” (Austin, Seitanidi, 2012: 727). Responsibility for sustainability needs to be shared: “Sole responsibility is an oxymoron” in itself (Visser, 2011: 5) and each individual agent of the system is engaged in the complex SD commitment (Allee, 2000).

#### ***2.4 The Bifocal Innovation: integrating desirable social innovation and business innovation***

*“Social Innovations are not necessarily driven by the profit motive and business innovations need not to be social innovations” (Pol and Ville, 2009: 881). And the social side of innovation must not remain hidden behind a technical agenda (Pol and Ville, 2009; Dawson and Daniel, 2010)*

One of the opportunities for research in OI practises is to get a better insight about how organizations can capture the potential benefits of OI-Strategy with a fairly large magnitude (Lichtenthaler, 2010; cited by Huizingh, 2011), overcoming its under-exploitation (Chesbrough, 2003a; van der Vrande *et al.*, 2009; Huizingh, 2011; Gambardella and Panico, 2014) as well as its under-exploration (Cavriani, 2019). In the light of the discussion currently taking place on merging OI practices with the sustainability concept (Arcese *et al.*, 2015), the research aims to better understand how OI can be linked to SD, considering the SD a fairly large magnitude of OI’s potential benefits. But the breadth and depth of the SD issue create complexities (Payne & Raiborn, 2001), entailing to a broader setting of the OI perspective and to a multilevel analysis of OI research (Chesbrough & Bogers, 2014; Bogers *et al.*, 2017). In fact when the main commitment of an organization’s OI strategy becomes the SD, it is necessary to get an insight into how

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<sup>43</sup> *Transformational collaborations* are identified as the most advanced collaborative stage, in which “there is shared learning about social needs and partners ‘roles in meeting those needs”, and that are labeled as “Social Issues Platform” for collaboration by Selsky and Parker (2010). “Interdependence and collective action is the operational modality, such as the joint creation” for Austin and Seitanidi (2012: 744).

innovation, which type of innovation and moreover at which level innovation takes place: “on an *organizational level*,” or “*on a societal level* ... improving quality of life,” or “*on a global level*, shifting ... [paradigm] ... towards capitalism 4.0 ... based on new insights into values and relationships ... evolving social capital and national well-being.” (Edvinsson, 2013: 170-171; italics added).

Historically, innovation’s primary pursuit has been to develop companies’ competitive advantages and profits, thus the emphasis of the literature on innovation management has always been on how to translate innovation into commercial applications, or in other words, into an “appropriable rent for innovators in so far as imitation is deferred” (van der Have, Rubalcaba, 2016: 1931; Schumpeter, 1949; Dawson and Daniel, 2010). But bearing in mind that for a long-run future of businesses and societies it is necessary to spur SD (Payne and Raiborn, 2001), which concerns also boosting *a regenerative impact on the ecosystem’s various forms of capital* –social, human, cultural, economic, natural and so on (Elkington, 2001:7)–, the *social innovation (SI) issue* (van der Have and Rubalcaba, 2016; Dawson and Daniel 2010; Pol and Ville, 2009; Mouleart *et al.*, 2005) needs to *explicitly* enter in the organizations’ commitments, to be achieved not merely coincidentally as a by-product of their strategy,<sup>44</sup> but as part of their strategic focus (Baumgartner and Ebner, 2010). Interestingly, Dawson and Daniel (2010: 12) “acknowledge the importance of social input into the management of complex problems in order to achieve an innovative social solution ... innovations that contribute to social sustainability and societal well-being”.

Innovativeness, no matter whether it is for challenging the industry standards or for creating products and services that exceed what users could anticipate (Whitney, 2011), is not only crucial for the competitiveness of firms but also for the competitiveness of communities, and more in general for increasing the human well-being and meeting the growing and diversified needs of society (Borzaga and Bodini, 2012). But the question is whether the concepts of Social Innovations (SIs) and Business Innovations (BIs) are of a similar magnitude.

Although the history of innovation shows that many BIs can get beneficial effects not only for innovators but also for the community as a whole, generating human well-being and social impacts as well (Pol and Ville, 2009: 883; Schumpeter), these spillovers are developed mainly coincidentally (Baumgartner and Ebner; 2010)<sup>45</sup>. Actually, SIs are not necessarily driven by profit motives, instead they are motivated by the goal of meeting social needs and performing a role in society –by apportioning out different forms of value among the community. And BIs –generally motivated by

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<sup>44</sup> E.g. through the so-called externalities or knowledge spillovers.

<sup>45</sup> Innovation dissemination can have a regenerative impact on the innovators’ ecosystem too (e.g. knowledge spillovers). Also Schumpeter (1909: 3) already highlighted the existence of “altruistic or social wants ...[that] are felt and taken into account by individuals or their agents”, but in this profit-maximization ethos the development of social innovation is always a by-product and achieved coincidentally.



profit maximization (Pol and Ville, 2009: 881)– do not need to be Social. Moreover, the “two perspectives [innovations driven by the objective of improving well-being of societies and those driven by profitability and commercial success] can also come into direct conflict” (Dawson and Daniel, 2010: 11). Consequently, SI is not always identifiable with BI (and vice versa)<sup>46</sup>.

Driving the SD as the main commitment of the strategy asks for a “shift in our perception of how innovation benefits human being “(Pol and Ville, 2009: 881). Interestingly, Chesbrough and Di Minin (2014: 169) also claim that research on OI has so far primarily focused on the private benefits of innovations and, consequently, “has tended to overlook its impact outside the private sector” (Chesbrough & Di Minin, 2014: 169).<sup>47</sup> Therefore, it is possible to assert that there is a sensitivity, and an explicit call, for research in the application of OI practises in non-profit, public contexts (West and Bogers, 2014). The current research, investigating how OI strategy can be coupled with SD and therefore, how organizations can have a regenerative impact also on their ecosystem, is per definition not focused on understanding merely the private benefits of innovations, but instead, is striving for a better insight into the socio-cultural and economic impact that the OI approach can have on the wider system in which the focal organization is nested –in addition to the impact on the focal organization itself.

Dawson and Daniel (2010: 11; italic added) suggest that this “shift in emphasis towards ‘social’ innovations can shed useful insight on how to promote and develop innovations ... provid[ing] new and novel ways of tackling ‘problems’ that provide *collateral outcomes* that will ultimately benefit social well-being”. Definitely SI identifies a critical type of innovation (Pol and Ville, 2009), it is considered as an emerging area of innovation studies (van der Have, Rubalcaba, 2016),<sup>48</sup> despite the ambiguity of its fragmented concept (Pol and Ville, 2009; Dawson and Daniel, 2010; Borzaga and Bodini, 2012; 2014; van der Have, Rubalcaba, 2016)<sup>49</sup>.

To better understand the emerging SI field of research and to have a useful concept for exploring the case-study, the current research builds its SI framework on the review of some conceptual papers which have critically investigated different definitions of SI (Pol and Ville, 2009; Dawson and Daniel, 2010; Borzaga and Bodini, 2012; 2014; van der Have, Rubalcaba, 2016; report of The Young Foundation, 2007; 2012; World Economic Forum, the OECD LEED Forum on Social Innovation, 2000; Centre for Social Innovation, 2008). The Young Foundation report “Social Innovation: What it is, Why it matters and how it can be accelerated” (2007), in defining SI, stressed

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<sup>46</sup> The set of social innovation and the one of business innovation does not coincide (Pol and Ville, 2009).

<sup>47</sup> Consistently with the fact that OI implementations and therefore OI research has mainly regarded private-profit organizations and in fact there is a call for the analysis of OI practices in the non-profit public sector (West and Bogers, 2014)

<sup>48</sup> Especially the ones that look for framing innovations able to solve social problems to encompass the narrow economic and cutting-edge technological outlook on development (van der Have, Rubalcaba, 2016).

<sup>49</sup> There is certainly a lack of consensus about its specific meaning and its potential relevance in the academic discussions (van der Have, Rubalcaba, 2016)

the social purpose of new ideas, innovative activities and services put into play by the “focal locus of innovation” (that can be individuals, groups and organizations as pointed out by Chesbrough & Di Minin, 2014). The report highlights that SI means ‘innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organisations whose primary purposes are social’ (The Young Foundation, 2007: 8).

In one sense this definition is coherent with the statement of the current research that asks focal organizations to recalibrate their strategic focus on SD and not anymore just on profit-maximization. But in the other sense this definition excludes new ideas, innovative activities and services that although boosting a positive social impact in the society, are motivated by the goal of either business or socio-cultural innovation, or that are boosted by organizations that are not primarily driven by social purposes.

BI is, generally speaking, profit-seeking innovation (Pol and Ville, 2009) but typically also generates benefits to other parties than the innovator (the so-called innovation spillovers, e.g. knowledge spillovers); but agreeing with the authors, it is not possible to “identify the set of social innovation with the set of business innovation” and vice versa. In any case, if a SI is boosted by a company which is also profit-seeking, it does not mean that it cannot be considered as social when it boosts social –positive– innovation spillovers. However, the present research puts forward that to drive SD a recalibration of the strategic focus is necessary, if the focal organization is focused on profit-maximization.

The concept of social innovation has been considered in the OI literature as well, and investigating OI practises implemented in the public sector, the Open Social Innovation concept has been proposed (Chesbrough & Di Minin, 2014). Both studies (of Chesbrough & Di Minin, 2014 and Pol & Ville, 2009) refer to the World Economic Forum, to the Nesta and the Young Foundation sources to specify the notion of SI, but Pol & Ville (2009) as well as van der Have and Rubalcaba, (2016), entered deeply into the debate about the value and consistency of the content of this critical type of innovation through a critical approach. They remind that the concept of SI, being used in different disciplines, does not have fixed boundaries; they propose few distinctions for a critical discussion of the concept –institutional change, social purpose and public good– which the present research enhanced for its investigation, striving to understand the kinds of innovation activated by the OI-strategy of the Rijksmuseum (among the wider society and in partnerships with other organizations).

Chesbrough & Di Minin (2014), pointing out that SI can be the result of individuals, groups and organizations, underline that, whichever will be its locus, by definition SI needs to account for social change as the ultimate goal of its strategy. SI is seen in general terms as the prime mover of

institutional change (Pol and Ville, 2009) or positive social change (Chesbrough and De Minin, 2014). Chesbrough and Di Minin (2014: 169) also remind that “innovations that get to the market create change in society”, but there can be many sorts of innovations and their perspective, as stressed by Pol and Ville (2009) does not consider whether the change is desirable or not and they also not really distinguish different types of SI. For example, according to Heiscala (2007: 59) SI means change in at least one of the three social structures –cultural, normative and regulative– of society, and these changes “enhance its collective power resources and improve its economic and social performance.” The current research embraces this conceptual framework but without considering this dual improvement of both economic and social performances of the society, although desirable, a necessary condition for evaluating an innovation as social.

Although all different critical discussions about the SI definitions have been helpful to the current study, the main framework used by the research to analyse the case-study data is the one of Pol and Ville (2009). They distinguish SI from BI and other kinds of innovations (Borzaga and Bodini, 2012)<sup>50</sup>, which helps to drive a shift in the emphasis when discussing innovation, by evoking a shift in the perception of how innovation benefits human being and social well-being (Pol and Ville, 2009). They define an *innovation as social* “if the implied new idea has the *potential* to improve either the *quality or the quantity of life*” (Pol and Ville, 2009: 881; italics added).<sup>51</sup> And for “the quality of life” they refer to the macro-level quality of life, which they define “as the set of valuable options that a group of people has the opportunity to select” (Pol and Ville, 2009: 882).<sup>52</sup> But, differently from Dawson and Daniel (2010: 12), who claim for a “view that seeks to place the social innovation first” in the strategic focus of organizations<sup>53</sup>, Pol and Ville (2009) suggest a concept –the one of *bifocal innovation*, that considers the overlapping (the integration) of the sets of social and business innovation– but with an additional distinction inside the SIs set: the bifocal concept includes only *desirable social innovation*, which is “the creation of new ideas *displaying a positive* impact on the quality or the quantity of life” (Pol and Ville, 2009: 884; italics added).

Putting SI on first place in organizations, as Dawson and Daniel (2010) suggested, is only implementable by public-non-profit organizations or, at most, by social enterprises, which above all are requested to be sensitive to collective goals, having their primary pursuit in succeeding in helping society (Moore, 1995: 12) and their primal nature in creating what Moore (1995) calls *public value*.

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<sup>50</sup> They distinguish SI from business innovation but also *desirable* from *deleterious social innovation* and *pure social innovation*. They stress that there are innovations that are neither business nor social. And, moreover, they remind a framework of five ideal types of social innovations suggested by Heiscala, (2007): technological, regulative, normative and cultural innovations. Because of the setting of the case-study the latter have been a useful definition.

<sup>51</sup> Their use of potential is not trivial, considering the main impossible predictability of the future impact of social innovations.

<sup>52</sup> Therefore, it does not focus on specific individual choices (too subjective) but on the *set of valuable options*.

<sup>53</sup> As Chesbrough and Di Minin proposed with the Open Social Innovation perspective (2014).

Differently the current research endorses Pol and Ville's (2009) bifocal innovation concept, firstly because it helps to interpret OI-practises which strategized both for meeting social needs and performing a role in society –by disseminating public value– and for harnessing their economic sustainability (although not with a main profit-maximizing ethos) by increasing their capacity to develop differentiation and growth of revenue: this integrated development path is coherent with the SD issue (as conceived by the research). Secondly, Pol and Ville's (2009) concept of bifocal innovation is also useful to drive a shift in the concept of OI-strategy in order to recalibrate it and lead this paradigm to the SD issue, through strategies which are also implementable in profit organizations, that evidently cannot seek to place SI first.

Thus, Bifocal innovation is a concept that helps to identify different types of innovation that underpin different types of impact which shall be committed by all kind of organizations (profit and non-profit) pursuing SD. The bifocal innovation perspective is useful to understand OI-strategies which integrate social and business innovation goals and, thus, which strive to manage the tension between what is good for the focal organization and what is good for the larger system: defined by the research as the primary tension describing the SD dynamics. Therefore, the perspective of *Open Bifocal Innovation* can be the base for recalibrating the OI perspective in order to link it with the SD goal in every kind of organization.

For harnessing SD “organizations need to ... purposively open up processes beyond the organization's boundaries to leverage internal and external resources, *for their success and for improving the organization's overall ecosystem*”, looking for “a long-run future” by ensuring its health (Payne & Raiborn, 2001:159) but they are not asked to spill completely their strategic focus with the “view that seeks to place the social innovation first” (Dawson and Daniel, 2010: 12)<sup>54</sup>. For boosting SD every individual organization is asked to be internally and externally sustainable –as suggested by Elkington (2001)– to spur *a regenerative impact on their ecosystem's various forms of capital* – social, human, cultural, economical, natural and so on” (Elkington, 2001:7).

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<sup>54</sup> In fact, *pure public innovation* should be the focus of specialized (public) policies development (Borzaga and Bodini, 2012; Pol and Ville, 2009).

### 3. Setting of the research and research-method

The setting of the research is the Dutch Rijksmuseum of Amsterdam, the national museum of the Netherlands. During its refurbishment (started in 2004 and finished in April 2013) it has reinvented itself by rethinking the sense of the Museum and the way of communicating and disclosing its Cultural Heritage, connecting people, art and history by becoming “an open museum” which look to “play an active role in the society ... inspir[ing] and enrich[ing]. The sense of beauty and the awareness of time.” (Rijksmuseum annual report 2013: 24, the first report after its reopening; self-translated). But its success is not restricted to its socio-cultural commitment of heightening the level of cultural participation by lowering the threshold to experience culture and art, enhancing the digital technologies; in fact, at the same time the Rijksmuseum has been able, through its innovation of the strategy, to improve its competitiveness and its economical sustainability, as confirmed not only by its balance sheet but also by the “Raad voor Cultuur” (the Dutch Council for Culture, advising the government and the parliament about cultural organizations), that in its last advise report (May 2016: 283; referring to the period 2017-2020; self-translated) at the paragraph Entrepreneurship wrote “The Rijksmuseum is a financially healthy institute, with a high liquidity and solvency”.

Being the list of challenges and commitments long and complex also for art organizations (Chong, 2010) the setting of the research could be an interesting one to investigate the organizations’ capacity of focusing on long-term robustness. Moreover, although art management literature usually distinguishes public, non-profit organizations from private, commercial, for-profit ones (Chong, 2010), the research endorses that at any rate they all need to improve their capacity to boost strategy-flexibility for their sustainability (Chong, 2010), but considers the setting of particular interest since it deals with a public museum, therefore an art organization which is primarily driven by a public mission of creating *public value* (Moore, 1995), and nevertheless is leading in enhancing its self-financing.

Art organizations are committed to spread their Cultural Heritage –in which a potential of knowledge, creativity and moral imagination (Werhane, 1999) is built-in–, in order to perform a role in society and be of value for the wider community (Chong, 2010) by leading to be a potential hub of inspiration and education for the society, flourishing cultural and social achievements. Moreover, by disseminating their Cultural Heritage arts organization are also potential engines of economic development (Sacco, Blessi and Nuccio, 2008) for all profit and non-profit organizations, being a stimulus for innovation by boosting creativity, in particular in the so-called Culture and Creative Industries (CCIs).

However, art organizations are also required to adhere to the new imperative of boosting economic sustainability (Chong, 2010), being increasingly able to develop strategies to support their programming through self-financing and being accountable as well<sup>55</sup>. Therefore museums, and in particular public ones, could be an interesting setting of research to investigate successful logics of action that are looking to pursue strategic decisions for economical sustainability which do not “divorc[e] from ... broader ethical concerns and social responsibility” (Chong, 2010: 20) of boosting social and cultural innovation and stimulating fine-tuning of public values (Bozeman, 2007).

Here after a brief description of the Rijksmuseum history will be provided together with several topical moments and practices before and after its re-opening in 2013 –which also coincided with the re-thinking and re-formulation of the museum’s strategy, that put forward a new mission and vision, and strategized them to “satisfy the needs of its 21<sup>st</sup> century visitors”, “placing the museum in a leading position in the world of digital image culture and open design” with “the firm belief that its collection belongs to the public and the museum itself is the custodian” (Volkers, 2016:15).

Endeavoring to explore the nature of dynamic processes embedded in real organizational settings, the *explorative* case-based research (Yin, 1994;2014; Siggelkow, 2007; Eisenhardt, 1989; Anteby *et al*, 2014) applies a *qualitative-interpretative approach* (Myers, 2013; Ellis and Levy, 2008; Silverman, 2011) highlighted by the main OI authors as the “best suited [method] to revealing the complexities that underpin the adoption of OI” (Chesbrough *et al.*, 2014). Even according to Huizingh (2011) OI implementation-research is particularly suited for pursuing the “how” question (Yin, 1994), bringing together the contextual and process knowledge in evaluating OI implementation (Chesbrough *et al.*, 2014).

Although aware of the single case-study generalization limits, the research agrees with Siggelkow that “a single case can be a very powerful example” (Siggelkow, 2007: 20) when it can be considered as an idiomatic case<sup>56</sup>, thus the research strove for harnessing the case–study also as explanatory, when attempting to understand how the observed OI-strategizing of the focal public organization led to SD. Moreover, the research methodology considers concrete, context-dependent knowledge valuable, because of the nature of human activity which is situated in local context (Flyvbjerg, 2006). In Chapter 4, table 2 a schematic overview of the data collection is given.

Later on, this brief description will also be represented in figure 1, while the Dynamics of Rijksmuseum’s openness will be proposed in table 1, which schematizes the emerged by the research

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<sup>55</sup> Interestingly, the “Raad voor Cultuur” in its 2013-2016 advise report (May 2012: 298) stressed the fact that the museum in spite of a growing independence of its governance, for being named “rijks” –thus a public, state museum– needs to be a best example to the sector also in the way it accounts for its operations to the society; in fact, the annual reports of the Rijksmuseum are very detailed and extensive.

<sup>56</sup> As Siggelkow (2007: 20) claims “a single case can be a very powerful example”, just it is necessary to “make sure ...[to] have a talking pig”. The research considers the case-study also as a critical one (Flyvbjerg, 2006) compared with the prevailing OI implementation, thus useful for contributing to the creation of a contrasting conceptual framework.

three main phases of the Museum's openness, enhancing Huizingh's (2011) process/outcome matrix<sup>57</sup> investigated at the extra-organizational, organizational and inter-organizational levels.

### 3.1 *The Rijksmuseum, brief history*

The Rijksmuseum of Amsterdam is the national museum of the Netherlands which “tells the story of eight hundred years of the Dutch art and History through its collection of one million objects” (Volkers, 2016). The history of the Rijksmuseum of Amsterdam at its current location goes back to the year 1885, when the building of architect Pierre Cuypers, combining the Gothic and the Renaissance styles, was opened. The collection of the Rijksmuseum contained most of the older paintings belonging to the City of Amsterdam as well as paintings, prints and historical objects from the National Art Gallery, which included paintings such as Rembrandt's Jewish Bride and also the collection of 19th-century art from the City of Haarlem. Finally, many objects of the Cabinet of Rarities, which were part of the new Netherlands Museum for History and Art, came back to Amsterdam. Over the years, the collection of the Rijksmuseum steadily grew and consequently the museum underwent multiple changes. The south west-side was enlarged between 1904 and 1916 (with what today is called the Philips wing). The two courtyards were covered during the 1950s and 1960s in order to create more rooms. Already during the 1970s, when yearly visitors reached almost one-and-a-half million per year, the building started to show more and more shortfalls of modern requirements. “After more than a century of intensive use, this huge building needed a radical makeover” (the Rijksmuseum website<sup>58</sup>).

In the year 2000, the Dutch government approved the renovation project and after four years of preparation, the renovation works effectively started in 2004. The renovation was under the architectural lead of two Spanish architects, Antonio Cruz and Antonio Ortiz from Sevilla, chosen for “... their purist view of architecture and their excellent solutions to the architectural and logistic challenges involved in this project” (the Rijksmuseum website). The masterpiece of Pierre Cuypers from 1885 is not only a museum building but also a monument. “Continue with Cuypers” was the motto of the renovation and the clear layout was therefore restored wherever possible. Taco Dibbits (actually the General Director of the Rijksmuseum but at the time of the related interview still Director of the Collection) said “Instead of fighting the building, we have embraced it and accepted its eccentricities”. “Furthermore, the monumental ornaments also returned to the Gallery of Honour, the Front Hall, the Night Watch Gallery and the stairwells. Cuypers' hallmark is best preserved in

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<sup>57</sup> The matrix proposes various ways of innovation paths based on the distinction between closed and open outcome and processes: *closed innovation* (closed outcomes and closed processes), *private OI* (closed outcomes and open processes), *public-innovation* (open outcomes and closed processes) *open-source* innovation (both open outcomes and processes).

<sup>58</sup> <https://www.rijksmuseum.nl/en/organisation/history-of-the-rijksmuseum>

the library where the original design and ornaments have largely been maintained” (the Rijksmuseum website).

The renovation did not include any extension of the building: “Big is big enough. It’s the same size as it was before. I am a foodie, but I don’t like too many courses. I want us to focus and only have the best of the best. I believe in the strength of simplicity” said Wim Pijbes, the Rijksmuseum’s director from 2008 until 2016<sup>59</sup>.

After almost 10 years of renovation the main building was handed over in 2012, and work began on preparing for the opening on April 13, 2013. Only the *Night Watch* by Rembrandt van Rijn remained in its old position, at the center of the building. The new Rijksmuseum offers visitors an overview of art and history from the late Middle Ages to the present day. Paintings, images, historical objects and applied arts are displayed together in context, offering a comprehensive image of art and culture, with –as can only be expected– particular attention paid to the highlights of the story of the Netherlands. In fact, as Taco Dibbits said during the first direct face-to-face research-interview in 2013, “the Rijksmuseum collection is national collective memory”.

The restored Rijksmuseum has a new entrance, an outdoor exhibition space with free entrance (e.g. the gardens in front and in the back, which also host temporary exhibitions<sup>60</sup>), an Asian pavilion, shops, restaurants, educational facilities and a renovated library.

### **3.2 Rijksstudio: opening up and reinventing the Rijksmuseum**

The long period (5 years longer than what was planned) of the closure for renovation of its main building offered the Rijksmuseum the opportunity to digitize a large part of its collection also. As the total collection counts over 1.1 million objects and only around 8.000 of them can be displayed in the museum, it was felt as a duty to present online also those artworks that would not be on view in the museum; furthermore the Rijksmuseum wanted to make the collection available to all (also for those not able to visit the brick-and-mortar museum), claiming that *the collection is of everyone*. In fact as recollected by Linda Volkers, the marketing manager of the Rijksmuseum, the Museum “took this initiative in the firm belief that its collection belongs to the public, and the museum itself is the custodian” Linda Volkers (2016: 15) and to attract the new audiences wherever they are, 24/7.

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<sup>59</sup> Source :<https://www.nytimes.com/2013/04/02/arts/design/glories-restored-rijksmuseum-is-reopening-after-10-years.html>.

<sup>60</sup>Interestingly, the Museum in 2012 received 1.5 million euro from the BankGiro Lottery for the period 2013-2017 to organize temporary exhibitions of sculptures in the open (free entrance) gardens which currently are also offering a food and drink service during the summer.



The mission of the Rijksstudio which guided, and still guides all developments, is “to connect people, art, and history” (Gorgels, 2013; <sup>61</sup>Manager Digital Products of the Rijksmuseum) which translates the Rijksmuseum vision “the Rijksmuseum links individuals with art and history”. The Rijksstudio looks “to bring the collection to the broadest possible contemporary audience, reducing the distance between the museum, its collection and the public” (Gorgels, 2013) which translates the Rijksmuseum mission “At the Rijksmuseum, art and history take on new meaning for a broad-based, contemporary national and international audience”. Furthermore, the museum formulated several core values: “simplicity, personal, authenticity, quality, and innovation” (Gorgels, 2013). The mission and the values were the base for the development of the Rijksstudio and for the museum’s new website in which the Rijksstudio was integrated. There the Rijksstudio was thought to “... form a social layer above the online collection itself”, addressing not only the identified target groups but also the so-called culture snackers, who enjoy viewing images and sharing them with friends and followers (Gorgels, 2013). “We think that everybody is (in a way) a culture snacker today and that it’s important for museums to reach them” (Gorgels, 2013).

The E-strategy – which followed from the above – was to bring the collection closer to the public at various levels (close to the website visitor, close to the collection, close to the building - a real world visit -, with museum experts close at hand). As formulated by Peter Gorgels (2013) “We bring everything close by, so that the user can reach out, establish personal contact, and zoom in and out. We make art accessible, inviting, and inspiring. We encourage touching. We create ease of use”.

The digitization activity (stimulated by the aim of the Dutch government to digitize the National Cultural Heritage), which has been made possible also thanks to the financial support of 1.1 million euro from the Dutch BankGiro Lottery (a big national lottery concentrating on cultural sponsorship), started during the renovation. The BankGiro Lottery made the funds available in 2011 because the project was considered able to democratize the cultural heritage of the museum by making the images of the collection available and sharable with a broader audience in an innovative way (annual report 2011:12). In 2011 the project started as RijksXL, a platform aiming to digitize 150.000 artworks images making them available for a wider community, but at the same time the digital project was also looking to develop applications for making the images available in an innovative way by giving the user the possibility to become proactive with the collection (annual report 2011:18). In 2012 the Museum overspent the publications budget (by 779.000 euros) fully due to the Rijksstudio project, and because of the socio-cultural and ethical and innovative appreciation of

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<sup>61</sup> P. Gorgels, Rijksstudio: Make Your Own Masterpiece!. In *Museums and the Web 2013*, N. Proctor & R. Cherry (eds). Silver Spring, MD: Museums and the Web. Published January 28, 2013. Consulted December 2, 2019.

the Rijksstudio strategy, the BankGiro Lottery absorbed the whole overspending (annual report 2012).

The digitization activity started during the renovation years (counting around 125.000 artworks at Rijksstudio's launch in October 2012 in preparation of the Museum's re-opening in 2013) is still continuing and in the meanwhile the Rijksstudio contains pictures of over 650.000 works of art (website Rijksmuseum December 2019). The guidelines for the digitization (defined by Dibbits) have been a focus on the image, both through putting the image in the center of the attention without adding lots of information and data to them, and through the quality of the image by applying the highest possible resolution (2500 x 2500 pixels, 300 dpi). In Rijksstudio, the visual experience is the key aspect thus the concept focuses on essential content, and providing information is of secondary importance<sup>62</sup>. The new layout has emphasised the value of the image: as Taco Dibbits said in an interview, "this is the ideal way to view an artwork, the picture in its full glory, uncluttered by information or buttons". "Many museum websites present a wealth of information and data<sup>63</sup>. Rijksstudio believes in the strength of the images themselves" (interview with P. Gorgels).

In Rijksstudio (completely copyright-free and royalty-free) everybody can make personal selections (the so-called Rijksstudios) and download the pictures and artworks. Users are encouraged to use the images they find in any way they wish to make their own masterpiece. They might for example select the copyright-free images to use as a greeting card or poster, or to print them on canvas, aluminum, or plexiglass as a home decoration. They can also alter images to humorous effect or to produce their own artwork, which they can then share with the outside world<sup>64</sup>. A special cropping tool was developed to help users select part of an image. Orders for special products were processed by the Dutch start-up company Peecho, which had installed an API on the site linking to various print-on-demand companies.

At the beginning (October 2012) the Rijksstudio was only freely available for private use,<sup>65</sup> however in November 2013 the Rijksmuseum decided to make it also completely freely available for commercial use<sup>66</sup>. Rijksstudio plays a key role in helping to anchor the Rijksmuseum's position in the new world of digital image culture and open design.

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<sup>62</sup> For other, as Taco Dibbits highlighted in the first research-interview in 2014, there are many other several sources, also open-sources in which it is possible to find bibliographic, didascaly information about artworks, artists and so on as e.g. Google Art & Culture.

<sup>63</sup> "Although content-rich, the design of "virtual museum" often fails to rise above the level of a database intended more for administrative purposes than for aesthetic pleasure. The artworks are often shown as small thumbnails. If they can indeed be enlarged, there are various (technical) restrictions which stand in the way of a truly user-friendly experience" (interview with P. Gorgels).

<sup>64</sup> Sources <https://www.rijksmuseum.nl/>; <https://mw2013.museumsandtheweb.com/paper/rijksstudio-make-your-own-masterpiece/>

<sup>65</sup> Source <https://www.nrc.nl/nieuws/2012/11/01/rijks-deelt-collectie-met-de-wereld-1169906-a268170>

<sup>66</sup> (<https://historiek.net/collectie-rijksmuseum-helemaal-vrij-te-gebruiken/38486/>).

Since the year 2014 the Rijksmuseum has organized the so-called Rijksstudio Award: it regards a biennial art- and design competition, where people (professionals as well as amateurs) are invited to make their own masterpiece inspired by the artworks available on the Rijksstudio. An international jury of design experts then selects the ten finalists and the three winners win a monetary prize and their artwork or design might also become part of the Rijksmuseum shop.

### ***3.3 Rijksstudio Award: a call to be creative***

As Linda Volkers (the Rijksmuseum Marketing Manager) explained,<sup>67</sup> the Rijksstudio Award design competition has been launched in 2014 with the aim to boost Rijksmuseum's commitments to be open and accessible as well as a booster of inspiration in creativity to everyone, and not just to a restricted number of professionals. Via its operativity it encourages users to be creative, inviting the public to "draw inspiration from the Rijksmuseum collection" –digitalized and made available for free through the Rijksstudio open-source platform– and producing new artworks in a similar way as several design companies as Studio Droog during the launch of the Rijksstudio in 2012. E.g. Droog made a tattoo and a dining table inspired by artworks, presented during the 2013 Milano Design Week <sup>68</sup> and Alexander van Slobbe created a dress and a shawl, whereas Heineken (a main sponsor) produced a special set of art bottles. These professionals demonstrated the power of the concept showing the operative value of disclosing knowledge for creativity beside bringing the Rijksstudio to the public attention, and this power is enhanced by other professionals and leading design manufacturing companies as e.g. Swatch, through partnerships of co-development and co-branding, but the Rijksstudio Award strives to give this possibility of enhancing the creative power of the open-source Rijksstudio, giving the chance to collaborate with the Rijksmuseum to everyone that wants to submit its creation to this design competition. An international team of leading experts judges the entries and the projects of the finalists are exhibited in the Rijksmuseum. Where possible they receive support for the actual production of the design projects, with also the possibility of co-branding with the Rijksmuseum, and the possibility to be sold through both Rijksmuseum's web and brick-and-mortar shop. "The reasons behind this are strictly not commercial; making a profit

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<sup>67</sup> During the two-days conference "Museum Digital Transformation" 2017 in Florence, during the interview before the conference, as well as during the conference "The Digital in Culture spaces" in 2016 in which has an on-line preceding (Image first: opening up the Rijksmuseum with Rijksstudio"; L. Volkers, 2016).

<sup>68</sup> The collaboration with Studio Droog has been analyzed in the first research-phase which focused on investigating design-driven-innovations paths (Verganti, 2008) and their potential value of disclosing and disseminating Cultural Heritage into the society and the wider community, by the research named Design-to-boost-Culture (Calcagno and Cavriani, 2014). In this research-stage different managers of the design company (the founder, designers, the commercial manager and the CFO) have been interviewed to triangulate information about the collaboration with the Rijksmuseum. The co-development project presented in 2013 was named "Masterpieced by Droog and the Rijksmuseum." Also in 2014 a co-developed project by Rijksmuseum and Droog was presented at the Milano Design Week named "Rijksstudio m2 ... a setting for a studio in which the richness of the Rijksmuseum collection resonates in walls and ceilings" (Droog.com). As communicated also by the Droog.com archive website this project was communicated as "Rijksmuseum and Droog present during Salone del Mobile Milan" and it has been sponsored by Heineken (Rijksmuseum annual report 2014).

is not a goal in itself. The Rijksmuseum is doing this to stimulate and facilitate new talent” (Volkers, 2016: 19). This competition helps the Museum “to get closer to its community”, to “enhance brand awareness” and to anchor the position of the Rijksmuseum “in the world of digital image culture and open design” (Volkers, 2016: 19).

### ***3.4 Collaborating with Swatch***

As an outcome of the research a new collaboration was started in 2015 between Swiss watchmaker Swatch and the Rijksmuseum. Guided by the shared value “the collection is of everyone” and by the commitments “let’s get everyone be inspired by art” and “we stay with the young” the collaboration co-developed a collection of three watches inspired by Rijksmuseum’s collection enhancing Dutch creatives which had already collaborated with the Museum in few design projects. To respect the above-mentioned value “the collection is of everyone” the Rijksmuseum waited three years (the standard time-to-market of Swatch is 2,5 years) to co-launch these watches on the worldwide market. Although Swatch offered to launch the co-project in a limited edition capsule for the Swatch Club and the Rijksmuseum Friends, the museum decided to wait until Swatch was able to include the Rijksmuseum-Swatch project in the Swatch’s standard production schedule (part of the master production schedule Worldhood collection) and therefore the launch finally took place on July 2018 at the Rijksmuseum gardens and the Philips Wing<sup>69</sup>. The Swatch brand has a twist and an ironic design in its DNA and a history of having driven the innovation of meaning of watches, transforming them from an elite luxury product into a democratic and fashion design accessory. Through the collaboration the Rijksmuseum succeeded in its commitments of staying with the young and by waiting to co-launch in the standard master production schedule of Swatch the museum succeeded in its commitment of democratizing the accessibility<sup>70</sup>. The project also fits strategically with Rijksmuseum’s commitment of driving positive synergies through the open-source strategy, looking to continually accelerate the adoption of the open digital content Rijksstudio and in such a way to get people and companies inspired for innovation and creativity, to regenerate the wider society and the competitive advantage of firms. According to Hendrikje Crebolder to create content and projects with partners you first need to develop relations but the alignment in the values driven the collaborations as such with Swatch, transforming the relation into a partnership in which tangible and intangible resources are shared,

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<sup>69</sup> Information communicated interviewing (and triangulating the data) Carlo Giordanetti, the Creative Director of Swatch, Hendrikje Crebolder, Head of Development and Media of the Rijksmuseum, and Erik van Ginkel, the CFO of the Museum, during the event which launched the co-branded collection.

<sup>70</sup> Motivation communicated in the same above-mentioned interviews (with both Giordanetti of Swatch and Crebolder of the Rijksmuseum, but questioning them separately) when asking about the reasons of such a long lead time for the launch of the design-project (the collaboration started in 2015 and the products were put on the market in 2018).

looking to future potential co-development projects e.g. both the organizations are very interested into the Chinese market and society.

The collaboration with the Rijksmuseum inspired Swatch to make similar project with other art museums of international renown to reinterpret a distinctive selection of their famous artworks<sup>71</sup>.

### **3.5 Cooperating with KPN**

As a lead sponsor, KPN (the former Dutch state post and telecommunication company, today focused on telecommunication) not only supports the Rijksmuseum financially, but also with ICT expertise and hi-tech resources: as an example, the website of the Rijksmuseum –including the Rijksstudio platform as well as the on-line shop, both integrated in the main website–, is hosted by KPN. “KPN is helping the Rijksmuseum to achieve its strategy of being an innovative, state-of-the-art cultural institute of global significance. This means lots of work behind the scenes, but it's essential for reaching the top in the museum world.”<sup>72</sup>

In the year 2015 the exhibition “The Late Rembrandt” took place in the Rijksmuseum. It showed a number of Rembrandt paintings from the most special period of his life as had never been shown before. KPN made the exhibition accessible on-line so that the special collection could also be seen by those unable to get to the museum. This exhibition has been one of the most visited after the reopening, boosting the growth of the own-revenue of the art organization in 2015 (annual report 2015).

In addition, Rijksmuseum regularly receives guests in the museum who have been invited by the KPN “Most Beautiful Contact Funds”, which since its start in 2007 has the objective to put people who feel lonely in contact again with the world which surrounds them. It focuses its action on what the company calls vulnerable groups – “such as the elderly, people with learning difficulties or long-term and chronically ill children ... [which] have a relatively high chance of ending up in social isolation”–, for whom a museum visit is not always obvious. For KPN this commitment is at the heart of the fund's projects, which looks to make efforts to prevent or break the cycle of social isolation, and the company collaborates with the Rijksmuseum which regularly receives guests in the museum accompanied by KPN volunteers, to get a tour of the highlights of the Rijksmuseum's collection.<sup>73</sup>

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<sup>71</sup> Source: <https://www.fratellowatches.com/swatch-x-rijksmuseum-collaboration/>

<sup>72</sup> Information sourced in the KPN website: <https://overons.kpn/en/kpn-in-the-netherlands/at-the-heart-of-society/kpn-mooiste-contact-fonds>.

<sup>73</sup> All information sourced from the [KPNrijksmuseum.nl](http://KPNrijksmuseum.nl), [KPNmcf.com](http://KPNmcf.com) and [overons.kpn](http://overons.kpn)

### **3.6 Co- acquiring and co-exhibiting Rembrandt paintings with the Louvre**

After months of battle between the Dutch and French authorities about the potential acquisition of two Rembrandt paintings, as both were interested to buy them for their respective country, it was agreed that the portraits of the newly-weds Marten Soolmans and Oopjen Coppit were bought through an unprecedented joint acquisition, backed by an intergovernmental agreement concluded on February 1, 2016 by the French and Dutch States on behalf of the Musée du Louvre and the Rijksmuseum in Amsterdam.

The portraits had been in private French hands for almost four centuries and were bought for €160 million: after having been restored in the Rijksmuseum they are being exhibited in turn by the Louvre and the Rijksmuseum. Wim Pijbes, when still General Director of the Rijksmuseum in 2016 commented: “What no one thought possible is now reality: the most wanted and least exhibited Rembrandts in the world, in the Louvre and the Rijksmuseum in turn, in the public domain and within everyone’s reach.”<sup>74</sup>

### **3.7 Cooperating with Philips “focusing on link between art and well-being”**

Since the year 2001 Philips is founder of the Rijksmuseum because for the company “Art has great power to inspire, unite and change lives. It is proven to enrich people's lives by stimulating the mind and senses. It makes our lives just that little bit better”.<sup>75</sup> As Philips explains on its website when referring to sponsoring with the Rijksmuseum “Phillips and Rijksmuseum extend long standing partnership, focusing on link between art and well-being”<sup>76</sup>. That's why Philips is “proud to partner with the Rijksmuseum”. The General Director Wim Pijbes declared in 2016 (at the time of the decision of Philips to extend the collaboration for other 5 years), “Conserving the Dutch cultural history is part of our shared goal, and we aim to apply Philips’ technology innovations in new ways to touch people’s lives and those of future generations with art. I am very much looking forward to work with Philips to let art contribute to people’s well-being.” And Frans van Houten, CEO of Royal Philips, said “This year we celebrate the renewal of our partnership with the Rijksmuseum which goes back many years. I am delighted that we will continue on our common

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<sup>74</sup> All information sourced from the following web sites: <https://www.rijksmuseum.nl/en/marten-and-oopjen>; <https://www.louvre.fr/en/portraits-maerten-soolmans-and-oopjen-coppit-rembrandtan-exceptional-acquisition-exhibited-musee-du-louvre>; [https://www.ed.nl/cultuur/subsidie-rijksmuseum-onder-voorwaarden~aeba6d6e/?referrer=https://www.google.it/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=2ahUKewjilqOOxsvmAhWqPOwKHa2\\_DysQFjACegQIARAB&url=https%3A%2F%2Fwww.ed.nl%2Fcultuur%2Fsubsidie-rijksmuseum-onder-voorwaarden~aeba6d6e%2F&usg=AOvVaw0PODrKaQIiR39CDCywJK5u](https://www.ed.nl/cultuur/subsidie-rijksmuseum-onder-voorwaarden~aeba6d6e/?referrer=https://www.google.it/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=2ahUKewjilqOOxsvmAhWqPOwKHa2_DysQFjACegQIARAB&url=https%3A%2F%2Fwww.ed.nl%2Fcultuur%2Fsubsidie-rijksmuseum-onder-voorwaarden~aeba6d6e%2F&usg=AOvVaw0PODrKaQIiR39CDCywJK5u)

<sup>75</sup> Sourced from the website of phillips.com, sponsoring, Rijksmuseum.

<sup>76</sup> “We work closely with the Rijksmuseum to introduce meaningful innovations and programs that enhance museum visits but also, importantly, reinforce the link between art and well-being” (<https://www.philips.com/a-w/about-philips/sponsorships/rijksmuseum>).

mission to touch people's lives through the combination of technology, people-centric design and our cultural history.”<sup>77</sup>

The sponsorship started from CSR motivations, Philips' role as supplier of advanced lighting technology for the museum and for relation management and hospitality possibilities. Phillips took care of the new lighting project of the restored Rijksmuseum “Masterful lighting in Rijksmuseum”<sup>78</sup>. As Taco Dibbits (at the time director of the Museum's collection) wrote “they [Philips] did not just develop the light, but everything connected with it, so that we could concentrate on the art”.<sup>79</sup>

In the Rijksmuseum there is the Philips Wing in which the museum “organizes high-profile exhibitions with art from its own collection and art on loan from international and national collections. The Philips Wing has a permanent room to exhibit photography and incorporates one of the oldest lacquer rooms in the world.” It has hosted Rembrandt's masterpiece *The Night Watch* during the restoration of the main museum and after the reopening in 2013 the Philips Wing has also been refurbished and reopened on the first of November 2014.

“The renovated Philips Wing of the Rijksmuseum includes 1,300m<sup>2</sup> of exhibition rooms and a restaurant. Like the main building, the wing has been restored to its original state. ... originally built in 1890 in the garden of the Rijksmuseum ... developed the nickname ‘Fragment Building’ ... Further extensions followed over the years using different construction techniques, making the structural design for the renovation very challenging ... alternative spaces were created in the basement and in the two roof caps on the two short sides of the building<sup>80</sup>. Wim Pijbes, at the time the Director of the Rijksmuseum declared “It is a historical day. The Netherlands has gained an extra museum.” (Pien Niche 2014).<sup>81</sup>

After the divestment of the lighting division and the repositioning of Philips as a Health Tech company it was decided to continue the sponsorship and to use it for the new positioning of Philips. Art and culture, as in the Rijksmuseum, has a core position in the sphere of interests of health professionals and doctors. They are currently the most important business-to-business target group of Philips. In fact, the Philips sponsoring website explains that “The Rijksmuseum has a broad attractive force. ... Phillips supporting a top museum which is admired in the whole world radiates positively on Philips”<sup>82</sup>.

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<sup>77</sup> Both the declarations are sourced from the website of [phillips.com](http://phillips.com), sponsoring, Rijksmuseum.

<sup>78</sup> The Rijksmuseum's “Art collection lit with efficient LED lighting. ... The museum is now one of the first to use LED lighting exclusively to illuminate collections of art and is one of the world's largest LED lighting installations.” ([lighting.philips.com](http://lighting.philips.com) Rijksmuseum).

<sup>79</sup> Sourced from the website of [lightening.philips.com](http://lightening.philips.com) and confirmed vis-a-sis by Dibbits during a meet in 2014.

<sup>80</sup> “For years the Philips wing had been a neglected part of the Rijksmuseum. The wing had a frugal atmosphere, due to little investment. Thanks to the renovation the Philips wing has beautiful exhibition rooms and is in unison with the rest of the museum. Neglect is no longer the case.” Muriel Huisman, Director of Cruz y Ortiz Architects (Pien Niche 2014; Europe Press Office on [arup.com](http://arup.com),) which won the restoration-project.

<sup>81</sup> Europe Press Office on [arup.com](http://arup.com)

<sup>82</sup> Sourced and self-translated from the website of SponsorRing; <https://sponsoring.nl/philips-en-rijksmuseum/>

To improve people's lives Rijksmuseum collaborates with Philips on MRI scans. Through a collaboration with five partners –Philips (as pioneer in the field of medical Ambient Experience), the Rijksmuseum, the Academic Medical Center of Amsterdam, the Erasmus Medical Center of Rotterdam and the Rotterdam Philharmonic Orchestra– a new way to make the experience of patients in an MRI scan more relaxing has been developed. The particular ambient experience –which creates an environment of dynamic light, projection (of artworks from Dutch Masters of the Rijksmuseum) and sound (music from the Rotterdam Philharmonic Orchestra)–, makes the MRI scans more comfortable for patients. “Together with the Rijksmuseum, Philips helps to improve the lives of patients undergoing a MRI procedure,” said Werner Satter, General Manager of Healthcare Experience Solutions.

Moreover, beside the aim of increasing the comfort of the patients there are also scientific, research aims, e.g. to improve the outcomes of the scans, by creating an environment packed with multiple stimulus of dynamic light, projection and sound, in the imaging room as well as in the MRI bore. On Monday 26 November 2018, Philips and the Rijksmuseum were jointly awarded the SponsorRing award for their joint campaign ‘Using the power of art and music to improve MRI experiences’. Out of the 15 nominated cases of the total of 58 submissions, Philips and the Rijksmuseum emerged as winners in the Art and Culture category.

To “inspire healthy living”, the Rijksmuseum has also joined with the global leader in health technology –Philips– on the “Dutch Masterjuices” project: a healthy-living campaign which highlights the importance of fruit and vegetable consumption by “releas[ing] a short film which sees still life works of art suddenly appear without its fruit and vegetables in a bold move that creates confusion and surprise with museum visitors”<sup>83</sup>.

### ***3.8 Operation Night Watch: “from art historical research to artificial intelligence”, an open-accessibility-research and conservation project***

On 8 July 2019 the Rijksmuseum started “Operation Night Watch”, considered as the biggest and most wide-ranging research and conservation project in the history of Rembrandt's masterpiece. “Rembrandt's Night Watch is one of the world's most famous works of art. The painting is the property of the City of Amsterdam, and it is the heart of Amsterdam's Rijksmuseum, where it is

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<sup>83</sup> Sourced from the Philips.com website. Other information sources of the paragraph are: <https://sponsoring.nl/philips-en-rijksmuseum/> ; <https://www.philips.com/a-w/about/news/archive/standard/news/articles/2018/21081127-philips-wins-dutch-sponsoring-awarded-for-campaign-philips-and-rijksmuseum-improve-peoples-lives-in-mr-scanner.html> ; <https://www.rijksmuseum.nl/nl/pers/persberichten/hollandse-meesters-en-klassieke-muziek-voor-betere-patintbeleving-in-nieuwste-philips-mr-in-academisch-medisch-centrum>



admired by more than two million visitors each year. The Night Watch is the Netherlands' foremost national artistic showpiece, and a must-see for tourists.”<sup>84</sup>

The goal of Operation Night Watch is the long-term preservation of the painting. Moreover, “Operation Night Watch is for everyone to follow”. In fact, one of the unique aspects of this project regards that it can be followed by everyone both on-line<sup>85</sup> and in the museum. It takes place in full view of the visiting public in an ultra-transparent glass chamber designed by the French architect Jean Michel Wilmotte. The research team working on The Night Watch is made up of more than 20 Rijksmuseum scientists, conservators, curators and photographers. For this research, the Rijksmuseum is also collaborating with museums and universities in the Netherlands and abroad, including the Dutch Cultural Heritage Agency (RCE), Delft University of Technology (TU Delft), the University of Amsterdam (UvA), Amsterdam University Medical Centre (AUMC), University of Antwerp (UA) and National Gallery of Art, Washington DC.

The Operation Night Watch is also made possible thanks to a collaboration with AkzoNobel, the main partner of Operation Night Watch.<sup>86</sup>

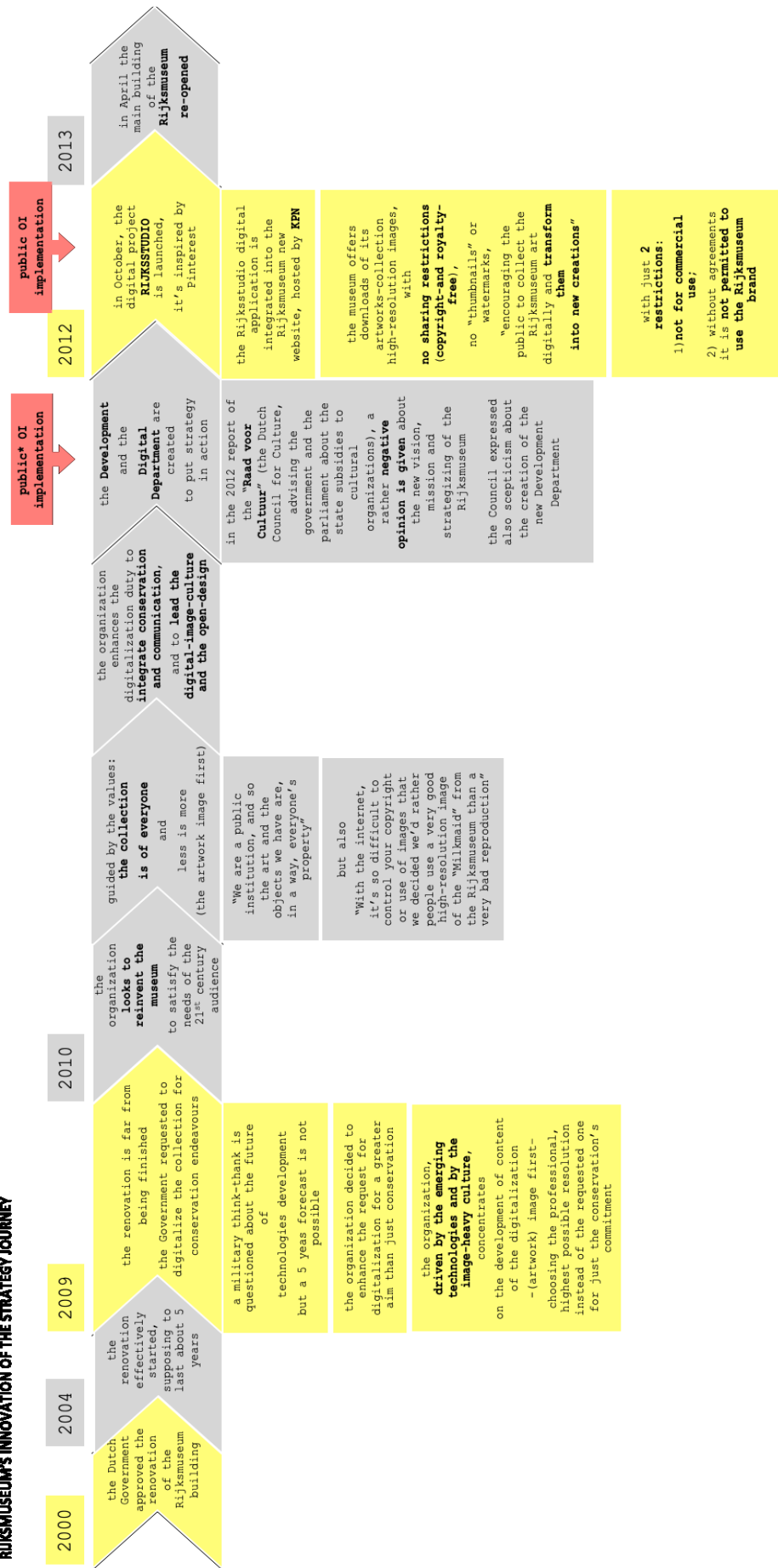
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<sup>84</sup> “With the support of the Ministry of Education, Culture and Science, the City of Amsterdam, Founder Philips and main sponsors BankGiro Lottery, ING and KPN every year more than 2 million people visit the Rijksmuseum and The Night Watch”. All information sourced from: <https://www.rijksmuseum.nl/en/press/press-releases/operation-night-watch-to-start-at-the-rijksmuseum>

<sup>85</sup> The Operation Night Watch can be followed online from 8 July 2019 at [rijksmuseum.nl/nightwatch](https://www.rijksmuseum.nl/nightwatch)

<sup>86</sup> Moreover, also made possible “by The Bennink Foundation, C.L. de Carvalho-Heineken, PACCAR Foundation, Piet van der Slikke & Sandra Swelheim, American Express Foundation, Familie De Rooij, Het AutoBinck Fonds, Segula Technologies, Dina & Kjell Johnsen, Familie D. Ermia, Familie M. van Poecke, Bruker Nano Analytics, Henry M. Holterman Fonds, Irma Theodora Fonds, Luca Fonds, Piek-den Hartog Fonds, Stichting Zabawas, Cevat Fonds, Johanna Kast-Michel Fonds, Marjorie & Jeffrey A. Rosen, Stichting Thurkowfonds and the Night Watch Fund”.

**RIJKSMUSEUM'S INNOVATION OF THE STRATEGY JOURNEY**

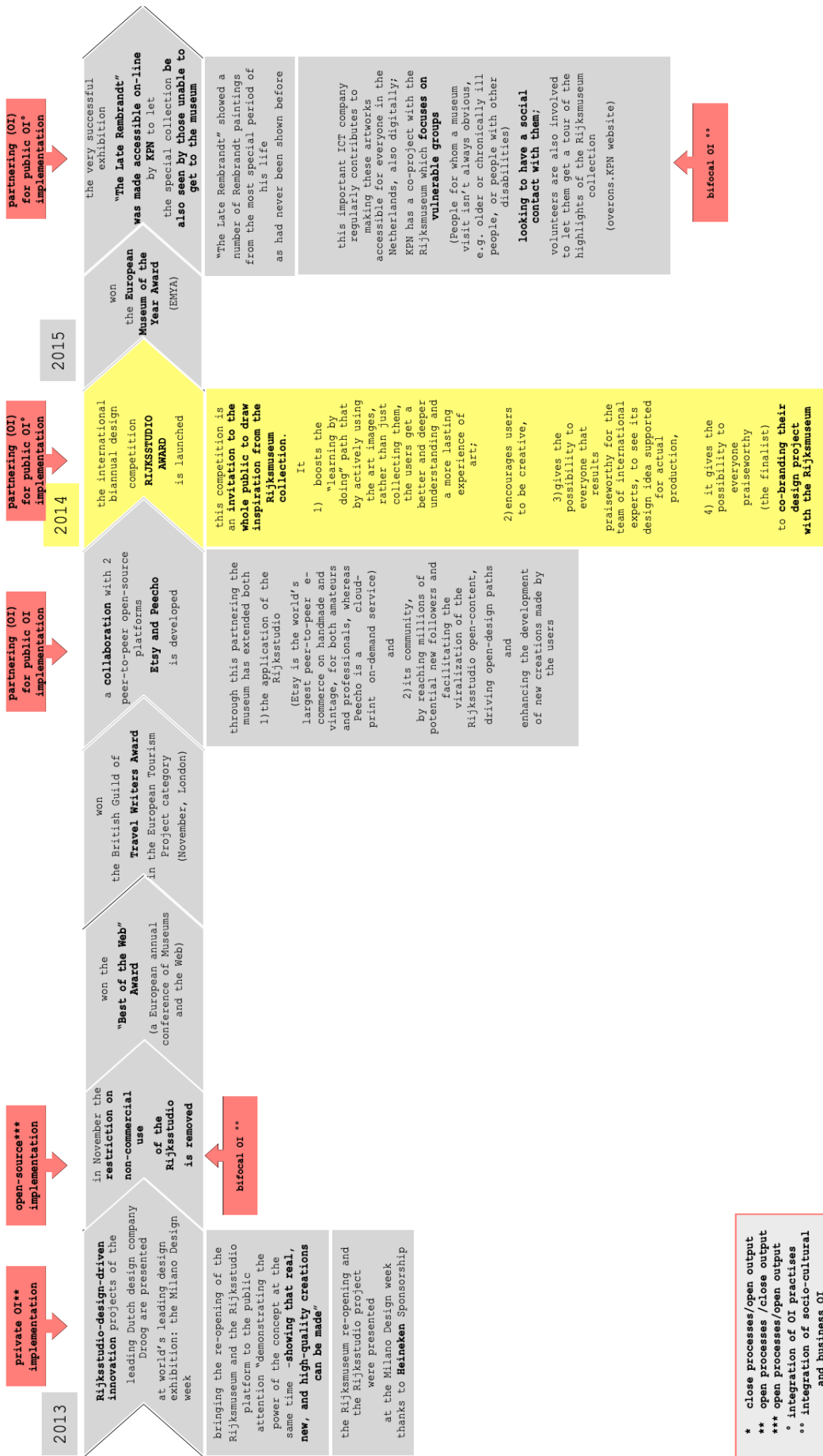


\* close processes/open output  
\*\* open processes /close output  
\*\*\* open processes/open output  
° integration of OI practises  
°° integration of socio-cultural and business OI

Fig 1. Rijksmuseum's innovation of the strategy journey

Fig.1. Rijksmuseum's innovation of the strategy journey

**RIJKSMUSEUM'S INNOVATION OF THE STRATEGY JOURNEY**

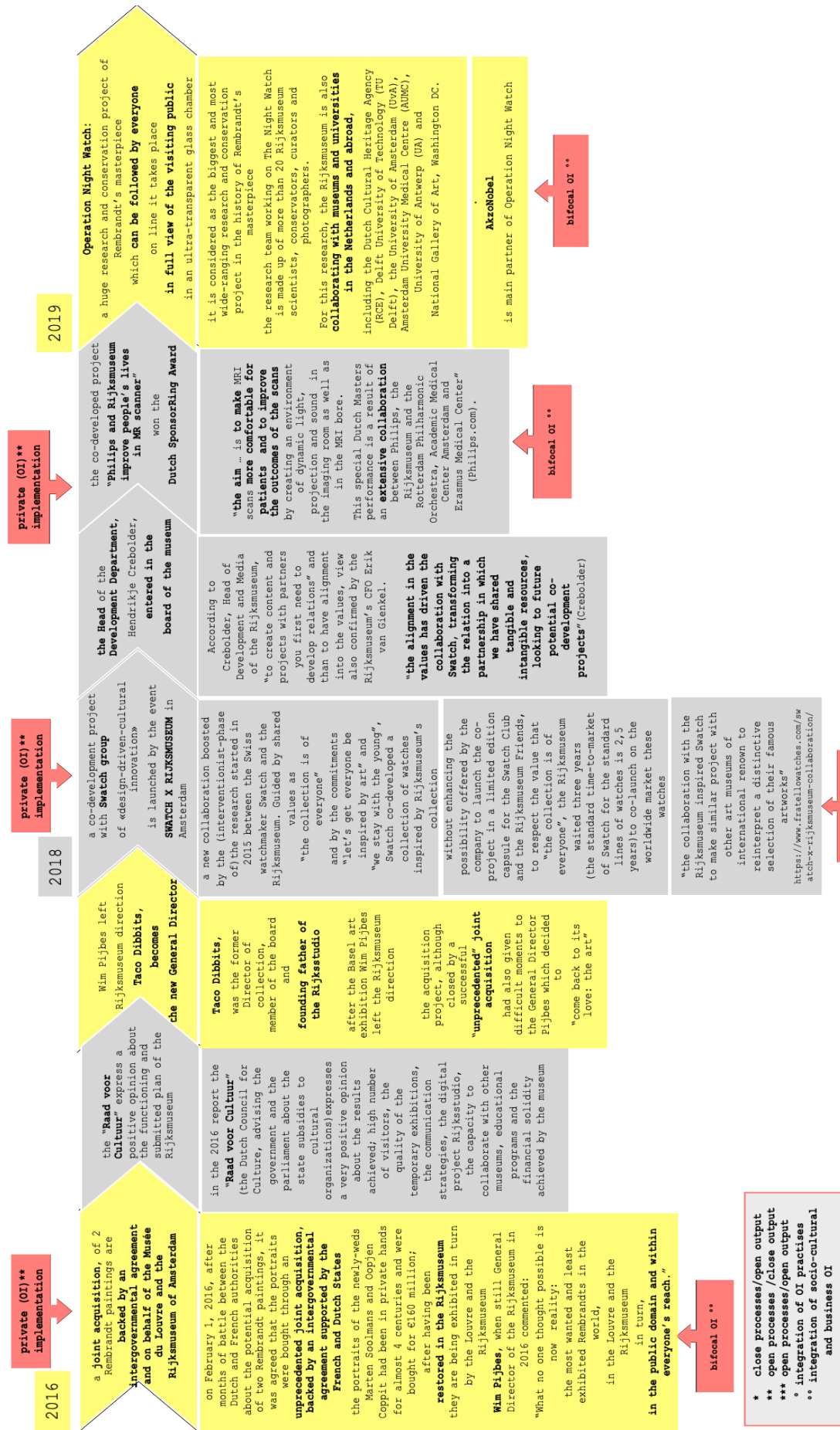


\* Close processes/open output  
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Fig 1. Rijksmuseum's innovation of the strategy journey

Fig.1 continued. Rijksmuseum's innovation of the strategy journey

**RIJKSMUSEUM'S INNOVATION OF THE STRATEGY JOURNEY**



**Fig 1. Rijksmuseum's innovation of the strategy journey**

Fig.1 continued. Rijksmuseum's innovation of the strategy journey

## CHAPTER 2

DIFFERENT, RECURSIVE STAGES OF THE RESEARCH

EVERYONE'S COLLECTIONS AT ART MUSEUMS:  
GROUND-BREAKING DIGITAL BUSINESS STRATEGY AS CORNERSTONE FOR  
SYNERGIES \*

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## 1. Abstract and key words

**Purpose of the paper:** This paper aims to investigate how an innovative digital strategy of a museum could develop new avenues for business and social value, looking into its role as a booster of competitive advantage for cultural institutions and as a possible source of socio-cultural development.

**Methodology:** The research project focuses on the analysis of the Rijksmuseum's re-opening strategy, using a case-based qualitative and recursive approach, where the outcome of each phase has been the starting point of the following phase.

**Findings:** "Open digital-cultural contents" make art and culture more accessible, stimulating people to value Cultural Heritage, heightening the level of cultural participation by lowering the threshold to experience culture and art. This e-strategy has been the precondition to develop synergies and alliances, moving towards a creative economy by catalysing spillovers in a wide range of economic and social contexts.

**Research limits:** This is a case-based research paper with contextual factors, but we consider the data to be particularly suitable for illustrating and extending relationships and logic among constructs.

**Practical implications:** The research contributes to better unlock the potential of the digital-cultural-contents leading to understanding of how to boost the durability of cultural organizations and unlock the potential of cultural and creative industries (CCIs).

**Originality of the paper:** Identifying synergies emerging from museums' ground-breaking digital-strategies adds significantly to the body of knowledge on the topic of innovation management in the cross-fertilization territories of the CCIs.

**Key words:** digital strategy; digital-open-content; cultural heritage; museum; synergies; alliances

## 2. Introduction

Nowadays Cultural Heritage, which is included in the broader concept of Cultural Capital (Throsby, 1994, 2001), is well founded and assumed to be an asset which offers an innovative and open ambiance that stimulates creative thinking (Florida, 2002, 2009; Kourtit *et al.*, 2011; McKinley, 1998). As sources of creativeness, cultural and social capital (Bourdieu, 1986) needs to be managed, developed and communicated effectively (Throsby, 2001). Re-imagining the management of cultural content, in order to find paths able to boost as a long-term value, the cultural participation of the public and the development of Cultural Heritage means finding new ways to communicate that Cultural Heritage effectively, proactively and coherently within the new postmodern era.

The "*visual culture*", qualified by this modern tendency to picture or visualize existence

(Mirzoeff, 1999)<sup>87</sup>, characterises Postmodern culture, placing an increasing premium on rendering experience in visual form. In the current epoch of overabundance of content and products it is extremely difficult to catch consumers' attention. This is not different in the cultural domain where the variety of cultural activities and cultural products is wide and deep. Moreover, this age is characterised not only by a (*digital*) *image culture* but also by widespread *open design*. A plethora of images and open contents –co-created, manipulated and downloadable– are available on the Internet for everyone and everywhere; organising cultural-content projects requires taking into consideration both the new technologies and the new approach regarding content, text and images<sup>88</sup>. Digital technologies<sup>89</sup> are flexible tools which can be used to boost business and social synergies, such as social cohesion and culture dissemination, capitalising the mechanisms of the *visual culture* paradigm (Mirzoeff, 1999).

The work presented here can contribute to better unlocking the potential of (open) digital-cultural contents, on both business and socio-cultural dimensions, within today's image culture.

Throsby (1994, 2005) has well expressed a reading of the Cultural Capital as economic capital. In any case, in order to sustainably manage the value of Cultural Capital, it is also necessary to understand the peculiarity of this asset (as compared to the economic capital tout court), which is its generation of a flow of income that needs to be measured in both terms of monetary-value and cultural-value (Throsby, 1997). Moreover such value, in its various dimensions<sup>90</sup>, needs to be democratically accessible to the community; in other words, it must be enjoyed by everyone (Benhamou, 2001).

Trying to discover strategies to manage Cultural Heritage sustainably (coherent with the postmodern *digital-image culture*, with the multiple dimensions of value presented by this Asset and with the necessity to make its Value democratically accessible to the community) this research focuses its attention on the institutions of a specific cultural industry: art and historical museums.

The endeavour is to understand how these cultural institutions can maintain, enhance and develop Cultural Heritage, boosting the participation of the public through re-imagined *digital cultural-content*. On top of this, the present study addresses the impact of this re-imagined *digital cultural content*, highlighting the possible avenues that open new perspectives on the relationship between cultural institutions and creative industries (CCIs), highlighting, moreover, the acceleration of the spillover effect of CCIs on other industries and on society at large<sup>91</sup>.

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<sup>87</sup> “Visual culture does not depend on pictures but on this modern tendency to picture or visualise existence” (Mirzoeff, 2012, p.6)

<sup>88</sup> From the interview of the digital communication manager of the Rijksmuseum, P. Gorgels.

<sup>89</sup> We refer to digital technology in general, as well as to the communication and marketing tools (like social media) where digital technology has a high impact on a new target audience.

<sup>90</sup> Economic capital, social capital, cultural capital and symbolic capital (Bourdieu), but also different value dimensions; monetary value and cultural value (Throsby).

<sup>91</sup> As suggested by the European Commission in the “Green paper. Unlocking the potential of cultural and creative industries”

CCIs are advanced frontiers of contemporary economic development, a productive dimension that generates both cultural innovation and innovation tout-court (Sacco, 2011), which derive nourishment from the creativity with which it is at once permeated (Calcagno, 2013). Furthermore, increased exposure to the world of arts and culture translates into higher creative capabilities (Kloosterman, 2005; Fusco Girard *et al.*, 2012; Kourtit *et al.*, 2011; Camagni, 2012), necessary requirements in a learning society where the ability to manage new skills is strategic (Bradburne, 2004).

The Rijksmuseum in Amsterdam, investigated in this case study research, has “re-invented itself during its renovation”<sup>92</sup>, opting to extend its virtual museum instead of enlarging the *brick-and-mortar* one, coherent with the opportunity of the available technology, with the *digital-visual cultural* paradigm (Mirzoeff, 2012) and with the management board’s important guideline “less is more”<sup>93</sup>. Creating its *Virtual Identity* through the Rijksstudio project, the Rijksmuseum has re-imagined the meaning (Verganti, 2008) of *digital cultural-content*, re-functionalizing its collection to generate strategic synergies as well as a flow of “*cultural outcomes*”<sup>94</sup>, “some of which accrue to society at large as public-good benefits, arising from the existence of these items of the cultural capital stock” (Throsby, 2005, p. 8). On one hand, Rijksmuseum’s new strategy is stimulating the Cultural Heritage Cycle (Thurley, 2005)<sup>95</sup>, promoting the participation of citizens in the cultural life of society (European Commission, 2010), while on the other hand, it is boosting creativity tout-court, both in (creative) industries and in the broader socio-cultural environment. These are some spillovers<sup>96</sup> of this approach; in addition, some important synergies have been achieved through the “*advanced management*” (Calcagno and Cavriani, 2014b)<sup>97</sup> of the strategy of Amsterdam’s museum. In particular, the research has analysed *mutual reinforcing* (Porter, 1996) in the implementation of the corporate strategy and effective management of alliances, which had boosted strategic-alignment synergies as well as cooperation synergies, business developments and financial matching<sup>98</sup>.

The study aims to add to the body of knowledge regarding the entrepreneurial re-use of cultural-content in order to develop innovative applications, innovative culturally sensitive products and concepts, that are able to communicate art and history in a ground-breaking way, reducing the

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(European Commission, 2010 p 19).

<sup>92</sup> From an interview with the general director, W. Pijbes.

<sup>93</sup> From an interview with the director of the collection and member of the board, T. Dibbits.

<sup>94</sup> We refer to John Smyrk’s definition of “*outcome*” proposed in the ITO model (Smyrk, 1995), which is discussed in paragraph 5.1.

<sup>95</sup> See footnote 160.

<sup>96</sup> Positive spill over effects refers to some external processes and some “positive side-effects” which arose from the implementation of the Rijksmuseum’s strategy innovation.

<sup>97</sup> In this research paper the “advanced manufacturing” approach has been proposed, “advanced management” is assumed to have the same characteristics.

<sup>98</sup> We refer to the “matching-funds model” proposed by Bradburne (2004) that, referring to the “Metzler effect”, takes the Public-Private Partnerships (PPPs) approach, namely by leveraging also private support, like that implemented by the Mak in Frankfurt.



distance between museums, their collections and the public<sup>99</sup>, and disseminating culture (Calcagno and Cavriani, 2014a). The observation has lit up avenues which can boost, through art museums' strategy innovation, a fertile environment for creativity, propelling economic and social wealth and answering the question, "How to accelerate the spillover effects of CCIs on other industries and society at large?" that was posed by the European Commission in 2010 (p. 19).

The present study endeavours to gain deeper understanding of how to boost synergies in the strategy innovation management of art museums, enhancing ground-breaking digital business strategy as a source of competitive advantage, financial sustainability and socio-cultural development.

### 3. Looking for synergies

#### 3.1 *The concept of synergy*

Synergy means 'combined action': it is a universal law of nature which provides a particular effect in a system of interacting elements: a dynamic effect connected with cooperation, it is a phenomenon that occurs at the junction of different elements (Kowalska, 2012). As synergy results from an economic activity in total, it can be analysed in the economic field through a holistic approach (Zhao, 2005). Thus, in economics, synergy is connected with the endless process of (re-) combining resources (Kowalska, 2012). As synergy results from an economic activity in total, it can be analysed in the economic field through a holistic approach (Zhao, 2005). Thus, in economics, synergy is connected with the endless process of (re-)combining resources (Kowalska, 2012), where it is possible to achieve a mutual strengthening (Porter, 1996, 1998), amplifying the effects of two or more related elements (Miller, 1996), which boost combined effects as a result of the cooperation.

Ansoff (1965; 1988) introduced the concept of synergy into strategic management, describing synergy as the combined effect<sup>100</sup> available to a diversified firm, suggesting that it can produce a combined return on resources greater than the sum of its individual parts<sup>101</sup>. However, this approach stresses just its positive effects, implying that synergy merely provides positive effects. Interpreting synergy as a cooperation of elements, however, which could cause different effects (Ensign, 1998) 1998), more recent researchers have noted that the effects of synergy can be positive, negative (dis-

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<sup>99</sup> Interestingly enough this brave approach has been able to reach a new target public (the young generation defined in the Rijks Studio strategy plan as "culture snackers"). With its e-strategy target, the museum is renewing the audience or, in other words, the end-user of the Cultural Heritage held in the Museum's collection.

<sup>100</sup> Ensign (1998) reminds that Hofer and Schendel (1978) referred to synergy as "joint effects", moreover, suggesting the development of interrelationships as a way to obtain synergy.

<sup>101</sup> He proposed the intuitive formula  $2 + 2 = 5$  to describe that firms' combined performance may be greater than a simple aggregate of their parts.

synergy) or null (a-synergy) (Kowalska, 2012).

The effect of synergy is therefore the difference between the total combined effect (realized as a result of cooperating elements) and the base effect (realized by non-cooperating elements) (Kowalska, 2012)<sup>102</sup>. Of course, this research focuses on the positive synergies, that have boosted the *outcomes* (Smyrk, 1995) of the Rijksmuseum's *virtual identity* project. In particular, it focuses on the interpretation of Davis and Thomas (1993) regarding super-additivity in the evaluation of business combinations<sup>103</sup>.

### **3.2 Strategies' alignment and cooperation by way of alliances to boost synergies**

The reasons why enterprises succeed or fail is the central question in strategy, which is bound with how they choose, develop, implement and manage strategy. "Any effort to understand success must rest on an underlying theory of the firm<sup>104</sup> and an associated theory of strategy" (Porter, 1991: 95).

Strategy is the means of integrating the activities of diverse functional departments within a firm<sup>105</sup>; in other words, to have the chance to succeed, it is necessary to integrate the different functional strategies with a broader corporate strategy. "An explicit and mutually reinforcing set of goals and functional policies is needed to counter the centrifugal forces that lead functional departments in separate directions" (Porter, 1991, p. 96). This internally consistent set of goals and policies could be boosted by strategies' internal alignment. Strategy implementation is a process of action, which is a connection of elements and tasks, as well as their cooperation (Goold and Campbell, 2000). There is a strong perception of the concept of synergy in the context of corporate strategy (Andrews, 1971; Ansoff, 1965, 1988; Pun, 2004). To achieve synergy, it is necessary that each task adds new value to the effect of the previous task (Kowalska, 2012). Another condition for success is that the set of goals and policies aligns the firm's strengths and weaknesses with its external environments. "Strategy is the act of aligning a company and its environment" (Porter, 1991, p. 97). Both kinds of alignments –internal and external– are the place of synergy in relation to strategy.

In this research paper, with specific reference to e-business strategy, we will argue, on one hand,

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<sup>102</sup>  $efsyn = ef(A+B) - (ef(A) + ef(B))$  where:  $efsyn$  = synergy effect,  $ef(A+B)$  = total (combined) effect, realized as a result of the cooperation of element A with element B,  $(ef(A) + ef(B))$  = base effect, realized by independent (non-cooperating) elements A and B (Kowalska, 2012). In other words, "synergy potential does not fully translate into actual synergies" (Knoll, 2008 p. 14) namely, synergy is a net effect between total synergies potential and realization costs (Knoll, 2008).

<sup>103</sup> "Such revenue super-additivities are associated with the combination and transfer of complementary resources to capture growth opportunities across businesses rather than with sharing similar resources to increase efficiency (cf. Eisenhardt and Martin 2000; Tanriverdi and Venkatraman 2005). We term these valuable revenue super-additivities from combining complementary operative resources across businesses growth synergies (Knoll, 2008).

<sup>104</sup> One of the essential conditions (Andrews, 1971, 1987) to explain success is that of developing and implementing an internally consistent set of goals and functional policies which collectively define an enterprise's positioning.

<sup>105</sup> Including marketing, production, research and development, procurement, finance and the like.

that it needs to be integrated<sup>106</sup> with corporate and functional area strategies<sup>107</sup> in order to boost synergies and develop an effective corporate strategy, while, on the other hand, that a groundbreaking e-strategy could be a cornerstone for further synergies by way of alliances.

Synergy is in many cases perceived in the context of business cooperation, where two or more cooperating subsystems<sup>108</sup> produce more than the total sum of their production would have been, had they been working separately. In order to understand these joint effects Davis (*et al.*, 1992) tested relatedness and resource sharing. This effect of synergy is connected with the mutual work of these sub-systems that, because of their connection, are able to produce mutually reinforcing activities (Porter, 1996, 1998; Miller, 1996; Fluck and Lynch, 1999; Siggelkow, 2002).

Cross-business synergies have been conceptualised in the corporate-strategy literature (Ansoff, 1965; Porter, 1996, 1998; Goold and Campbell, 2000) where the research has focused on studying the impact on performance of the relatedness between businesses of diversified firms (Rumelt, 1982; Berger and Ofek, 1995; Harrison *et al.*, 2001), most of them capturing the benefits of cost-sub-additivities (economies of scope) from sharing similar resources across businesses (Davis and Thomas 1993; Martin, 2002; Tanriverdi and Venkatraman, 2005).

Recently, however, relationships among businesses have been studied not only for how they lead to cost-sub-additivities, but also for how they lead to value-enhancing revenue-super-additivities, namely profitable corporate growth (Davis and Thomas, 1993; Tanriverdi and Venkatraman, 2005). This research paper focuses on these revenues, which are associated with the combination and transfer of complementary resources to capture growth opportunities across businesses, rather than with the sharing of similar resources for efficiency (Eisenhardt and Martin, 2000; Tanriverdi and Venkatraman, 2005). In this case, the alliances effectively developed by the cultural institution are stable cross-business collaborations looking for a kind of “advanced outsourcing” in order to develop other businesses or to gain consistency among the core organisational elements and systems (Siggelkow, 2002). They are strategic alliances from a resource-based point of view, developed to access other firms’ resources for the purpose of garnering otherwise unavailable competitive advantages and values for the firm (Das and Teng, 2003; Ray *et al.*, 2004). These alliances are “cooperative relationships driven by a logic of strategic resource needs and social resource opportunities” (Eisenhardt and Schoonhoven, 1996: 137).

This research focuses on cross-business opportunities in the area in which creative and cultural industries overlap and between juridically independent enterprises. These are open-minded alliances,

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<sup>106</sup> To examine in depth the central role of alliances in e-business strategy connected with the concept of the virtual organisation (Rowley, 2002, Venkatraman, 2000).

<sup>107</sup>Tallon (2007) suggested that alignment should be tightest in processes that are considered critical to each firm’s strategic focus.

<sup>108</sup> According to Chakravarthy and Lorange (1991) synergy describes how each cooperating entity strengthens each of their competitive positions by sharing capabilities.

considering how the art museum's management board has developed the framework of the partner analysis<sup>109</sup> and alliance conditions (Das and Teng, 2003), which is coherent, interestingly, with the guideline "less is more"<sup>110</sup> and the pillar value "the collection is of everyone". Moreover, such combinations have the highest impact force on the chosen elements of the external environment (Kowalska, 2012, p 105).

This research aims to analyse synergies concerning a dynamic management (Porter, 1991; Eisenhardt and Martin, 2000)<sup>111</sup> to achieve the alignment of the organization with its internal environment (synergies and strategy) and with its external environment (synergy and alliances), arranging resources to achieve competitive advantage, financial sustainability and socio-cultural development.

The change management of the re-opened Rijksmuseum, which re-invented itself by creating a *virtual museum*<sup>112</sup>, was developed by considering both the internal and external alignment and also by looking for emergent strategies (Mintzberg, 1979, 1987; Mintzberg and Waters, 1985; Porter, 1991), coherent with the corporate objective and always guided by certain shared values, which are heart-and-soul themes around which the organization has rallied, such as "less is more" and "the collection is of everyone". The evidence of this path will emerge from the presentation of the case study, which will allow a deeper understanding of the relations between the art museum's ground-breaking digital business strategy, its management of alliances and its achievement of competitive advantage and financial sustainability.

Therefore, the research question of this study is the following: "How could innovation in strategy by an art museum through a ground-breaking digital business strategy be a source of competitive advantage, financial sustainability and socio-cultural development?" Or, in other words, "What are the relations between the success of the Rijksmuseum and its digital strategy?" The consistent aim is to comprehend how Amsterdam's Rijksmuseum is achieving the maximum strategy *effectiveness*, "finding ... a combination which has the highest impact force on the chosen elements of external environment" (Kowalska, 2012: 105).

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<sup>109</sup> Market and resource analysis.

<sup>110</sup> For example, see footnote 147: "Other platforms should be."

<sup>111</sup> A process, which is on-going, involving continuous fine-tuning, adjusting and responding to changes in circumstances.

<sup>112</sup> A Museum without borders of time or space, ideally able to boost cultural experience whenever and everywhere, interestingly with the objective to let people get in contact with the collection not on view in the new Rijksmuseum outfitting, because of the "less is more" approach, the Museum has selected 8,000 pieces of artworks for display, out of a total of 1.1 million objects.

#### 4. Framework of the research: antecedent and methodology

The study presented in this paper is case-based (Siggelkow, 2007; Eisenhardt and Graebner, 2007) and uses a qualitative approach (Myers, 2013; Ellis and Levy, 2008). The research process is characterized by a recursive approach among different, albeit connected, research questions and cases, all on the same topic: strategy and innovation management in CCIs with a special focus on cross-fertilization territories.

The research started in 2013. To meet its objectives and following the recursive approach, the outcome of each phase has been the starting point of the following step. Therefore, the research path consists of interdependent phases (with a similar research problem<sup>113</sup> and coherent research goals<sup>114</sup>) and this research paper is focused on the third.

The study of the overlap between the domains of arts, creativity and management started at the end of the 1990s and is still on-going, producing various areas of cross-fertilization and stimulating a critical thought on the possible or actual relationship between arts and management (Scherdin and Zander, 2011). The main pillars, on which the overlappings are based, are design, creativity and entrepreneurship. These are, at the same time, the key words and reference points of a highly celebrated territory, a sort of “middle earth” (Calcagno, 2013) where hybridization between arts and management takes place, creating new conditions of economic value, but also urging management research to develop critical thinking regarding the patterns through which this relationship comes true. The first step of the research here has therefore focused on this overlapping, proposing some interpretations of the above-mentioned interactions.

In the second stage, the research focused on the emerging intersection between the domains of arts and management, discussing the design process as one of these merging areas of cross-fertilization. The design process has experienced, before any other field, a fatal attraction towards the cultural world, typically using the cultural dimension to re-invent the concept of products. Furthermore, the word “design” identifies a process of generation, which is at the same time an expression of creative thinking and also essential in any kind of entrepreneurial activity. Design is then the strategic axis on which the above-mentioned “middle earth” is based, the *file rouge* between art and management and the process shared between artists and entrepreneurs in transforming a creative idea in a project of innovation.

In order to explore this idea, the second research stage analysed the case study of Droog, a design

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<sup>113</sup> Contributing to better understanding the relationships, the logic and the opportunities of “effects between fields”, especially in the cross-border area of CCIs.

<sup>114</sup> Finding ways to develop synergies which could boost social and economic spillovers for both creative and cultural industries and more generally for the maintenance and enhancement of Cultural Heritage.

company based in Amsterdam and working at the fuzzy borders between the arts and design<sup>115</sup>. More specifically, the research has focused on the analysis and interpretation of an open innovation project (Chesbrough, 2003) launched by Amsterdam's Rijksmuseum and joined by Droog. Using emerging data the work proposed a model of "sustainable cultural development", identifying an area of meaningful and promising cross-pollination between the worlds of culture and design, opening a new perspective on the relationship between cultural and creative industries.

After a literature review of design management and an inductive analysis based on the case study "Droog and its collaboration with the Rijksstudio", the second research stage resolved its research questions<sup>116</sup> proposing an alternative perspective on design, adopting what had emerged as a new model of design-led-innovation, where cultural regeneration may be realized through the design of artefacts incorporating specific cultural codes. In the suggested path, the world of art and culture can use design as a driver to increase its value by communicating itself through the design of artefacts, thus reaching the external world more effectively, reinforcing Cultural Heritage at the same time towards a new model of innovation. The suggested "*Design-to-Boost Culture*" approach re-functionalized design's ability to create value by boosting culture and art (Calcagno and Cavriani, 2014a). This design approach (developing society's knowledge and sensitivity about different kinds of art in order to attract customers to art and culture and suggesting new ways to live the consumption experience) transforms design language into a tool for the Cultural Heritage Cycle development (Thurley, 2005), giving culture a way to pass through the products using them to shape a new relationship with the customer. At the same time, it interprets the supposed relationship between cultural and creative industries that, becoming more than a simple combination of different industries, can be based on cross-business synergy and co-development, aimed at producing sustainable innovation by generating social and cultural, in addition to economic, impact<sup>117</sup>.

During the data collection and analysis of the second research phase, we discovered that the sparkling process of design that we named "*Design-to-Boost Culture*" was the result of a collaboration between the Rijksmuseum and Droog, which was interestingly driven by the art museum. On the occasion of its re-opening (in 2013) after a ten-year restoration, the museum launched the "Rijks Studio" official site, a ground-breaking online presentation of 125,000<sup>118</sup> works of art from its collection. To celebrate this digital milestone, the Museum approached several leading

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<sup>115</sup> Since its founding, Droog has pioneered new directions for design discourse, radically experimenting in the design of products, experiences, concepts and events.

<sup>116</sup> "Could design give value to the cultural and artistic domain?" "Is it possible to imagine a path through which the design world could support the sustainability and development of Cultural Heritage?"

<sup>117</sup> The first project coherent with the *Design-to-boost Culture* approach (Calcagno and Cavriani, 2014a) has been an unexpected tattoo, referring to the "still life with flowers in vase" by Jan de Heem dated to the 17th Century and designed by Studio Droog. This artefact enabled the Museum to meet Street Culture <https://studio.droog.com/studio/all/rijksmuseum/tattoo/> and moreover has pioneered and communicated the opportunities offered by the Rijks Studio (boosting the e-strategy of the museum).

<sup>118</sup> At the moment, they are 200,000.

international designers, architects and artists to become pioneers of Rijksstudio by selecting some pieces from the online collection and using them creatively to produce a new artwork or series of products. This project thus strengthened the idea that a process of innovation could be launched thanks to the proactive “use” of Cultural Heritage. However, there was something more here than the re-functionalization of “centuries-old works reinterpreted in contemporary shapes, functions, techniques and materials”<sup>119</sup> (Ramakers and Jaworska, 2014: 161). The additional effects were the boosting of the connection between people, art and history and of the development of Cultural Heritage through the communication of cultural codes, which were core to this path of design development.

Exactly these findings and suggestions for further research directions, received at the Egos Conference 2014 during the presentation of the second-phase paper, have driven the start of the third research stage treated in this paper, which concerns cultural institutions in order to better understand the potential impact of the relationships, the logic and the opportunities of “effects between fields” in the cross-border areas of CCIs<sup>120</sup>.

The specific research goal of this current phase has been to understand how cultural institutions like art museums could sustainably maintain, enhance and develop Cultural Heritage, boosting the participation of the public as well as the spillover effect in the cross-territories between the cultural and creative industries. The endeavour is intended to gain deeper understanding regarding how to boost synergies in the strategic innovation of art museums, enhancing ground-breaking digital-business strategies as source of competitive advantage, financial sustainability and socio-cultural development.

It was swiftly discovered that the collaborations boosted by the art Museum were multiple and different both for the characteristics of the partnerships and for their strategic objectives. Some were complementary<sup>121</sup> –optimising the internet’s contribution to their core business– and some were designed with specific objectives, to reinforce the contribution of the e-strategy to the core business as well as to the strategies of other functional areas (Pun, 2003, 2004; Pun *et al.*, 2004). Therefore, this third phase of the research began firstly with a review literature and secondly with interviews of the art museum’s managers/directors and some of the different partners cooperating with the Rijksmuseum.

Reviewing literature concerning art museums’ management (Bradburne, 1999, 2002, 2004; Grattan and Langeven, 2007; Bakhashi and Throsby 2010; Calcagno and Faccipieri, 2010, 2011;

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<sup>119</sup> Explicative examples are the project “Masterpieces by Droog and the Rijksmuseum” <http://www.droog.com/news/2013/04/masterpieces-droog-rijksmuseum/> and the project “Rijksmuseum: Rijksstudio m2” presented by Droog during the Fuori Salone del Mobile in Milan in 2014 <http://www.droog.com/news/2014/04/droog-milan-2014/>

<sup>120</sup> The research problem at all stages of the research.

<sup>121</sup> See footnote 147.

Calcagno and Biscaro, 2012; Bonaccini, 2011, 2012; Cecchini, 2013) with particular attention to the impact of digital technology on the new ways of interaction between the museum and its audience, we immediately perceived that this case study would be highly representative thanks to its ground-breaking digital business strategy. Therefore, the research turned to an analysis of the literature concerning the synergies between the e-strategy and the corporate strategy (Rowley, 2002; Pun, 2003, 2004; Pun *et al.*, 2004; Tallon, 2007). The connection between synergies and alliances (Ensign, 1998; Das and Teng, 2000, 2003; Knoll, 2008; Christoffersen *et al.*, 2012) emerged as another academic research field coherent with the features of the case study.

As an effect of the literature review, the research question was clarified and focused: “How could an innovation in strategy by an art museum through a ground-breaking digital-business strategy be a source of competitive advantage, financial sustainability and socio-cultural development?” Or, in other words, “What are the relations between the success of the Rijksmuseum and its digital strategy?”

The gathering of the data for the case began with collecting information available on the web<sup>122</sup>, in order to gain the knowledge to effectively manage the direct interviews. Further data have been collected from primary sources: interviews, meetings and colloquia with directors and managers of the Rijksmuseum and the analysis of its financial reports<sup>123</sup>. During these interviews, the subjects of strategic innovation and digital strategy were discussed, as well as the subjects of alliances and collaborations. As collaborations are between two entities - the museum and its different partners - the research has collected information interviewing both the Rijksmuseum’s managers and some of its partners in order to compare and match the data more objectively and to better understand the collaborations’ characteristics (interviewing again the business director of Droog<sup>124</sup> and some other managers of the companies’ network developed and boosted by the cultural institution)<sup>125</sup>. Most observations and interviews (recorded, lasting on average 75 minutes) were subsequently been triangulated in order to discuss and let the critical points emerge.

The findings reveal that for art museums a ground-breaking digital business strategy, like a *digital-open-content* collection, bolstered by *tight-fit* (Siggelkow, 2002) alliances can be a cornerstone for synergies. The alliances need to be driven by an emergent strategy with internal and

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<sup>122</sup> E.g. video interviews, articles in Dutch and international newspapers, papers proposed for presentations at the re-opening by Rijksmuseum’s managers and “rumours” on social media.

<sup>123</sup> Taco Dibbits, director of the collection of the museum and member of the board of directors, responsible for the new corporate strategy and for the new approach of the collection’s outfitting in the *brick-and-mortar* restored museum. He was already part of the organization at the beginning of the renovation, which means he is the memory and the upholder/supporter of all the renovation-reopening strategy development and implementation. Peter Gorgels, manager of digital communication, responsible for the digital project Rijks Studio, the *virtual identity* of the museum. Marjolijn Meynen, the head of communications and marketing. Hendrikje Crebolder, the head of development and general director Wim Pijbes.

<sup>124</sup> Machiel Brautigam. In the first research phase the co-founder and president of Droog Renny Ramakers and the manager of Studio Droog Marielle Janmaat were also interviewed.

<sup>125</sup> Manager of Peecho, some users of the platform Etsy, together with the Rijksstudio project.



external fit. The connected synergies lead the digital strategy to be internally and externally effective, able to boost economic, financial and socio-cultural spillovers.

## 5. Ground-breaking digital business strategy and alliance management: the case-study of Amsterdam's Rijksmuseum

### 5.1 "Less is more" and "Rijksmuseum's collection belongs to everyone"

The chain of causality of this case study goes back to the period of the restoring of the Rijksmuseum. It began in 2004 and was expected to take five years. Instead, it has effectively taken ten. From the beginning, one of the most important guidelines, "less is more", boosted the decision-making process; therefore, the museum's refurbishment has not involved (in contrast to many other museums) the expansion of the *brick-and-mortar*<sup>126</sup>. Contextually, the new outfitting was conceived to follow the same guideline; the exhibited collection in the "new" Rijksmuseum counts about 8.000 artworks out of a total collection of 1.1 million objects<sup>127</sup>. As the restoration was taking more time than estimated, the management board tried to transform the delay into an advantage, deciding to use this longer period of being unable to exhibit the collection by focusing its attention on the artworks' digitalization at the highest possible quality<sup>128</sup>. This choice has driven important decisions around the restoration project, transforming it into a moment of re-invention of the art museum. Coherent with the decision not to expand the *brick-and-mortar*, and with the pillar value that the Museum's collection is everyone's heritage<sup>129</sup>, the board decided to expand the virtual walls of the museum instead of the "concrete" ones, developing the idea to create a *virtual identity* for the Rijksmuseum - the Rijksstudio - consistent with the emergent new technological<sup>130</sup> and socio-cultural scenario<sup>131</sup>.

This ground-breaking digital business strategy leans on open content on one side and on the high resolution of the image on the other side: the digital project, Rijksstudio, is an *advanced virtual museum* which makes the Museum's collection available to everyone.

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<sup>126</sup> W. Pijbes stated: "We didn't need to build an extension. Big is big enough. I'm a foodie, but I don't like too many courses. I want us to focus and only have the best of the best. I believe in the strength of simplicity". The restored Rijksmuseum has a new entrance, an outdoor exhibition space with free entrance, an Asian pavilion, shops, restaurants, educational facilities and a renovated library.

<sup>127</sup> Dibbits said, "Instead of fighting the building, we have embraced it and accepted its eccentricities". They want the public to get a sense of history, seeing the paintings, furniture and applied arts which were all conceived around the same time, "so rather than separating paintings from silver tapestries or furniture, as they had before, the curators have decided to tell the history of Dutch art from the Middle Ages to the 21st century".

<sup>128</sup> The highest-resolution images using the available technologies (2500 x 2500 pixels, 300 dpi). These are not "thumbnails," and there are no watermarks or sharing restrictions, which means they are of real value to the user.

<sup>129</sup> Dibbits, during the interview, defined the Rijksmuseum collection as "national collective memory" which "belongs to everyone".

<sup>130</sup> "New technological scenario" refers both to the possibility of high-resolution images (thanks to new tools for high-quality digitalisation) and high-quality of the image available on PCs, smartphones and tablet (accessible through Computer Mediated Communication (CMC) tools) and to the new CMC technologies themselves.

<sup>131</sup> The socio-cultural scenario refers to the new (digital) *virtual culture* typical of postmodernism (Mirzoeff, 1999) and also to the widespread open-design approach.

The internally consistent new set of goals was translated into a new vision-mission of the Rijksmuseum: linking individuals with art and history, by allowing these to take on a new meaning for a broad-based, contemporary audience. In other words, the art museum was looking for a new key challenge, deciding to reduce the distance between the museum, its collection and the public, while targeting at the same time a new audience –the recalcitrant target of the “*culture snackers*”<sup>132</sup> “letting them be attracted by the beauty of the images and trying to get them into the museum in the end, to experience the authenticity of the art” (Dibbits).

Interestingly enough, in defining this growth path, they have deliberately not given attention to benchmarks in their own industry, thinking that to be innovative it is necessary to look towards other fields<sup>133</sup>. Rivetingly, moreover, during the restoration of the *brick-and-mortar*, the team responsible for the Rijksstudio project consulted a military think-tank regarding the forecasted digital and ICT technologies, with special focus on the (Web-) Computer-Mediated Communication (W-CMC). Their objective was to use the most advanced technologies to evaluate these increasingly important marketing-communication media in order to mobilise as much as possible visitors’ engagement with the digital-content creation of the Rijksstudio. Receiving a technological framework forecast with only a three-year time horizon (and the restoration was far from finished), they decided to concentrate their energy on the quality of the digitalization and on the development of the visual concept, stressing the content of the e-strategy innovation over the selection of the W-CMC tools.

The values of simplicity, authenticity, quality and innovation have driven the development of the Rijksstudio project and together with the guideline “less is more” these supported strategic decisions that led to the chosen web concept, “with the minimum possible text and the highest possible quality of the image”<sup>134</sup>. According to Peter Gorgels, the objective of the Web experience is to “earn attention by offering attractive content that is easy to share”. The previous website contained too much information and too many options, whereas the new concept, coherent with “less is more”, opted to focus on essential content<sup>135</sup>. The layout has emphasised the value of the image: as Taco Dibbits said, “this is the ideal way to view an artwork, the picture in its full glory, uncluttered by information or buttons”.

The e-strategy mission –to bring the collection to the public– and its strategic principles were coherently implemented. The website had to be “lean and mean”, it had to be an open platform and it had to identify ways of reaching the public by surprising and seducing, whereby users would learn

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<sup>132</sup> The teens and more generally young creative people, who love web opportunities like downloadable images available for free.

<sup>133</sup> From the interview with T. Dibbits.

<sup>134</sup> About the focus on the image: “Many museum websites present a wealth of information and data. Rijks Studio believes in the strength of the images themselves” (interview with P. Gorgels).

<sup>135</sup> “Anything else should be pushed into the background or omitted altogether” (interview with P. Gorgels).

more and wish to return<sup>136</sup>. Interestingly enough, both the new mission and the new values have been the exegesis of the core pillar-values “Rijksmuseum’s collection belongs to everyone” and “less is more”; moreover these core pillar values have been fundamental to the implementation of the emerging strategies of the Rijksmuseum.

## 5.2 The e-strategy as a core element of the corporate strategy

The vision of the Museum, “The Rijksmuseum links individuals with art and history”<sup>137</sup>, reflects the mission of the Rijksstudio “to connect people, art, and history”. In order to let art and history adopt a new meaning for a broad-based, contemporary, national and international audience (paraphrasing the mission of the Rijksmuseum), the museum has implemented its e-strategy as a core element of its corporate strategy, bringing the collection to the broadest possible contemporary audience.

The mission of the Rijksstudio (connecting people, art and history) was clear from the beginning, but something in the strategy changed because environmental challenges were reconsidered. It was decided at the start to invite members of the public to create their own works of art by downloading images of the artworks and using them in a creative way, but deviating from the first concept, this boosted creative activity has also been made available for commercial applications, whereas previously it was only available for private applications<sup>138</sup>. The core motivation for this new decision has been the forecast that otherwise the strategic potentiality of the Rijksstudio as a marketing tool of the museum would have been compromised, caused by a reduction in the positive impact of public engagement with the *viralisation* of the brand<sup>139</sup>. The spillover effect in creative industries would not have been possible, so that the public would have been less interested in using the collection in a copyright-free creative way<sup>140</sup>.

This change in the implementation of the digital strategy has been boosted by the emergent strategy, coherent with the corporate objective to use the Rijksstudio project to connect the museum’s collection with a contemporary, (inter-)national audience and consistent with the marketing strategy to develop the awareness of the restyled brand of the art museum, fostering the *resonance* of the

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<sup>136</sup> “Although content-rich, the design of “virtual museum” often fails to rise above the level of a database intended more for administrative purposes than for aesthetic pleasure. The artworks are often shown as small thumbnails. If they can indeed be enlarged, there are various (technical) restrictions which stand in the way of a truly user-friendly experience” (interview with P. Gorgels).

<sup>137</sup> The Vision of the museum is “The Rijksmuseum links individuals with art and history” and the Mission is “At the Rijksmuseum, art and history take on new meaning for a broad-based, contemporary national and international audience” (<https://www.rijksmuseum.nl/en/organisation/vision-and-mission>)

<sup>138</sup> “Rijksstudio is exceptional ... because we actively encourage users to be creative in this way using the collection of the Rijks Museum available not only wherever and whenever, but also for every artistic development” (P. Gorgels).

<sup>139</sup> “... we also wish to encourage people to publish our content on their own sites and blogs. The more who do so, the greater our outreach” (P. Gorgels).

<sup>140</sup> Results: Rijks Studio at the moment shows 200,000 digital images and has lodged 2.47 million visitors (the amount has doubled), 210,000 objects have been downloaded and 110,000 personal accounts have been created.

Rijksmuseum<sup>141</sup>. The cultural open-content collection became a fully open source, usable also for commercial applications, boosting creative spillovers as well as marketing communication, (e. g. by letting the brand of the museum be presented during the Salone del Mobile di Milano 2013, conveying its re-opening thanks to the collaboration with Droog). This approach has led to increased participation by the (Dutch<sup>142</sup>) audience with the Rijksmuseum and to a boost of the positive Cultural Heritage Cycle (Thurley, 2005) in Dutch society at large, mostly thanks to the Rijksstudio project.

Moreover, with its e-strategy (to achieve the corporate objective of connecting a broader target audience of people to art and history, enhancing the new external-environment opportunities) the Rijksmuseum approached a new target: the “culture-snackers”, comprising a young audience that enjoys viewing images and sharing them with friends and followers, part of the prevailing image-heavy culture. Its new *virtual identity* created a new target group for the art museum on top of art professionals or art lovers<sup>143</sup>; by mobilizing this new audience, the e-strategy gives the art museum a place within today’s image culture. As Gorgels said “We shall invite and seduce the snackers. We shall inspire and engage the art lovers, enabling all to take their passion further. Ideally, we shall convert the snackers into true art lovers, and we shall connect with all site users to create mutual loyalty”.

### ***5.3 Alliances: boosting synergies in the e-strategy and spillovers in the corporate objective***

The idea of the *open collection* has first of all been a Corporate Social Responsibility (CSR) project of the Rijksmuseum; in other words, the propelling motivation has been ethical: “the collection of the national museum is a (*national*) *collective memory* that belongs to everyone”.

The e-project has enhanced the available new technologies, letting the cultural-value of the Cultural Capital (Throsby, 2005) held in the museum’s collection, become democratically accessible to the community (Benhamou, 2001). In following the guideline “Rijksmuseum’s collection belongs to everyone” the board of the museum has enhanced this path, also boosting strategic synergies and certain spillovers (e.g. a sustainable management of the Cultural Capital).

The Rijksstudio project was conceived to drive the “*viralisation*” of the reopening of the Rijksmuseum and, in addition, to re-brand the “new” museum, to develop, in other words, its *resonance*. To facilitate these objectives and bring the online project to public attention, renowned

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<sup>141</sup> The mission of the marketing strategy is to develop the awareness of the Rijksmuseum brand looking to boost the visitors’ success (both in the *brick-and-mortar* museum and to the virtual museum Rijksstudio) and enhancing the support of the followers to the viralisation of the museum’s brand using the social media for the word-of-mouth advertising. The number of visitors to the Museum has doubled (actually more than 4 million since reopening) exceeding expectations.

<sup>142</sup> After the reopening for the first time in years, the number of Dutch visitors exceeds the number of foreign visitors (L. Volkers interview, marketing director of the RijksMuseum).

<sup>143</sup> They applied the 80/20 rule, designing based on the assumption that 80 percent of visitors would represent the identified target groups. At the same time, the other 20 percent must also be able to find their way around. The result has been characterised by simplicity, and the design approach has drawn inspiration from generalist platforms.

designers and artists were asked to produce new artworks inspired by the Rijksmuseum's collection and available through the *open content* Rijksstudio. One of these projects, joined by the design company Droog, was the case study of the second stage of this research<sup>144</sup>. Grippingly, thanks to this collaboration, the Rijksmuseum has been represented for two years (2013 and 2014) at the Design Week in Milano: quite a ground-breaking and successful marketing operation for the art Museum.<sup>145</sup>

Other collaborations of the same nature and with the same objectives (marketing and communication, *viralisation* of the brand) have been boosted by the art museum<sup>146</sup> but, more interestingly from a strategy-synergy point of view, the museum started to develop other stable collaborations in order to support the "virtual organisation"<sup>147</sup> necessary to optimise the contribution of the internet to its core objectives, extending applications and increasing the community dependency to boost the brand awareness of the museum. This goal has also been very important for the museum's capacity to attract supporters and partners because, as Dollinger *et al.* (1997) wrote, a firm's reputation encourages decision-makers to form a strategic alliance with it. Two partnerships that have been necessary to support the e-strategy objectives and the internet presence are Etsy<sup>148</sup> and Peecho. These two open platforms (the first a peer-to-peer e-commerce website focused on handmade and vintage, and the second a cloud-print on-demand service) are ways to reach millions of potential followers,<sup>149</sup> boosting the creative use of the Rijks Studio as well as extending the sharing and cropping of the collection, enhancing and exploiting the latest digital technology and digital trends.

From a resource-based point of view (Das and Teng, 2000), these are service partnerships, a kind of distribution agreement; however, looking more deeply, they are strategic alliances<sup>150</sup> that boost strategic synergies. Eisenhardt and Schoonhoven (1996, p.137) view alliances as "cooperative relationships, driven by a logic of strategic resource needs and social resource opportunities". Thus, the partnerships with the two platforms are a joint marketing and promotion partnership with which the museum is able to boost - simultaneously and synergically<sup>151</sup> - the corporate objective (connecting

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<sup>144</sup> The first product with cultural codes embedded in the design concept has been the remarkable tattoo. See footnote 147. For more information about this collaboration, we refer to the research paper concerning the second stage of the research (Calcagno and Cavriani, 2014a).

<sup>145</sup> See footnote 119.

<sup>146</sup> Fashion designer Alexander van Slobbe produced a dress and a shawl, which De Bijenkorf sold in a limited edition of 100 pieces; Christian Borstlap produced a stunning video animation in which he brings to life various prints from the collection; the fashion brand Ladresse by Simone van Trojen has developed dresses with embedded cultural code.

<sup>147</sup> "Collaborations are a useful vehicle for enhancing knowledge in critical areas of functioning where the requisite level of knowledge is lacking and cannot be developed within an acceptable timeframe or cost" (Madhok, 1997, p 43). And, coherently with this, Gorgels said "Other platforms should be used where possible rather than building everything ourselves".

<sup>148</sup> "Rijksstudio (Rijksmuseum) introduces its digital images to be used by Etsy" (<https://www.etsy.com/it/pages/rijksstudio>). Etsy is the world's largest platform for handmade and vintage products.

<sup>149</sup> Etsy has 40 million clients all over the world.

<sup>150</sup> "Strategic alliances are voluntary cooperative inter-firm agreements aimed at achieving competitive advantage for the partners ... The critical part played by technology and speed in the new competitive calculus, among other factors, has led to the contention that the key to success in the coming years lies in the creation of collaborative advantage through strategic alliances" (Das and Teng, 2000).

<sup>151</sup> Thanks to the tightly coupled organisation of resources, which boosts mutually reinforcing activities (Porter, 1996) creating and sustaining tightly reinforcing elements (Siggelkow, 2001, 2002).

more effectively individuals with art and history, increasing the target audience of people who can be connected with the collection and boosting a positive Cultural Heritage Cycle) and its e-strategy (bringing the collection more effectively to the people), as well as its marketing strategy (developing the museum's brand awareness, to increase the number of potential visitors<sup>152</sup> using word-of-mouth advertising) and last but not least its financial strategy (increasing the reputation of the museum and the visibility of its brand to leverage also private financial support) coherent with the model of public-private partnerships (PPPs).

The research analysed the logic of the decisions regarding these alliances based on the Resource-Based Rationals (Das and Teng, 2000)<sup>153</sup>, namely “maximizing firm value through gaining access to other firms' valuable resources” (Ramanathan *et al.*, 1997)<sup>154</sup>.

The above-described framework of highly interdependent elements (Miller, 1981; Porter, 1996) is an example of the synergies developed by the alignment of the e-strategy with the corporate strategy which, fostering tight-fit alliances, is furthermore able to boost financial synergies to improve the sustainability of the cultural institution.

#### ***5.4 Examples of synergies and spillovers: sustainability of Cultural Capital***

The sustainable “matching-funds model” (Bradburne, 2004) of the Rijksmuseum, coherent with the PPPs approach, is greatly boosted by the synergies that originated from the ground-breaking e-strategy and its alignment with corporate strategy and by the strong commitment with the guideline (shared value) “the collection is of everyone”.

The ground-breaking digital strategy - to let the museum's collection become totally copyright-free, on-line and open content, to democratise the consumption of art, making it accessible and usable online to the widest possible audience - has been the core element leading the Rijksmuseum to receive a million-euro grant from the National Lottery for Culture, BankGiro Loterij<sup>155</sup>.

The marketing director of the Rijksmuseum, Volkers, said “We are very enthusiastic, the BankGiro Loterij has sponsored Rijks Studio because one of their objectives is to exhibit culture to a broader audience”. The managing director of the BankGiro Loterij, Marieke van Schaik, said “We are proud to be a partner of the Rijksmuseum (because) we are two organizations with the same mission”. And Pijbes, managing director of the Rijksmuseum, said “Without the BankGiro Lottery, Dutch museums would not be able to take part in the international art market. Nor would we be able to succeed in our mission to ensure that the museum is accessible for everyone and for all ages”.

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<sup>152</sup> That effectively has increased enormously, exceeding the budgeted target of the restoring business plan for restoration.

<sup>153</sup> And not on the Transaction Cost Rationale: “Minimizing the sum of production and transaction costs” (p. 35, referring to Kogut)

<sup>154</sup> See footnote 147.

<sup>155</sup> The digitalisation project was financed by a million-euro (\$1.29 million) grant from the national BankGiro lottery, which provides funds for the arts and cultural groups.

Summarizing the spillovers: because of its open content, Rijksmuseum has received and is still receiving<sup>156</sup> important financial support from the National Lottery, and because of its consistent implementation of e-strategy, it has boosted both the achievement of its marketing objectives (increasing brand awareness and the visibility of the art museum) and the successful democratisation of the collection. Additionally, because of its reputation, the Rijksmuseum is leveraging private support through partnerships (co-branding and marketing as well as business partnerships<sup>157</sup>) and is moreover increasing the financial support derived from Dutch society through the friends/patron of the museum card<sup>158</sup>, as well as from companies like ING Bank and KPN (the former national telecommunication company).

Interestingly, the whole strategic approach has fostered mutual fertilization between the identity of the Dutchmen and the Rijksmuseum's identity, now perceived by the community as a "*collective national memory*"<sup>159</sup>. This is, of course, a success of the strategy innovation of Amsterdam's top art museum, which has boosted a positive Cultural Heritage Cycle, "to make the past part of our future" (Thurley, 2005, p 26) creating a cycle of understanding, valuing, caring and enjoying<sup>160</sup>.

As Volkers said, "Before the restoration, 70% of visitors were foreign tourists; after the reopening, 60% of the visitors are Dutch, and also the number of kids visiting is increasing more and more (400.000 just in the first year)". Especially for the youngest generation, the Rijksmuseum has another important objective for which the museum is also receiving financial support from the BankGiro Loterij<sup>161</sup>: "to send all children to see the "*Night Watch*" (the most representative painting by Rembrandt, around which the Rijksmuseum building was architecturally conceived by the architect Pierre Cuypers) before their 12th birthday!" as Dibbits said.

The social spillovers are quite evident in the increase of both social-cultural participation as well as social cohesion. A national identity has been developed around the art museum's Cultural Heritage, considered to be a *collective national memory* of which people are proud and which they want to support and maintain. The Rijksmuseum, with its ground-breaking digital strategy, has catalysed the attention of both the real and virtual community, able to inspire different audiences: Dutchmen as well as foreigners, children as well as adults, culture-snackers as well as art lovers and professionals.

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<sup>156</sup> The national lottery is the sponsor of Rijksstudio downloadable project as specified on the web site of the latter.

<sup>157</sup> The most important are Philips, Heineken, Douwe Egberts and Albert Heijn, but also CCIs like Droog, Ladresse, and Alexander van Slobbe.

<sup>158</sup> <https://www.rijksmuseum.nl/en/friends>, Interviewing T. Dibbits it became clear that around half of the operational revenues are connected to the friends' card/patron of the Rijksmuseum card and other museums cards.

<sup>159</sup> Interview with T. Dibbits.

<sup>160</sup> "By understanding the historic environment people value it; by valuing it, they will want to care for it; by caring for it they will help people enjoy it; from enjoying the historic environment comes a thirst to understand" (Thurley, 2005, p 26), which provokes a thirst to support and take care of it.

<sup>161</sup> In 2014, the Rijksmuseum received an amount of almost 1 million euros in earmarked donations, which will enable the continuation of the Rijksmuseum bus service. This contribution from the BankGiro Loterij will therefore make it possible to continue fulfilling the stated ambition to send all Dutch children to see the *Night Watch* before their 12th birthday. This program has been set up because not all schools have the resources to achieve this on their own.

This latter is an example of a flow of synergy that starts from the alignment of strategy (not only e-strategy and corporate strategy, but also marketing strategy), continues with the development of alliances and flows into the financial sustainability of the art museum as well as the sustainability of the Cultural Capital.

### **5.5 Some quantitative results of the re-opening strategy**

To illustrate the *effectiveness* of the innovative strategy of the new Rijksmuseum, some results will now be highlighted. Mr. Pijbes expected the renovated museum to attract 1.75 million to 2 million visitors annually, which would rank the Rijksmuseum twentieth in attendance among all museums worldwide. In its last full year (2002) before restoration it drew 1.3 million visitors. From its reopening in April 2013 until November 2014, the number of visitors has exceeded 4 million (2,47 million in the whole of 2014), therefore doubling its number of visitors. Moreover, the Rijksmuseum's new exhibition wing (1,000 m<sup>2</sup>, restored after the re-opening and able to receive 1 million visitors annually) is at the moment further contributing to its increasing success. For the first time in years, the number of Dutch visitors (now 60% compared to 30% in the past) exceeds the number of foreign visitors; over a quarter (23%) of visitors used an e-ticket, which, by international museum standards, is also an unprecedented number. Rijks Studio –showing at the moment 200,000 digital images– has lodged 2.17 million visitors (therefore doubled); 500,000 objects have been downloaded and 110,000 personal accounts have been created. The re-opening strategy innovation has led to the following financial results for 2014: a positive operational result of € 5.2 million, entrance fees of € 25.6 million (of the 2,47 million visitors, 21% had a Museum card), and sponsoring revenues of € 5.2 million.

The Rijksmuseum has won (inter-)national “Best of the Web” awards (SpinAwards 2013, Dutch Interactive Awards 2013, Museum and Web Awards and the European Design Award) and recently won (for 2015) the “European Museum of the Year Award” (EMYA)<sup>162</sup>. These awards are based on peer evaluations by museum professionals.

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<sup>162</sup> <http://www.europeanmuseumforum.info/emya/emya-2015.html> “The renewed Rijksmuseum offers impressive multilingual guidance to its visitors, witty and thought-provoking interventions in the galleries, and a state-of-the-art website for virtual visitors. The ambition to “reach every child in the Netherlands by the age of twelve” is notable, impressive and achievable. This is a great museum ... providing a rich experience to the public, and a socially aware outreach programme for visitors of all ages”



## 6. Discussion and conclusion

### 6.1 Discussion

Any discussion of what determines an organization's success, firstly needs to define what success means. For the purpose of this research paper, we need to consider the special kind of organization we have studied: a cultural organization and, in particular, an art museum. Porter (1991: 96) argued that "firm success is manifested in attaining a competitive position or series of competitive positions that lead to superior and sustainable financial performance". The flow of synergies described above has demonstrated the "superior and sustainable financial performance" that the Rijksmuseum has achieved thanks to synergies boosted by its ground-breaking digital strategy. Moreover, consistent with Throsby (2005, p. 7), "Cultural Capital gives rise by definition to two sorts of value: economic and cultural". Therefore, for discussing the success of the strategy of an art museum (or cultural institutions in general), it is necessary to consider these two types of value. Throsby insists that the cultural valuation of the stock of Cultural Capital is measurable according to some agreed-upon system of units, reflecting the significance or worth to society of a cultural asset. During any time period, Cultural Capital produces a flow of income measured in terms of both monetary and cultural value (Throsby, 2005, p. 8). Grippingly then, considering that the cultural value depends on the significance or worth to society of the cultural asset, if the strategy of a cultural institution reinforces this perception (as the art museum of Amsterdam has done), it, at the same time, synergistically increases the value of Cultural Capital<sup>163</sup>; in other words, it achieves a socio-cultural synergy, disseminating culture and boosting the preservation of Cultural Heritage.

According to the ITO (Input-Transform-Outcome) model of Smyrk (1995)<sup>164</sup>, "*outcomes* are the result of *outputs* being utilised by stakeholders" (Smyrk, 1995, p. 4). In other words, outcomes represent the *effectiveness* with which the *utilisation* of the output has taken place.

The Rijksmuseum processed its corporate strategy with a ground-breaking e-strategy, and the *output* (the Rijksstudio) is in itself a high-value output, because of its contribution to the democratisation of the museum's collection. However, if the management board had not boosted synergies, neither in the implementation of the strategy nor in the development of alliances<sup>165</sup>, the

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<sup>163</sup>  $Y_c = \alpha K_c$  is the production function of cultural value (calculating the cultural value of the cultural capital  $K$ ), where  $K_c$  is the cultural value and  $\alpha$  is the "cultural appreciation parameter", "measuring the extent to which members of society, in a given time period, understand and appreciate the significance or importance of  $K$ . Thus for a society that cared nothing for its cultural assets,  $\alpha = 0$  and no cultural income would accrue" (Throsby, 2005 p. 9).

<sup>164</sup> This model evaluates the success of a project, expressing the "goal as the extent to which desired outcomes are generated" (Smyrk, 1995, p 3) including effectiveness in the evaluation.

<sup>165</sup> E.g. the decision to let the content also be used for commercial applications or the partnerships with the creative industry such as Droog, to inspire the possible use of the open content of Rijks Studio and communicating the Museum at the Fuori Salone in Milan, or the partnerships developed with Etsy and Peecho, which were specific alliances to boost the "utilization" of the output (the open, digital cultural content) and which have impacted the consumption (as well as the *viralisation* of the museum brand). For Smyrk (1995) this means "the mechanism of converting sets of available outputs into desired outcomes".

*effectiveness* of the strategy process would have been less significant, despite its game-changing copyright-free, open digital collection. Although this is a case-based research paper with contextual factors, we consider the findings particularly suitable for illustrating and extending relationships and logic in the broader field of strategy innovation management in CCIs that deal with digital-open (cultural) contents.

## 6.2 Conclusion

These results reveal that, for art museums, a ground-breaking digital business strategy bolstered by *tight-fit* (Siggelkow, 2002) alliances –driven by an emergent strategy with internal and external fit– can be a cornerstone for synergies. The connected synergies allow the digital strategy to be internally and externally effective, able to boost economic, financial and socio-cultural spillovers.

The success of the innovation strategy of the Rijksmuseum connected to its restoration/reopening definitely depends on the museum’s brave decision to develop a totally copyright-free, open online collection with the aim to democratise the art and to link a broad-based contemporary audience with art and history. However, this is “just” the *output* of the strategic project, saying nothing about its *effectiveness*. In order to determinate the success of the project, the mechanism of converting this available output into the desired *outcomes* (which Smyrk calls *consumption*) is traceable to the synergies that depend on the strategies’ alignment and their effective alliances. This research has revealed that the *effectiveness* of a cultural institution’s strategy also depends on its capability to enhance emergent strategies consistent with its core elements. The findings of the research<sup>166</sup> therefore lead to the conclusion that, although the process of strategy innovation presented in this case was based on a ground-breaking digital business strategy, it would not have led to ground-breaking success if the e-strategy had not been utilised as a cornerstone for synergies. Rijksmuseum’s perception of the need to boost the effectiveness of the open-content digital strategy has been the key condition for its success, letting the digital strategy become a cornerstone for synergies.

The managerial implications<sup>167</sup> of the above results are that, even though the digitalisation of Cultural Heritage and e-strategy seem to be a panacea for sustainable Cultural Capital management and development, the *effectiveness* of a (digital) e-strategy in cultural organisations - and the *resonance*, competitiveness and sustainability towards which such a strategy aims - highly depends on the capability of the organisation to implement such strategy by creating and maintaining a tight-

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<sup>166</sup> Related to the research question: “How could an innovation in strategy by an art museum through a ground-breaking digital-business strategy be a source of competitive advantage, financial sustainability and socio-cultural development?”

<sup>167</sup> This case study can be used (Flyvbjerg, 2006) to better understand the connection between the digital strategy of a cultural organisation and its socio-cultural and economical success.

fit with overall corporate strategy by enhancing emergent strategies and alliances. These implications are even more significant considering that they are even valid with a ground-breaking digital business strategy, as the research has pointed out.

Considering that Cultural institutions such as museums, are possible pivots to develop *cultural innovation* (Coblence and Sebastier, 2015), capable to generate a fertile environment for creativity, future research directions would include verifying whether and understand how collaborations between (art) museums and creative industries could develop new Business Models, to boost their economical and socio-cultural sustainability as well as the sustainability of Cultural Heritage.

**DIFFERENT, RECURSIVE STAGES OF THE RESEARCH**

**PUBLIC CULTURAL ORGANIZATIONS  
LEVERAGING IN- AND OUT-BOUND FLOWS OF IC “FOR THE LARGER GOOD”:  
THE ECOSYSTEM’S RE-GENERATION \***

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## 1. Abstract and keywords

Coherently with the view that each individual organization needs to nurture the ecosystem in which it is nested, the research advocates that “organizations [no matter whether public or private, profit or non-profit] need to develop new understandings of how to create and exploit their nonfinancial resources”, also considering the commitment of a *regenerative impact* on the ecosystem’s various forms of capital –natural, social, human, cultural, economical and so on. Therefore, the research issue is investigating how organizations can improve their economic and socio-cultural performance, *having at the same time a regenerative impact on the ecosystem in which they are nested*. Organizations, through an open strategy that leverage outbound flows of IC resources, can enhance positive regenerative impacts on the ecosystem in which they are nested, driving social innovation. In such a kind of exchange process “IC expands its boundaries into the wider eco-system” mobilised by outbound flows that *structure* “shadow options” for the future.

Key words: Intellectual Capital (IC) Sustainable Development, multilevel-perspective, museums

## 2. Introduction

The research takes account of the context of sustainable development (henceforth SD), which at a macro-level (Ebner and Baumgartner, 2006) can be described as the purposive investment in meeting ‘the needs of the present without compromising the ability of future generations to meet their own needs’ (WCED, 1987: 8; the so called Brundtland report). And, stimulated by Edvinsson’s proposition, the research strives to increase IC consciousness, investigating “how intellectual resources can be ... *shared and utilised for the larger good*: ... on a societal level, using [open innovation strategy and] social networking to grow talent and improve the quality of life <sup>168</sup>; and on a global level, ... [to develop] new insights into values and relationships, with fusion of IC and *societal innovation* into evolving societal capital and national well-being” <sup>169</sup> (Edvinsson, 2013: 170-171; emphasis added), driving *deep-level positive social change* (henceforth PSC; Stephan, *et al.*, 2016).

The research shares the view that each individual organization (no matter whether public or private, profit or non-profit) needs to nurture the ecosystem in which it is nested (Allee, 2000; Porter and Kramer, 2006; 2011; Dumay, 2013) –a statement strictly underpinned by the complex adaptive system lens (henceforth CAS; Reeves *et al.*, 2016; Cohen, 1999; Dooley, 1996; Choi *et al.*, 2001;

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<sup>168</sup> The World Commission of Environment and Development (WCED) sees the ‘possibility for a new era of economic growth, one that must be based on policies that sustain and expand the environmental resource base. And we believe such growth to be absolutely essential’ (WCED; 1987: 1).

<sup>169</sup> The first level proposed by Edvinsson - the organizational level - to build trust and leverage collective capability to reach IC multipliers has been the focus of the first stage of the research (Cavriani, 2016).

Mirabeau and Maguire, 2014). Moreover, it certainly agrees that intellectual resources are drivers of organizational performance and value creation (Marr *et al.*, 2004; Allee, 2000; Teece, 2000; Nahapiet and Ghoshal, 1998), and thus fundamental for the long-term success of companies and many other kinds of organizations (Itami and Roehl, 1987; Dierickx and Cool, 1989), and also one of the most important factors for a region's socio-economical development (Bontis, 2004; Sánchez-Medina *et al.*, 2007; Borin and Donato, 2015). As a consequence, the research advocates that “organizations need to develop new understandings of how to [explore,] create and exploit their non-financial resources” (Wasiluk, 2013: 104; Mellahi *et al.*, 2015), taking into consideration the commitment of a *regenerative impact* on the ecosystem's various forms of capital – social, human, cultural, economical, natural and so on (Elkington, 2001:7). Hence, “organizations need to look beyond what their firms own or control” (Reeves *et al.*, 2016: 49) and *purposively open up processes*<sup>170</sup> *beyond the organization's boundaries, to leverage internal and external (IC) resources besides improving the organization's overall ecosystem*, in order to ensure its health. By implementing this strategic pathway organizations' “IC expands its boundaries into the wider ecosystem” and “other forms of value beyond just the monetary wealth” (Dumay, 2016: 169; Allee, 2000; Edvinsson, 2013) are taken into consideration as corporate pursuits.

According to Chesbrough and Appleyard (2007:58), for making strategic sense of innovation communities, networks and ecosystems, the approach of organizations towards strategy needs to be an ‘open strategy’, based on promoting porosity in organizational boundaries rather than on the importance of constructing barriers. Thus, this strategic approach could drive organizations to boost the SD that is regenerating their ecosystem as well<sup>171</sup>. Consistently, the theoretical lenses of open innovation and IC are utilised with the aim to increase IC consciousness<sup>172</sup> investigating how organizations' intellectual resources can be leveraged and shared “for the larger good”.

Being environments potential sources of knowledge for all organizations (Holmes and Smart, 2009: 396) ensuring their health is a win-win strategy that benefits both community and companies (Porter and Kramer, 2006, 2011); indeed, all of them have a self-interest in boosting its flourishing. The issue of “how organizations can improve their economic and socio-cultural performance, *having at the same time a regenerative impact on the ecosystem in which they are nested*” (the problem of the research; henceforth RP), is therefore of importance and embraces

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<sup>170</sup> Processes of resource development and management **but also** processes of value creation and apportionment.

<sup>171</sup> The Ebner and Baumgartner's (2006: 13 fig. 2) framework that describes the relationship between SD, corporate sustainability and CSR is visually useful to understand the eco-system's regenerative impact that organizations can drive through IC out-bound and in-bound flow strategies: the three economic, ecological and CSR/social rectangles that are depicted in the micro-level corporate sustainability frame, overflow into the wider ecosystem (the SD macro-level frame); that visualized the regenerative impact that organizations can drive to boost ecosystems' SD.

<sup>172</sup> The research attempts to go beyond IC reporting (Dumay, 2013; Edvinsson, 2013) and reflects upon IC not as mainly a measuring and/or accounting issue but “as a more and more strategic ecosystem for sustainable value creation”(Edvinsson, 2013: 163).

Edvinsson's (2013:169) encouragement to "keep looking for those invisible opportunity spaces, which [he] think[s] of as *capital in waiting*", "hidden values and future impact" (Edvinsson 2013: 166, emphasis added). Moreover, it is consistent with Dumay's (2013: 8) expectations for the fourth IC research-stage, that "concentrates on building strong economic, social and environmental eco-systems, where healthy organizations can flourish", whereas "the third stage of IC concentrates on building strong organizations".

### 3. Antecedents, theoretical underpinning and framework

This case-based research focuses on analysing the re-opening strategy of Amsterdam's Rijksmuseum – the most important Dutch public museum. Its renewed strategy is based on opening up processes of IC management and has been launched through an open source cultural project – the Rijksstudio –, strategically designed for disseminating and democratizing a few of the organization's intellectual resources with the aim to reach, engage and inspire the whole society (lead users as well as the community in general) besides the goal of developing economical performance. Definitely the open source model inspires ideas such as open innovation (OI) and requires a rethinking of the strategy perspectives (Chesbrough and Appleyard, 2007:58) since it shifts the focus from ownership to the concept of openness and, therefore, asks for a re-consideration of the processes - that underlie value creation and value capturing (Chesbrough and Appleyard, 2007:60) - connected to the comprehensive process of structuring, bundling and leveraging resources (Sirmon *et al.*, 2007).

Cultural (public) organizations –being characterized by complex commitments, difficult to drive simultaneously (Chong, 2010)<sup>173</sup>–, are extremely interesting organizations for investigating the SD strategies and in particular it can be of significance investigating their mechanisms of managing intellectual resources, as the Cultural sector is strictly based on IC. Indeed, all the IC components are key factors, or in other words, the main recourses of this sector (Chong, 2010; Donato, 2008; Calcagno, 2013; Calcagno, Cavriani, 2014; Borin and Donato, 2015). Moreover, even though the analysis concerns a public organization, considering the economical success of the organization connected with the implementation of its *IC open innovation strategy*, it can increase IC consciousness in how to manage IC resources for the SD for profit, private organizations as well.

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<sup>173</sup> As Chong (2010) remarks, public cultural organizations have complex commitments, meaning difficult to drive simultaneously — excellence and artistic integrity, audience development and accessibility, public accountability and cost effectiveness — , one of the most effective development paths by which it is possible to manage these organizations in a socio–economical–sustainable way is securing financial stability by 'revenue enhancement, which often means diversifying the revenue stream' (Chong, 2010: 21).

Sustainable development, corporate social responsibility<sup>174</sup> and, more in general, the way in which business relates to society are focal themes in today's management-research agenda (Frynas and Yamahaki, 2016; Mellahi *et al.*, 2015): organizations do not operate in a vacuum (Aragon-Correa and Sharman, 2003<sup>175</sup>; Donaldson, 2001) and therefore corporate activities affect society and vice versa external conditions also influence organizations. Porter and Kramer (2006) referred to the latter as the *outside-in linkages* and, indeed, ensuring the health of the competitive and social context is a win-win strategy that benefits both community and companies (Porter and Kramer, 2006, 2011).

The research, considering the SD an “holistic scenario of human development with a socio-cultural, ecological and economic dimension” (Wallner, 1999: 49), strives to frame the relation between business and society, – and therefore between organizations and the environment in which they are nested –, through a complex adaptive system lens (henceforth CAS; Reeves *et al.*, 2016; Cohen, 1999; Dooley, 1996; Choi *et al.*, 2001; Mirabeau and Maguire, 2014). Coherent with this perspective, regenerating the ecosystem in which the organization is nested is fundamental for integrating the short-term with the long-term aspects of driving sustainability (Dyllick and Hockerts, 2002; Leavy, 2012). Indeed, one of the crucial principles of the CAS perspective is that “local events and interactions among the ‘agents’... can cascade and reshape the entire system” (a property called emergence) and, consequently, “the system’s new structure then influences the individual agents, resulting in further changes to the overall system. Thus, the system continually evolves in hard-to-predict ways through a cycle of local interaction, emergence and feedback.” (Reeves *et al.*, 2016: 48; emphasis added). Considering organizations and their ecosystem as *nested systems* sheds light upon the fact that organizations (private and public, profit and non-profit) need to monitor and address complexity outside their own boundaries, not only in order to address strategy flexibility or to improve resource management and development and innovation processes, but also with the aim to create value – considered with an expanded “more organic, living systems view of the world of value” (Allee, 2000: 29; Dumay, 2016) –for the ecosystem in which they are nested.

Coherently, according to Dumay (2013: 8) SD is acquiring more and more attention in the fourth IC research-stage which “concentrates on building strong economic, social and environmental eco-systems, where healthy organizations can flourish”. Furthermore, according to Edvinsson it is desirable to increase IC consciousness by investigating “how intellectual resources

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<sup>174</sup> For understanding the concepts of SD, corporate sustainability and CSR and the relationship between them, embraced by the current study see Ebner and Baumgartner, 2006), and for an updated review and roadmap of theoretical perspective on CSR see Frynas and Yamahaki (2016).

<sup>175</sup> A contingency RBV perspective.



can be ... *shared and utilised for the larger good*" in order to understand how to expand IC boundaries into the wider eco-system (Dumay, 2016).

The research, therefore, aims to go along with the fourth IC research-stage (Dumay 2013:8), supporting the view that each individual organization needs to nurture the ecosystem in which it is nested (Allee, 2000; Dumay, 2013) and coherently with the CAS cycle of local interaction, emergence and feedback. Thus, 'organizations need to look beyond what their firms own or control' (Reeves *et al.*, 2016: 49) by purposively *opening up processes* –of resource management but also of value creation and apportionment–, *beyond the organization's boundaries*, to leverage organizational (internal) resources, besides improving the organization's overall competitive context (ensuring its health), structuring and bundling new intellectual resources into it.

According to Chesbrough and Appleyard (2007:58), for promoting porosity in organizational boundaries, in order to make strategic sense of innovation communities, networks and ecosystems, the approach to strategy needs to be 'open strategy'. This strategic approach could drive the SD of the organizations' ecosystem (Edvinsson, 2013), balancing the need to disseminate value in the ecosystem with the value creation pursuit of the organization (its competitive advantages) and their need to capture part of this value in order to bolster organizations' initiatives of outbound flows.

Therefore, OI strategy and IC lenses have been used to analyze the practice<sup>176</sup> of the organization *purposively opening up processes*, investigating how organizations' intellectual resources can be utilised and shared for the larger good.

In the special issue on Open Innovation West and co-authors (*et al.*, 2014:807) listed the "efforts to more closely integrate open innovation with established theories of management and economics" among the emerging themes for the coming decade of OI research.

We are in an era of high environmental uncertainty, where knowledge-based resources are more valuable because of their suitability for greater flexibility (Miller and Shamsie, 1996; Sirmon *et al.*, 2007)<sup>177</sup>, therefore, IC resources are not only key resources and drivers of organizational performance and value creation (Marr *et al.*, 2004; Nahapiet and Ghoshal, 1998)<sup>178</sup> and one of the most important factors for a region's socio-economical development (Bontis, 2004; Sánchez-Medina *et al.*, 2007; Borin and Donato, 2015), but, as the current research claims, if disseminated into the ecosystem by exchange processes (Nahapiet and Ghoshal, 1998) between individual organizations and their environment, they could also create an effective regenerative impact on this

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<sup>176</sup> Coherently with a call "for more studies of the application of IC in practice" (called *the practice turn*: Guthrie and Dumay, 2015: 260),

<sup>177</sup> "Uncertainty also creates ambiguity regarding the resources needed to develop and maintain competitive advantages. This ambiguity suggests that firms need a repertoire of resources; especially intangible resources are useful for potential strategy-flexibility, being, often, the most flexible" (Sirmon *et al.*, 2007:278).

<sup>178</sup> Important for the success of companies and many other kinds of organizations (Edvinsson and Malone, 1997; Sveiby, 1997; Marr and Schiuma 2001; Carlucci and Schiuma, 2006; Kujansivu and Lonqvist 2007; Donato, 2008; Vagnoni e Oppi, 2015; Cavicchi, 2017).

ecosystem, –because of their potential of being a flexible repertoire of resources and, thus, capable of providing a range of viable opportunities to alter existing capabilities or to create new ones to respond to environmental change. In such a kind of exchange process<sup>179</sup> “IC expands its boundaries into the wider eco-system” (Dumay, 2016:169) mobilised by outbound flows that *structure* “shadow options” for the future.

Open IC innovation can represent a strategy for the larger good, the ecosystem’s regeneration, besides the organization’s sustainability.

#### **4. Methodology, method and data collection**

The research has engaged in the exploration and analysis of strategizing practices (Mirabeau and Maguire, 2014), ‘understanding of “strategy in the making”, as a dynamic accomplishment rather than a static outcome’ (Feldman and Orlikowski, 2011: 1243), striving to understand the relational and enacted nature of strategizing (Whittington 2006). The research also embraces the principle of *relationality of mutual constitution* for which ‘no phenomenon can be taken to be independent of other phenomena’ and ‘the relations of mutual constitution do not imply equal relation’ (Feldman and Orlikowski, 2011: 1242), therefore, social reality is always ‘in the making’ (Gherardi, 2006) and consequentially characterized by lacking of prediction and control and thus its ‘order’ is emergent (Choi *et al.*, 2001; Ferraro *et al.*, 2015; Lewin, 1992).

‘To advance management theory, a growing number of scholars are engaging in field research, studying ... real organizations’ (Edmondson, McManus, 2007: 1155). Endeavoring to explore the nature of dynamic processes embedded in real organizational settings, the case-based research (Yin, 1994; 2014; Siggelkow, 2007; Eisenhardt and Graebner, 2007; Eisenhardt, 1989; Anteby *et al.*, 2014) applies a qualitative-interpretative approach (Myers, 2013; Ellis and Levy, 2008; Silverman, 2011). The research strove for harnessing the case–study also as explanatory, when attempting to understand how the observed open innovation strategizing of the focal public organization has led to SD.

Started in 2013 and using a recursive approach, the research is characterized by different, albeit connected, research phases and information and outcomes collected in the preceding stages have boosted and guided the development of the current theoretical framework of research. The collection of original data was conducted through research interviews (open-end and semi-

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<sup>179</sup> Exchange is a pre-requisite for combination processes that, in turn, is also a process for the development of IC (Nahapiet and Ghoshal, 1998).

structured in-depth<sup>180</sup>; Qu and Dumay, 2011; Kvale and Brinkmann, 2009), field observation (both through proactive and passive approaches) and desk research on quantitative-qualitative documents made available by the organizations and other sources. Aiming to address the RP, the current research-stage analysed the strategy-innovation of a public cultural organization in *leveraging* (mobilising and deploying; Sirmon *et al.*, 2007) its IC resources through an *open source cultural platform*<sup>181</sup>.

The research has analysed the intellectual resources management – connected to the comprehensive process of structuring, bundling and leveraging (Sirmon *et al.*, 2007) – that has driven the open IC innovation strategy, striving to understand the complex interdependent relation between the culture assets of the organization, the leveraging of the outbound flows of its structural assets and the structuring and bundling of new social capital and relational capital for the organization and new Intellectual resources for the ecosystem.

## **5. Descriptive case findings: leveraging IC by pioneering outbound flows of IC components as an exploration investment.**

Amsterdam's Rijksmuseum, the most important Dutch (public) cultural organization, has reopened in 2013 after ten years of restoring; this renovation project has been driven by the decision not to expand the brick-and-mortar<sup>182</sup> and by the pillar value that the "Museum's collection is everyone's heritage"<sup>183</sup>. Coherently with this main value and with the mission of the Museum – "At the Rijksmuseum, art and history take on new meaning for a broad-based, contemporary national and international audience" – the management board decided to expand the virtual walls of the Museum instead of the "concrete" ones, developing the idea to create a *virtual identity* of the cultural organization, the Rijksstudio: a strategic decision consistent with the emergent new technological<sup>184</sup>

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<sup>180</sup> The former to access the perspectives aiming to develop a proper theoretical framework, and the latter guided by identified themes and designed to acquiring more elaborated responses, ensuring that the same thematic approach is applied during each of the interviews (Qu, Dumay, 2011).

<sup>181</sup> A structural model of open source indicated by West and Gallagher (2006) as a *spinout* open innovation strategy, that is when the flows of content (in this specific case-study a high professional quality of images of the collection of the museum) pass from the focal organization to the user community, becoming a public good.

<sup>182</sup> W. Pijbes stated: "We didn't need to build an extension. Big is big enough. I'm a foodie, but I don't like too many courses. I want us to focus and only have the best of the best. I believe in the strength of simplicity". The restored Rijksmuseum has a new entrance, an outdoor exhibition space with free entrance, an Asian pavilion, shops, new restaurants, educational facilities and a renovated library.

<sup>183</sup> Taco Dibbits, the current general director, during an interview in 2015, defined the Rijksmuseum collection as a "national collective memory" which "belongs to everyone". During a speech on the third Rijksstudio Award ceremony on 21 April 2017 he confirmed this main value that is continuing to guide the strategizing: "This is your collection, this is everyone's collection ... just remind you that's why we gave up all the imagines for free in a highest resolution ... to inspire the whole world".

<sup>184</sup> "New technological scenario" refers both to the possibility of high-resolution images (thanks to new tools for high-quality digitalisation) and high-quality of the image available on PCs, smartphones and tablets (accessible through Computer Mediated Communication (CMC) tools) and to the new CMC technologies themselves.

and socio-cultural scenario<sup>185</sup>. Rijksstudio is a ground-breaking online open source presentation of 610,000 works of art from the Museum's collection. To celebrate this digital milestone, the Museum approached several leading international designers, architects and artists to become pioneers of Rijksstudio by selecting pieces from the online collection and using them creatively to produce new artworks or series of products. This project thus strengthened the idea that a process of innovation could be launched thanks to the proactive "use" of Cultural Heritage. The open source platform, in any case, is more than the re-functionalization of "centuries-old works reinterpreted in contemporary shapes, functions, techniques and materials" (Ramakers and Jaworska, 2014, p. 161).

The cultural organization, after developing this new structural capital (the digital database of the art collection, a component of the IC) by acquiring the technology to have the highest possible resolution<sup>186</sup> of the images, is pioneering a fully open source platform in which one of the main structural assets of the Museum is available copy-right-free to everybody, everywhere, whenever and for every use –the latter meaning usable even for professional and commercial applications<sup>187</sup>. In other words, the Museum is strategizing OI through a *spinout approach*: a structural model of open source indicated by West and Gallagher (2006), when the flows of content pass from the focal organization to the user community<sup>188</sup>.

The Museum is continuing to invest in structuring new IC focusing on the artworks' digitalization at the highest possible quality: the objective is to digitalize the whole art collection of the Museum in five years<sup>189</sup>. The investment in structuring this new database of digital images is based on the aim to spread the Museum's cultural heritage to the whole society, letting art and history adopt a new meaning for a broad-based, contemporary, national and international audience (paraphrasing the mission of the Rijksmuseum). The enhancement of contemporary language has the objective "to inspire the whole world" (T. Dibbits, public speech April 2017) "letting them [the community] be attracted by the beauty of the images" (T. Dibbits, interview in 2015). The Museum is "actively

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<sup>185</sup> The socio-cultural scenario refers to the new (digital) *virtual culture* typical of postmodernism (Mirzoeff, 1999) and also to the widespread open-design approach. The "*visual culture*" is qualified by this modern tendency to picture or visualize existence (Mirzoeff, 1999) that place an increasing premium on rendering experience in visual form; more precisely "it does not depend on pictures but on this modern tendency to picture or visualise existence" (Mirzoeff, 2012, p.6)

<sup>186</sup> The highest-resolution images using the available technologies (2500 x 2500 pixels, 300 dpi).

<sup>187</sup> Interestingly, "The mission of the Rijksstudio (connecting people, art and history) was clear from the beginning, but something in the strategy changed because environmental challenges were reconsidered ... deviating from the first concept. Therefore, the images have also been made available for commercial applications, whereas previously was supposed to be only available for private applications. The core motivation for this decision has been the forecast that otherwise the strategic potentiality of the Rijksstudio as a marketing tool of the museum would have been compromised, caused by a reduction in the positive impact of public engagement" (Cavriani, 2016) as well as less viralisation of the reputation of the Museum.

<sup>188</sup> The authors, identifying different structural approaches to OIS, 'refer to spinout all cases where firms transform internal development projects to externally visible open-source projects' (West and Gallagher 2006: 325) and where therefore the focal organization is essentially giving away its rights, whereas 'pooled R&D' concerns the flows that go from firm to firm and 'proprietary' are the ones that remain inside the focal form.

<sup>189</sup> Goal that the director T. Dibbits has confirmed during the third Rijksstudio Award ceremony on 21 April 2017.

encourag[ing the community] ... to be creative”... and “using the collection of the Rijksmuseum ... for every artistic [and also commercial] development”.

The open content strategy is looking for “earn[ing] attention by offering attractive content that is easy to share” (P. Gorgels, interview 2015) also for “trying to get them into the museum in the end, to experience the authenticity of the art” (T. Dibbits, interview 2015), but the first objective is ideological: being open to democratize the art and let the society be inspired in its creativity and in its values and beliefs. This spinout strategy is therefore structuring the possibility to expand the boundaries of the Museum’s IC into the wider ecosystem.

The Museum, – besides the economical sustainability, boosted by diversifying the revenue-strategies<sup>190</sup> through the development of audience and partnerships<sup>191</sup> and through the deployment of complementary services <sup>192</sup> –, has pioneered an OI strategy to support other goals (West and Gallagher, 2006) connected with the acceleration of the adoption of the platform, for example to support outbound flows of “*cultural outcomes*”<sup>193</sup> that are regenerating the ecosystem letting the society be inspired by art. Interestingly, increased exposure to the world of arts and culture translates into higher creative capabilities (Kloosterman, 2005; Fusco Girard *et al.*, 2012; Kourtit *et al.*, 2011; Camagni, 2012) and in doing so, it responds to the necessary requirements in a learning society, where the ability to manage new skills is strategic (Bradburne, 2004). Another regenerative impact of the open IC innovation strategy of the Museum regards the stimulation of talent in the whole community by engaging them in getting inspired by the art of the digital collection in order to develop new design products, a pathway also boosted by the project of the international Rijksstudio Award. By now at its third edition, it “invites members of the public to draw inspiration from the Rijksmuseum collection” and “create your own piece of art”<sup>194</sup>. At the third Award ceremony (2017) the general director Taco Dibbits stimulated the continuous engagement in the creative process informing that in the coming future the Museum will organize an exhibition of art and design pieces developed for the Rijksstudio Award.

The open source strategy is bolstering emergent patterns of accessibility to knowledge that create

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<sup>190</sup> As Chong (2010) remarks, public cultural organizations have complex commitments, meaning difficult to drive simultaneously and one of the most effective development paths by which it is possible to manage these organizations in a socio–economical–sustainable way is securing financial stability by ‘revenue enhancement, which often means diversifying the revenue stream’ (Chong, 2010: 21). Actually, two third of the economic resources are self-financing, one third from ticketing and one third from the development department, that is responsible for the strategic partnerships and other development activities e.g. complementary products/services of the organization (e.g. the new restaurant that has actually achieved one Michelin star).

<sup>191</sup> An important component of the IC, named by Allee (2000) business relations, and by Marr *et al.*, (2004) relationship assets.

<sup>192</sup> The acceleration of the adoption of the platform boosted by the organization through strategic partnerships (again leveraging the important IC component of relationships assets) with other social platforms like Etsy (Rijksstudio introduces its digital images to use for Etsy <https://www.etsy.com/it/pages/rijksstudio>), the world’s largest platform (has 40 million clients all-over the world) for handmade and vintage products) has developed the brand and reputation of the Museum fueling the adoption of related products and services.

<sup>193</sup> We refer to John Smyrk’s definition of “*outcome*” proposed in the ITO model (Smyrk, 1995).

<sup>194</sup> Quotations from the website of the Rijksmuseum.

productive opportunities for new IC development (Nahapiet and Ghoshal, 1998), for growing talent and improving the quality of life evolving the societal capital and national well-being, which is boosting deep-level PSC. The engagement to effectively connect the community (people), art and history (a fundamental component of the IC of the Museum that the spinout project has spread into the ecosystem) has reinforced the structuring of the positive Cultural Heritage Cycle (Thurley, 2005) “making the past part of our future” by creating a cycle of understanding, valuing, caring and enjoying” (Thurley, 2005: 26)<sup>195</sup>. This is visible for example in the growth of the economical support to the Museum from patrons and through sponsoring and in the perception of the cultural organization as a culture asset of the Dutch society<sup>196</sup>.

Amsterdam’s Rijksmuseum re-opening strategy innovation is based on leveraging its IC components by pioneering outbound flows of one of its main structural assets through an open-source platform – of the digital database of its art collection – to explore economical and socio-cultural spillovers. Strategizing this spinout model is opening up the processes to innovate and develop the IC of the organization and the IC of its ecosystem as well, leveraging its intellectual recourses for the larger good besides reaching IC multipliers for the organization (Cavriani, 2016).

## 6. Discussion and conclusion

Chesbrough (2003a) and van de Vrande and co-authors (*et al.*, 2009) underline that firms perform more inbound than outbound activities<sup>197</sup> and therefore fail to capture the potential benefits of OI strategy with a fairly large magnitude (Lichtenthaler, 2010 cited by Huizingh, 2011). And, when performing outbound activities, they mostly correspond to the exploitation of internal ideas, knowledge or IP (more in general internal assets), whereas inbound activities correspond to the exploration (experimentation) through the internal use of external knowledge (Lichtenthaler, 2010; Lichtenthaler and Lichtenthaler, 2009).<sup>198</sup>

The research reveals that leveraging outbound flows of intellectual resources can boost and drive economical and socio-cultural positive development of the individual organization and the ecosystem in which it is nested (at the societal or global level).

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<sup>195</sup> “By understanding the historic environment people value it; by valuing it, they will want to care for it; by caring for it they will help people enjoy it; by enjoying the historic environment comes a thirst to understand” (Thurley, 2005: 26), which provokes a thirst to support and take care of it.

<sup>196</sup> As Volkers (the director of the marketing department at the time of the re-opening) said, “Before the restoration, 70% of visitors were foreign tourists; after the reopening, 60% of the visitors are Dutch, and also the number of kids visiting is increasing more and more”.

<sup>197</sup> Despite Chesbrough’s and Crowther’s (2006) observation that every inbound effort by definition generates a reciprocal outbound effort, according to most of the OI literature (West and Bogers, 2014; West, Salter *et al.*, 2014; Cheng, Colin, Huizingh, 2010; Chiaroni, Chiesa Frattini, 2010; Huizingh 2011) firms perform more inbound activities and the inbound mode has been far more popular among researchers as well, as empirical studies have demonstrated.

<sup>198</sup> And others e.g. Martini *et al.*, 2017; van de Vrande *et al.*, 2009.

The Museum – as a consequence of its primigenial commitment<sup>199</sup> of democratizing and expanding its intellectual resources into the wider eco-system – has driven the open source strategy as an *exploratory investment* (Kogut and Kulatilaka, 2001; March, 1991) by out-bound flows of its IC components (in particular starting by its structural capital) with the strategic intention to explore for new opportunities (Janney and Dess, 2004) “investing in [intellectual (structural)] assets to respond to the future changes’ (Kogut and Kulatilaka, 2001: 748) and support other goals<sup>200</sup> (West and Gallagher, 2006), likewise spreading the intellectual resources into the wider ecosystem and making –internal and external– cultural and social capital grow. The organization, to enhance shadow opportunities, is looking for positive spillovers of the open source project, being ready to bolster them through emergent strategies (Cavriani, 2016).

The corporate culture (the organization’s values and beliefs), which is an element of the cultural assets that Marr and co-authors (*et al.*, 2004) advocate as an important component of IC, is the main antecedent of the implementation of the OI strategy (Frankenberger, *et al.*, 2014) as an exploratory investment. It has boosted (and is still bolstering) the strategic open source investment and its aimed PSC development<sup>201</sup>: the Museum is looking “to inspire the whole world. ... popularise the collection”<sup>202</sup> through the use of the open source platform in order to drive designing projects innovation and connecting art, history and people. The mechanism that has boosted the synergic cycle of new IC development at organizational level is the complex and dialectical process (Nahapiet and Ghoshal, 1998) in which social capital is created and sustained through exchanges, and therefore by the relational capital, and, in turn, social capital facilitates exchange, the pre-requisite for structuring and bundling resources and letting the outbound flows investment explore new development opportunities beyond the organization boundaries.

As revealed in the first stage of the study (Cavriani, 2016), which was more focused on the first level of analysis proposed by Edvinsson, despite the ground-breaking e-strategy<sup>203</sup> if the cultural organization had not boosted synergies through the development of relationship assets (Marr *et al.*, 2004) and, more in general, its social capital (as defined by Nahapiet and Ghoshal, 1998), boosting

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<sup>199</sup> Being a public organization the commitment of boosting public value (Moore, 1995) is deeply part of its primary pursuit.

<sup>200</sup> E.g. the engagement of the community and supporters, that the organization identify as the connecting goal.

<sup>201</sup> The current director of the Museum Taco Dibbits – one of the main decision-makers of the re-opening strategy innovation – during an informal interview (April 2017) has answered to a direct and dry question “what is in brief your strategy?”: “I have no strategy, just ideology! My driver is ideology! ”. It is of importance to consider that the dialog was in Italian language (not his mother language but fluently spoken by him) and the meaning he has given to the concept of “ideology” was totally driven by the content of values and belief (that, interestingly, are shared by all the other managers as emerge from the interviews and that boost a high motivation inside the human capital): the democratic value of the Museum’s collection and of the Art have inspired his decision-making mind-set since the beginning of the re-opening strategy innovation and it has been driven by the fact that “the collection is of everyone”. On the other hands the director, the board members and the main managers have the consciousness that “you need money to boost this democratic value” (Hendrikje Crebolder, the director of the development department – who managed also all the relational-social capital, all the partnership development of the organization) that since march 2017 is entered in the Museum’s board of directors.

<sup>202</sup> From a speech of the director Taco Dibbits on the third Rijksstudio Award ceremony on 21 April 2017.

<sup>203</sup> That is in itself a high-value output (Smyrk, 1995) because of its contribution to the democratization of the Museum’s cultural capital.

productive opportunities to exchange and bolster effective partnerships, the effectiveness of the OI strategy to pursue SD would have been less significant, despite its game-changing copyright-free, open-digital-collection strategy.

The current stage confirms that these findings are compelling also on a societal and global level which discloses that for an effective SD, considered as Edvinsson proposed (for the larger good), open IC innovation strategy is a bolster of emergent patterns of accessibility to knowledge that create productive opportunities for new IC development, for growing talent and improving the quality of life and for evolving societal capital and national well-being, that is boosting deep-level PSC.

Analysing the societal, ecosystem level, and the regenerative impact reachable through an organization's open IC innovation strategies, it is fundamental that the outbound flows are of intangible resources. We are 'permanently' experiencing an era of high environmental uncertainty that "creates ambiguity regarding the resources needed to develop and maintain competitive advantages. This ambiguity suggests that firms [– as well as the ecosystem in which they are nested in order to be a flourishing one –] need a repertoire of resources, [and] *especially intangible resources, because they are often the most flexible*" and, therefore, useful for potential strategy-flexibility" (Sirmon *et al.*, 2007: 278, emphasis added; Miller and Shamsie, 1996). In other words, knowledge-based resources are considerable as particularly valuable because of their suitability for greater flexibility (Miller and Shamsie, 1996; Sirmon *et al.*, 2007).

The strategy of the museum shifted the approach of managing its inimitable IC resource from its control to its outbound leveraging, enhancing and cultivating all the relational nano-roots (Edvinsson, 2013) that came as spillovers capable to drive its socio-economic performance. It is worth noting that the Dutch Museum, –besides increasing its profit performs<sup>204</sup>, enhancing and renewing its IC resources (developing reputation, legitimacy<sup>205</sup> and social-relational capital) and seeking win-win outcomes through synergistic value creation<sup>206</sup> (Cavriani, 2016)–, results to have a *regenerative impact* (Elkington, 2001) on its ecosystem. Therefore, in- and out-bound flows of the cultural organization have been driven not only in order to improve resource management and innovation processes or to address strategy flexibility and boosting economical performances, but *also with the aim to create value* (viewed in an expanded, "more organic, living systems view"; Allee, 2000: 29; Dumay, 2016)<sup>207</sup> for the ecosystem in which the Museum is nested.

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<sup>204</sup> A misuse of its business-activities effectiveness; its performing in risk-premium and its capacity to ensure future supply of capital (Druker, 2006).

<sup>205</sup> That is approaching the typical complex commitments of the (public) cultural organizations stressed by Chong, 2010.

<sup>206</sup> Following the different types of business cases for corporate social responsibility suggested by Kurucz *et al.*, (2008).

<sup>207</sup> That is expanding its potential domain (Allee, 2000) and considering that "is much more than money", integrating a monetary, utility, social and sustainable perspective of the concept (Dumay, 2016: 169).



In synthesis, *open IC innovation can represent a strategy for the larger good, the ecosystem's regeneration, besides the organization's sustainability*. Organizations, through an open strategy that leverage outbound flows of IC resources, can enhance positive regenerative impacts on the ecosystem in which they are nested, driving social innovation. Leveraging outbound flows of IC resources boosts and drives processes of exchange and combination of IC components that sustain the economical and socio-cultural development of the individual organization too. Outbound flows can also be approached as exploration processes, being an *exploratory investment* (Kogut and Kulatilaka, 2001; March, 1991) to support other goals (West and Gallagher, 2006) and explore for new opportunities<sup>208</sup>.

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<sup>208</sup> According to Lichtenthaler, (2010), Lichtenthaler and Lichtenthaler (2009) and others (e.g. Martini *et al.*, 2017 and van de Vrande *et al.*, 2009) outbound activities correspond to the exploitation of internal ideas, knowledge or IP (more in general internal assets) whereas inbound activities correspond to the exploration (experimentation) of external knowledge that can subsequently be used internally.

**DIFFERENT, RECURSIVE STAGES OF THE RESEARCH**

**OPEN INNOVATION IN A PUBLIC (CULTURAL) ORGANIZATION:  
TOWARDS A SUSTAINABLE DEVELOPMENT ETHOS \***

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\* Discussed at the World Open Innovation Conference (WOIC) 2019.

## 1. Abstract and keywords

The research strives to gain more insight into the potential benefits and challenges of OI-strategy linked to Sustainable Development (SD), interpreted at a macro-level, with an *external orientation of the sustainability* commitment, and as a ‘responsibility’ that each individual organization has of nurturing the ecosystem in which it is nested, for safeguarding the commons for future generations. A successfully implemented OI-strategy in a leading public museum –the Rijksmuseum of Amsterdam– is explored, developing an Explorative Conceptual Framework that places emphasis on the major dissimilarities with the prevailing OI paradigm. Thought-provoking issues emerged: the necessity (1) to *recalibrate the main strategic focus of focal organizations*, by *recalibrating the main profit-maximizing ethos*, considering sustainability not merely as a “by-product” of the OI-strategy, and by *decentralising the firm as the locus of strategic commitments* and (2) to go beyond the *un-exploration of outbound* practices, approached merely with an exploitative attitude. An “*open bifocal innovation*” concept to link OI to SD is introduced, to be explored more deeply. A practical implication for managing OI-strategies driven by SD is the need to explore new paths to capture the opportunities of economic value not “simply” elsewhere in the value chain, but by radically innovating the value chain –converting the relinquishment of control on critical assets into bifocal innovation paths. To succeed in this, explorative outbound practises are fundamental. Limitations could be connected with the explorative single-case-study research-approach.

Key words: OI in Public Organizations; Sustainable Development; Social Innovation, Bifocal Innovation; Museums.

## 2. Introduction: OI and open issues

Over the last 15 years the Open Innovation (OI) debate has strongly intensified, gaining widespread attention since Chesbrough’s 2003 homonym book. And although OI practices are of all times (Huizingh, 2011), proposing the concept of *purposively opening up the innovation process* as the *file rouge* of these activities has helped to draw attention of both academics and practitioners, enabling “to rethink the design of innovation strategies in a networked world” (Huizingh, 2011: 2), and to extend the OI construct by generating an integrated and transversal field of research (Huizingh, 2011; West, *et al.*, 2014)<sup>209</sup>. As a consequence, the OI literature has mightily grown, covering many topics (Gambardella and Panico, 2014), but there are still some outstanding issues that are yet to be addressed. In suggesting opportunities for future research different authors claim that few researches

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<sup>209</sup> The widespread concept and scope of OI is an opportunity but could also cause conceptual ambiguities; for a review on them see Dahlander and Gann, 2010 and Listone, 2010.

have considered the implementation of the paradigm by new types of organizations, and in particular by non-profit/public ones (West and Bogers 2017; West *et al.*, 2014; Chesbrough *et al.*, 2014), stressing that only recently research on OI-strategies implemented by government agencies and not-for-profit organizations (Holmes and Smart, 2009) started “despite the *profit-maximizing ethos* of Chesbrough” (West and Bogers, 2017: 44). Moreover, research regarding how OI could be linked with other domains such as *sustainability* is considered still relevant (WOIC 2018; 2019; Arcese *et al.*, 2015).

Striving to deal with the aforementioned two gaps and to gain more insight into the potential benefits and challenges of OI-strategy, this explorative case-based research analyses an OI-strategy of a public cultural organization, the Rijksmuseum of Amsterdam.<sup>210</sup> It is considered a leading European museum and an open-digital-strategy best-practise, because of its ground-breaking *open-source digital-project*<sup>211</sup> –the OI practice *par excellence* (Chesbrough and Appleyard, 2007: 60; West and Gallagher, 2006)–<sup>212</sup> and because of the economic and socio-cultural spillovers of its OI-strategy, generated at the focal-organization level (Cavriani, 2016) and at the level of the surrounding *society and the wider community*<sup>213</sup>.

The aim of this research-phase is firstly to propose an explorative conceptual framework which compares antecedents, content, benefits and dynamics of OI-strategy in firms (the main OI-paradigm presented in literature) with the OI-strategy implemented by the case-study public-organization. Secondly, the research aims to enhance the emerged dissimilarities to provide thought-provoking issues about how it is possible to capture potential benefits of OI-strategy *of a fairly large magnitude*,<sup>214</sup> construed by the research as the Sustainability issue, interpreted as the Sustainable Development meta-commitment (SD; Ebner and Baumgartner, 2006, Baumgartner and Ebner 2010). By doing so, the research aspires to gain more insight and contribute to the debate about how to link OI-strategy with *sustainability*, in order to enhance strategies for safeguarding the commons for future

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<sup>210</sup> There are different rijksmuseums in the Netherlands (in fact “rijks” means imperial, of the kingdom), but hereafter ‘Rijksmuseum’ or Museum will be used as synonymous of ‘the Rijksmuseum of Amsterdam’, which also reflects the meaning of ‘the Rijksmuseum’ in the Netherlands, which has also its own brand “Rijksmuseum”, restyled in occasion of its reopening in 2013.

<sup>211</sup> See the following table 3. at the end of the paragraph (p. 109)enot which recaps the different phases of the Rijksmuseum’s dynamics of openness, explaining and enhancing Huizingh’s (2011) process/outcome matrix).

<sup>212</sup> Open-sources are viewed as role-models for OI (Mueller-Seitz and Reger, 2009: 372; Chesbrough 2003, Gassmann, 2006; West and Gallagher, 2006). Interestingly, analysis of open-source cases on different fields than the hi-tech or implemented by public organizations are not yet available in literature

<sup>213</sup> The society and the wider community are viewed by the research “as an *elastic stakeholder category*, which is gaining greater significance” (Chong, 2010: 23; italic added) considering the growing importance of the sustainability commitment and, moreover, consistent with the type of the investigated organization –a public one– which leads to a strong commitment and a more challenging mandate (Chong, 2010) of performing a role in society by producing *value* for the community with the resources entrusted thereto (Moore, 1995:12).

<sup>214</sup> According to Huizingh (2011; but also, Scuotto, *et al.*, 2017: 135; Bianchi *et al.*, 2011 Chesbrough and Crowther, 2006) empirical studies showed that firms perform more inbound than outbound activities thus they “fail to capture potential benefits ... of a fairly large magnitude” (Huizingh, 2011: 3).

generations (WCED, 1987).<sup>215</sup> The research aims to propose thought-provoking issues to critically re-examine existing business and management OI-practices in order to propose “responsible” (Visser, 2011) *logics of action* able to conceive strategies driven by the SD commitment –looking for a *regenerative impact on the various forms of capital* (Elkington, 2001; 2002)<sup>216</sup> *of the organizations’ ecosystems*, to achieve *positive social impacts* (Stephan *et al.*, 2016) besides business development.

### 3. Theoretical background: OI and open issues

Although there can be various motivations for a limited use of OI practices,<sup>217</sup> in less munificent, complex, hypercompetitive and increasingly uncertain environments “it is difficult for one single firm to possess all resources [and capabilities] needed to develop and sustain current competitive advantages while trying simultaneously to build new ones” (Harrison *et al.*, 2001: 680). Given that organizations cannot conduct all activities by themselves to maintain their existence (Sirmon *et al.*, 2007: 280) they “need to look beyond what their firms own or control, monitoring and addressing complexity outside their firms” (Reeves *et al.*, 2016: 49) to accumulate and integrate the missing resources and capabilities (Frankenberger *et al.*, 2014) with the purpose of improving innovation, competitiveness and strategy flexibility (Brown and Eisenhardt, 1998; Shimizu and Hitt, 2004; Sirmon *et al.*, 2007). Moreover, for “making strategic sense of innovation communities, networks and ecosystems, the approach of organizations towards strategy needs to be an ‘open strategy’, based on promoting porosity in organizational boundaries rather than on the importance of constructing barriers” (Chesbrough and Appleyard; 2007:58). Thus, OI-practices represent a possible effective path of development in complex, hypercompetitive and less munificent environments for any type of organization –private, profit and public, non-profit.

The OI paradigm (Dahlander and Gann, 2010; Huizingh, 2011; West and Bogers, 2014; Antons *et al.*, 2016; Randhawa *et al.*, 2016; West and Bogers, 2017; Chesbrough, 2003a,b,c; 2006a,b) describes practices which have roots far back in history (Huizingh, 2011) before Chesbrough proposed this umbrella concept which, not surprisingly, is rich of different definitions, depending on the research focus (Huizingh, 2011; Dahlander and Gann, 2010). Chesbrough and Bogers, proposing “new frontiers in Open Innovation”, refined the concept of OI as “a *distributed innovation process* based

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<sup>215</sup> As requested by the World Commission on Environment and Development (WCED; 1987, the Brundtland Report; Dyllick and Hockerts, 2002).

<sup>216</sup> Which are: social, human, cultural, economical, natural and so on (Elkington, 2001: 7). By implementing this strategic pathway organizations expand their boundaries into the wider eco-system taking into considerations the SD pursuit.

<sup>217</sup> Huizingh (2011) stresses that some colleagues (e.g. Lichtenthaler and Ernst, 2009; De Wit *et al.*, 2007) found a limited use of OI practices because “globalization has led ... to focus on short term results”, cutting costs for long-term innovation research and for transaction-cost in using external knowledge (Huizingh, 2011: 4). Moreover, especially companies of smaller size or non-profit organizations have also fewer resources to build and maintain *relational capital* for harnessing collaborative networks (Huizingh, 2011).

on *purposively* managed flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms *in line with the organization's business model.*"<sup>218</sup> (Chesbrough and Bogers, 2014: 17 and 27; italic added). In any case, OI has its basic premise in purposively opening-up innovation processes to boost their effectiveness (Huizingh, 2011) in maximizing the focal firms' profits, therefore *it has a firm-centered profit-maximizing ethos* (West and Bogers, 2017). In fact, as emphasized by different authors (West and Bogers, 2014: 44; West *et al.*, 2014), Chesbrough developed the OI perspective heavily influenced by the "profiting from innovation framework of Teece" (1986) and coherently with the foremost *logic of action* of innovation management's primary pursuit, which historically has mostly been to develop companies' competitive advantages and connected profits.<sup>219</sup> Also Gassmann and Enkel (2004: 14) aver that OI "can be summarized as an approach that enriches companies' innovativeness ...to gain them competitive advantage".

In the light of spending reviews and economic tensions, particularly acute since the 2008 crisis which has increased the quest for public organizations' economic sustainability (Talbot, 2011), the research agrees with West and Bogers (2017: 44) that the business model premise that underlies the definition of OI could be extended to public, non-profit organizations "because of their need to create and capture value to maintain their existence". However public organizations also have their specific, main goal of performing a role in society by *disseminating*<sup>220</sup> public value into the wider community in which they are nested (Moore, 1995). This specific goal of public organizations does not appear to fit with an OI-strategy pronely implemented to perform firms' profit-maximization and consequently the question is whether it could be consistent with the goal of SD.

To approach this inquiry, it is useful to explain *the Sustainability-issue*<sup>221</sup> embraced by the research. After arguing about the complex scenarios which challenge organizations, the research analysed this challenge through the Complex Adaptive Systems (CASs) perspective (Reeves *et al.*,

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<sup>218</sup> "In this definition, *innovation* refers to the development and commercialization of new or improved products, processes, or services, while the *openness* aspect is represented by the knowledge flows across the permeable organizational boundary" (Chesbrough and Bogers, 2014: 17, 27; italic added).

<sup>219</sup> And in fact, the innovation management literature has mostly focused on understanding how to translate innovation into commercial applications, thus into an "appropriable rent for innovators in so far as imitation is deferred" (van der Have, Rubalcaba, 2016: 1931; Dawson and Daniel, 2010; Schumpeter, 1949).

<sup>220</sup> Disseminating in the meaning of apportioning public value out among the wider ecosystem in which they are nested.

<sup>221</sup> In the last years the sustainability debate has strongly intensified, and its terminology has broadened enormously (Ebner and Baumgartner, 2006; Baumgartner, Ebner 2010). *Sustainability* is the key concept to every corporate social responsibility (CSR), corporate responsibility (CR) and Sustainable Development (SD) frameworks. The framework of CSR has been defined in the 1950's as "...an obligation to pursue policies to make decisions and to follow lines of action which are compatible with the objectives and values of society" (Douglas *et al.*, 2004). Social responsibility assumes that firms' "economic and legal duties should be extended by certain responsibilities to society" (McGuire, 1963 cited by Ebner and Baumgartner, 2006: 2). The World Business Council for Sustainable Development (WBCSD) actively took part in the discussion, defining the CSR as a business' commitment to contribute to sustainable economic development by integrating social and environmental concerns into their business on a voluntary basis (Ebner and Baumgartner, 2006). The SD is an "holistic scenario of human development with a socio-cultural, ecological and economic dimension" (Wallner, 1999: 49) which strives to frame the relation between business and society, thus between organizations and the environment in which they are nested. It boosts the statement that regenerating the ecosystem is fundamental for integrating the short-term with the long-term aspects of driving sustainability (Dyllick and Hockerts, 2002).

2016<sup>222</sup>) according to which “local events and interactions among the “agents”... can cascade and reshape the entire system” and “the system’s new structure then influences the individual agents, resulting in further changes to the overall system ... [which] continually evolves in hard-to-predict ways through a cycle of local interactions, emergence and feedback.”(Reeves *et al.*, 2016: 48). Essentially, the CASs perspective provides a suitable theoretical scaffolding for analysing complex contexts, pointing out that each organization is a CAS in itself and is nested in a business and socio-cultural ecosystem, which is likewise nested in the broad societal and economic environment; it points out that each individual organization and the society are nested systems in which complexity exists at different, multiple levels –within and without the organizational boundaries–, and it also highlights that “at each level there is a tension between what is good for the individual agent and what is good for the larger system” (Reeves *et al.*, 2016: 49).

The CASs perspective brought out, that to manage complexity *in a sustainable way*<sup>223</sup> it becomes essential considering organizations, business and societal environment as *nested systems* in a complex world. And it also becomes essential to understand that, because of this interdependency, each individual agent of the system (in the current research ideally each organization; Allee, 2000;) is engaged in complex commitments characterized by the “*primary tension* between what is good for the individual organization and what is good for the community. The CASs’ *emergence property* suggests, fundamentally, that organizations need to look beyond what they own or control –monitoring and addressing complexity outside them– *not merely* to sustain their strategy flexibility and the innovation processes for enhancing their competitiveness over time, *but also for “ensur[ing ... to] contribute positively to the [broader] system* while receiving benefits sufficient to justify participation” (Reeves *et al.*, 2016: 49; italic added).<sup>224</sup> In other words, *organizations need to purposively open-up processes beyond their boundaries* (as the OI suggests), not merely to leverage internal and external resources for their individual success, but also to spur the growth of their ecosystem boosting its overall health as an “*emergent opportunity*”<sup>225</sup> to leverage individual organization’s resources benefiting society too (Porter &

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<sup>222</sup> As well as Cohen, 1999; Dooley, 1996; Choi, *et al.*, 2001; Mirabeau and Maguire, 2014.

<sup>223</sup> Firms are more and more asked to be sustainable enterprises –delivering simultaneously economic, social and environmental benefits (Hart and Milstein, 2003; Porter and Kramer, 2006, 2011; Leavy, 2012; Kennedy, Whiteman, van den Ende, 2016). In this statement “sustainable way” means pursuing approaches to strategy that emphasize the long-term robustness.

<sup>224</sup> Coherently with the CASs lens and its *cycle of local interactions, emergence and feedback*, Porter and Kramer (2006) referring to ‘*outside-in linkages*’, emphasized that corporate activity affects society and vice versa, external conditions also influence corporations, thus ensuring the health of the competitive context benefits both companies and community. The authors named this “meaningful benefit for society that is also valuable to the business” Shared Value (Porter and Kramer, 2006: 84). In full accordance, also the World Commission of Environment and Development (WCED) saw the “possibility for a new era of economic growth, one that must be based on policies that sustain and expand the environmental resource base. ... believe[ing] such growth to be absolutely essential” (WCED; 1987: 1)

<sup>225</sup> The adjective “emergent” refers to the *emergent outcomes* brought out by Reeves and colleagues (Reeves *et al.*, 2016: 48), which result from “local actions and interactions of the CASs.

Kramer, 2006).<sup>226</sup> In doing such, organizations will *boost* positive synergies in the CASs' cycle of local interactions, emergence and feedback –contributing positively to the system by creating and disseminating what Moore identifies as Public Value (1995), what Porter and Kramer (2006, 2011) identify as Shared Value, what Edvinsson (2013) suggests as *capital in waiting*<sup>227</sup>, and what the current research identifies as the SD.

Ensuring the health of the wider system is a win-win strategy which benefits the community, companies and all organizations in general, given that environments are potential sources of knowledge for all organizations (Holmes and Smart, 2009: 396) and thus, coherently, all of them have a self-interest in boosting its flourishing (Porter and Kramer, 2006, 2011). Spillovers could be firm-centered or extra organizational-centered. They could consist: in an empowerment dimension like an increasing capability and access to resources<sup>228</sup> (Mouleart *et al.*, 2005); in *spillovers of knowledge dissemination*;<sup>229</sup> in new social practices or policies development<sup>230</sup> which promote changes in the societal organization of people (which can also have economic ends; van der Have and Rubalcaba, 2016); or in the development and implementation of “new ideas ...[products and services] to meet social needs and create new social relationships or collaborations” (European commission, 2013: 6; defining social innovation). In any case, as Reeves and co-authors (Reeves *et al.*, 2016: 49) contend, companies which fail in creating value for the broader system's key stakeholders “will eventually be marginalized”.

Coherent with this perspective, the research approaches the sustainability issue agreeing with Payne and Raiborn (2001: 159) that “neither businesses nor the societies in which they exist will have a long-term future without pursuing the Sustainable Development”. The research has a macro-level perspective of sustainability, interpreting it with the SD<sup>231</sup> framework of Ebner and Baumgartner (2006) which has an *external orientation of the sustainability* commitment (Baumgartner and Ebner; 2010). Because of its specific setting (culture and creative industries) the

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<sup>226</sup> In fact, as Holmes and Smart (2009: 396) highlight, the economic, social and cultural environment is a potential source of knowledge and tangible resources for all organizations, thus ensuring its overall health is a win-win strategy that benefits both the community and the companies.

<sup>227</sup> “Invisible opportunity spaces, ... hidden values and future impact” (Edvinsson, 2013:169,166) which can be boost “*sharing and utilizing intellectual resources ... for the larger good ... on a global level ... [to develop] new insights into values and relationships, with fusion of IC and societal innovation into evolving societal capital and national well-being*” (Edvinsson, 2013: 170-171; emphasis added).

<sup>228</sup> But of course, differently from the OI framework, this is an outcome not merely for the focal organization (or the network of organizations) but for the community and environment in general.

<sup>229</sup> What the museum is doing through its public innovation, open-source practices and with the Rijksstudio Award, and with other partnerships e.g. with Droog and Swatch, KPN, Heineken and Albert-Heijn.

<sup>230</sup> For example, the Rijksmuseum has boosted a new regulation that the Dutch government promulgated, which lets the young generation up until the age of 18 enter for-free into public Dutch museums.

<sup>231</sup> The embraced SD framework is coherent with the Brundtland report (1987) and strives to frame the relation between business and society (thus between organizations and the socio-cultural and business environment in which they are nested). This framework describes the relationship between SD and CSR; the economic, ecological and social rectangles that are depicted in the micro-level as a CR/CSR frame, overflow into the wider ecosystem (macro-level frame of sustainability) by a regenerative impact that organizations should drive to boost ecosystems' SD



research interprets the sustainability issue according to its economic and socio-cultural strand, disregarding the ecological dimension of the environment.<sup>232</sup> Thus, it considers sustainability as the commitment to the socio-cultural dimension beside the economic one, as the ‘responsibility’ that each individual organization has of nurturing the ecosystem in which it’s nested (Allee, 2000; Porter and Kramer, 2006; 2011), looking to have a regenerative impact on its various forms of capital. And, hardly trivial, it puts forward the socio-cultural sustainability as a main strategic goal and not only as a by-product of the strategy.

Interestingly, right from the early stage of the case-study data-collection –during the inquiry into the antecedents and logics of action of the public museum’s innovation of the strategy– it became self-evident that the *initial motivations* to adopt OI (the *drivers behind the decisions of openness*) were different from the main *firm-centered profit-maximizing logic* and also from the typical *defensive* or *offensive* motives to openness (Huizingh, 2011). The critical in-depth qualitative analysis of the case-study suggests an upside-down set of beliefs and logics of action adopted to “make strategic sense of innovation communities, ecosystems, networks and [in particular of] their implications [which the public organization –differently from firms– took into consideration not merely] for the competitive advantage” development (Chesbrough and Appleyard, 2007: 58; 2017: 31). The case-data collected and interpreted, by contrasting the OI-strategy’s antecedents with its outcomes, reveal that the main OI-commitment and its conceptualisation were not *firm-centered*, but *extra-organization-centered* –finalized to create outcomes also for the society and the wider community, viewed together as an elastic and most strategic *stakeholder category* behind the decision of openness. This external issue of apportioning public value out among the wider system in which the organization is nested, appeared to be connected with an externally oriented sustainability –and not merely with the main internal economic sustainability, which, instead, investigates typically the dynamics and challenges of the sustainability of OI approaches “examin[ing] the ability of organizations *to sustain themselves economically* with an open approach to innovation” (Chesbrough and Appleyard; 2007)” (Appleyard and Chesbrough, 2017: 310, italic added). In particular, the museum’s OI-strategy appeared to be driven by a multilevel-construct of commitments and effectiveness.

The dissimilarities in the content of the OI-drivers, in the main ethos on which to base the definition, implementation and management of OI-strategy, and in the construct of its effectiveness, have elicited the opportunity of developing a specific exploratory conceptual framework of the case-study OI-strategy formulation and implementation.

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<sup>232</sup> Interestingly, Ebner and Baumgartner (2006) stress that the social dimension of SD is still the weakest pillar, neglected in discussions in comparison to the other two aspects.

#### 4. Methodology, method, data collection and research-setting

The research embraces the principle of *relationality of mutual constitution* for which ‘no phenomenon can be taken to be independent of other phenomena’ (Feldman and Orlikowski, 2011: 1242), therefore social reality is always “in the making”. “To advance management theory, a growing number of scholars are engaging in field research, studying ... real organizations” (Edmondson and McManus, 2007: 1155). Endeavoring to explore the nature of dynamic processes embedded in real organizational settings, the *explorative* case-based research (Yin, 1994; 2014; Siggelkow, 2007; Eisenhardt, 1989; Anteby *et al.*, 2014) applies a *qualitative-interpretative approach* (Myers, 2013; Ellis and Levy, 2008; Silverman, 2011) highlighted by the main OI authors as the “best suited [method] to revealing the complexities that underpin the adoption of OI” (Chesbrough *et al.*, 2014). Even according to Huizingh (2011) OI implementation-research is particularly suited for pursuing the “how” question (Yin, 1994), bringing together the contextual and process knowledge in evaluating OI implementation (Chesbrough *et al.*, 2014).

Although aware of the single case-study generalization limits, the research agrees with Siggelkow that “a single case can be a very powerful example” (Siggelkow, 2007: 20) when it can be considered as an idiomatic case<sup>233</sup>, thus the research strove for harnessing the case-study also as explanatory, when attempting to understand how the observed OI-strategizing of the focal public organization led to SD. Moreover, the research methodology considers concrete, context-dependent knowledge valuable, because of the nature of human activity which is situated in local context (Flyvbjerg, 2006).

The setting of the research is the leading Dutch museum the Rijksmuseum of Amsterdam, succeeding in its innovation of the strategy by enhancing the openness to disseminate value into the society and the wider community, disclosing its Cultural Content publicly and cross-fertilizing its tangible and intangible resources with other actors (profit and public organizations). And at the same time by enhancing the openness to grow its competitiveness, reaching the goal of increasing its revenue, thus its economic sustainability, as table 1 summarizes.

The research started in 2013, when the Rijksmuseum of Amsterdam reopened (after ten years of refurbishment)<sup>234</sup> and, through different but interdependent recursive phases, investigated its innovation of the strategy –which has become an OI-strategy– researching on the open-source OI-project Rijksstudio as the cornerstone “to open every possible process of the organization” (Cavriani and Calcagno, 2019; van Ginkel, CFO 2018<sup>235</sup>).

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<sup>233</sup> As Siggelkow (2007: 20) claims “a single case can be a very powerful example”, just it is necessary to “make sure ...[to] have a talking pig”. The research considers the case-study also as a critical one (Flyvbjerg, 2006) compared with the prevailing OI implementation, thus useful for contributing to the creation of a contrasting conceptual framework.

<sup>234</sup> It also coincides with the implementation of the renovated strategy.

<sup>235</sup> Data collected during the event launching “Swatch X Rijksmuseum” collection of watches in 2018 at the Rijksmuseum.

Development key economic figures Rijksmuseum							
	2000	2012	2014	2015	2016	2017	2018
Total number of visitors	1.14M	0.89M	2.47M	2.35M	2.26M	2.15M	2.34M
% Dutch visitors	51%	35%	56%	53%	47%	37%	37%
Total revenue	€ 62.76M	€ 84.26M	€ 85M	€ 119.6M	€ 89.8M	€ 82.1M	€ 89.2M
% own revenue	46%	44%	59%	70%	62%	62%	64%
Operational result museum activity ("gewone bedrijfsuitoefening")	€ 0.9M	€ 0.718M	€ 5.22M	€ 5.3M	€ 2.0M	€ 1.214M	€ 4.712M

**Table 1.** Grossed-up Development key economic quantitative data from the Rijksmuseum's annual reports, sourced from the Rijksmuseum website.<sup>236</sup>

Since then, the case-study research was made applying an interpretative recursive approach which in some moments was focused on investigating the data and in other moments was focused on investigating the literature, striving to integrate both the loci of information for *cross-interpreting*<sup>237</sup> the case data and the literature. Thereto, the interviews were firstly in-depth open-ended<sup>238</sup> and afterwards semi-structured<sup>239</sup> (Qu and Dumay, 2011; Kvale and Brinkmann, 2009), to investigate some talking points or topics from the literature with different interviewees (managers of the Rijksmuseum and also from different organizations when investigating e.g. collaborations paths) in order to have better insight and, at the same time, triangulate the information. Thus, original qualitative and quantitative data have been collected from primary sources such as qualitative interviews, observations of meetings (e.g. discussions of collaboration projects with partners such as Swatch and Droog), of public events (e.g. the Rijksstudio Award, or the Basel Art Fair) and colloquia with several museum directors and managers, and also with managers of some business partners. When possible, the interviews have been recorded and shared to triangulate, but not all observation-moments allowed or enabled good-quality registration; e.g. from half-day-meetings' observations between Swatch and the Rijksmuseum both in Amsterdam, and at the Biennale in Venice or from observations during public events. Other observations regarded the activities developed by the *Rijksmuseum Circle* (which is part of the Development Department). In addition, information has been collected through desk research of quantitative and qualitative documents made available by the organization<sup>240</sup> or from publicly available sources (e.g. the very detailed annual reports from 2010 until 2018, on-line articles or videos of members of the management board and of the digital manager

<sup>236</sup> The year 2013 has not been considered, being extraordinary in the light of the re-opening in April.

<sup>237</sup> Interpreting the case-data in view of the literature and vice versa.

<sup>238</sup> Aiming to be explorative and unlock perspectives for developing a proper theoretical framework.

<sup>239</sup> Guided by identified themes which emerged in other interviews, aimed to make triangulations (between different managers of the museum or of partners or to understand better publicly available information) and designed to acquiring more elaborated responses, also ensuring that the same basic themes are applied during each of the interviews with the different managers (Qu and Dumay, 2011).

<sup>240</sup> Internal qualitative and quantitative documents e.g. the one analyzing the quantitative trends of the development department and the planning for the coming future.

and the marketing manager concerning the re-opening strategy of the Museum and related activities).

In table 2 a schematic overview of the data collection is given.

The interpretation of the data strives to understand the OI-strategy antecedents, the strategy definition and its main stakeholders, the main motivations, benefits and challenges in approaching the openness and how OI implementation has driven a fly-wheel of spill-overs which mutually reinforced the museum's different commitments and in general its SD goal.<sup>241</sup> In order to assess if and how the museum succeeds in driving the SD, the research considers not merely the outputs of the OI-strategy but rather the outcomes (Smyrk, 1995; ITO model).<sup>242</sup>

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<sup>241</sup> The museum's managers have never declaimed the SD concept; the research has synthesized all their comments about the main goals and commitments of the museum in the SD concept coherent with the framework proposed by and Baumgartner, (2006) Ebner and Baumgartner (2010).

<sup>242</sup> This model (input-transform-outcomes) evaluates the success of a project, including also the *effectiveness* –interpreted as the goal, as “the extent to which *desired outcomes* are generated”–, and evaluating also “the *mechanism of converting sets of available outputs into desired outcomes*” (Smyrk, 1995:3; italic added).

PRIMARY DATA SOURCES until 27-01-2020	PRIMARY SOURCES FORMAT	PRIMARY SOURCES PERIOD OF PRODUCTION	SECONDARY DATA SOURCES publicly available
<ul style="list-style-type: none"> <li>■ face-to-face open and semi-structured interviews with Rijksmuseum managers: * <ul style="list-style-type: none"> <li>○ Wim Pijbes, General Director from 2008 until 2016,</li> <li>○ Taco Dibbits, at the time of the first encounter (in 2013) Director of Collection and member of the Board of Directors, and actually (since 2016) General Director,</li> <li>○ Erik van Ginkel, Director of Finance and Operations and member of the Board of Directors,</li> <li>○ Hendrikje Crebolder, at the time of the first encounter (2015) Head of Development and actually (since 2018) Director of Development &amp; Media and member of the Board of Directors,</li> <li>○ Francine Hijmans, Account Manager of Development, Partnerships Manager,</li> <li>○ Linda Volkers, Head of sub Department Marketing (part of the Communication and Marketing Department),</li> <li>○ Peter Gorgels, Manager of the Digital Products</li> </ul> </li> <li>■ Observation at events, ceremonies, conferences in which the managers were present and have been interviewed (some briefly and some more deeply): <ul style="list-style-type: none"> <li>○ “An Open Discussion on Copyright”, August 2013 in Amsterdam;</li> <li>○ Swatch Faces at Biennale Arte, the Press Conference, May 2015, and the first meeting Rijksmuseum (Crebolder and Hijmans) and Swatch (Carlo Giordanetti, Creative Director of Swatch), April 2015, both in Venice;</li> <li>○ second (half-day) meeting Rijksmuseum Swatch, 9 March 2016, in Amsterdam;</li> <li>○ Rijksmuseum at Art Basel: Private tour of Art Basel, June 2016 in Basel;</li> <li>○ two-days conference “Museum Digital Transformation”, March 2017 in Florence;</li> <li>○ Rijksstudio Award ceremony, April 2017 in Amsterdam;</li> <li>○ launch Swatch X Rijksmuseum, July 2018 in Amsterdam</li> </ul> </li> <li>■ face-to-face open interviews with Droog managers: <ul style="list-style-type: none"> <li>○ Mariëtte Jannaat, Factory Manager;</li> <li>○ Renny Ramakers, Founder of Droog;</li> <li>○ Machiel Brautigam, Business Director</li> </ul> </li> <li>■ face-to-face interviews with Swatch managers: <ul style="list-style-type: none"> <li>○ Carlo Giordanetti, Creative Director;</li> <li>○ Oliver Galet, Brand Manager Swatch Benelux</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ the face-to-face single interviews were recorded;</li> <li>■ data collected at events or meetings –as e.g. the 2017 Rijksstudio Award ceremony or few meetings between Rijksmuseum’s managers and Swatch’s Creative Director in 2015 at the Biennale in Venice and at the Rijksmuseum in Amsterdam, or during the launch-event of the Rijksmuseum-Swatch collection–, were not successfully recorded due to the inadequacy of the setting or due to the request of the participants, but notes have been recorded or written</li> </ul>	<ul style="list-style-type: none"> <li>■ the primary source data collection started in 2013 and is still continuing;</li> <li>■ the first contact which gave impetus to the research was at the Milano Design Week in 2013 with Droog;</li> <li>■ the collection of information through Droog’s managers continued until the Milano Design Week in 2015 with the last interview with Machiel Brautigam;</li> <li>■ the first contact with Rijksmuseum’s managers was with Taco Dibbits, at the time Director of Collection, at “An Open Discussion on Copyright” event **, August 2013 at the flagship store and headquarter of Droog in Amsterdam;</li> <li>■ the first face-to-face interview with Rijksmuseum’s managers was in Amsterdam, 29<sup>th</sup> October 2014 with Peter Gorgels, and the day after with Taco Dibbits</li> </ul>	<ul style="list-style-type: none"> <li>■ Rijksmuseum annual reports: of 2000, and from 2010 until 2018, documents that are very extensive and detailed (especially after the reopening in 2013) each with an average from 100 up to almost 300 pages;</li> <li>■ Advises of the Raad voor Cultuur *** <ul style="list-style-type: none"> <li>○ “Advies Culturele basisinfrastructuur 2017-2020”, Raad voor Cultuur, The Hague, May 2016</li> <li>○ “Advies Culturele basisinfrastructuur 2013-2016”, Raad voor Cultuur, The Hague, May 2012</li> </ul> </li> <li>■ Publications in conference proceedings of managers of the Rijksmuseum: <ul style="list-style-type: none"> <li>○ Peter Gorgels, 2013: “Rijksstudio: Make Your Own Masterpiece!”, in the proceeding of the annual conference MW2013: Museums and the Web 2013, in USA;</li> <li>○ Linda Volkers, 2016: “Image First: Opening Up The Rijksmuseum with Rijksstudio”; in “The Digital In Cultural Spaces Publication” (2016) proceeding of the conference;</li> </ul> </li> <li>■ Videos on the web (also on YouTube) of Taco Dibbits, Wim Pijbes, Peter Gorgels and Linda Volkers on the topics Rijksmuseum re-opening, the digital strategy, Rijksstudio, Rijksstudio Award;</li> <li>■ Website of the Rijksmuseum (apart from the annual reports) on topics as: mission and vision, organization, partnerships, sponsors, Rijksstudio, Rijksstudio Award, Operation Night Watch, Shop online;</li> <li>■ Webs of Partners or companies which collaborate with Rijksmuseum such as Philips, KPN, Droog, Swatch;</li> <li>■ Articles and publications in general referring to the Rijksmuseum, Rijksstudio (e.g. Arup.com, wallpaper.com, st.ilsolc24ore.com)</li> </ul>

\* Several managers have been interviewed repeatedly during the research time period.

\*\* During this event the “Droog Hotel” held an open discussion on the difficult issue of copyrights, hosting speakers “to share ideas on everything from hot issues to grand irritations surrounding the big bad world of design” (design.nl); Taco Dibbits was one of the invited speakers.

\*\*\* The Dutch Council for Culture, advising the government and the parliament about cultural organizations.

Table 2. Data collection.

## 5. Contrasting firms' OI-strategy with a public, non-profits one

To clarify the concept of OI-strategy that the current research-phase considers, it is useful to introduce an ongoing debate about *Open Strategy* (OS). A special issue titled “Open Strategy: Transparency and Inclusion in Strategy Processes”, called by Whittington, Hautz, and Seidl (2014), and published by the journal *Long Range Planning* in 2017, introduced a debate about OS and its conceptualization, considered by the proponent authors wider than the OI one. They proposed “a definition ... that emphasizes variations along the two dimensions of transparency and inclusion” (Hautz *et al.*, 2017: 298). Chesbrough and Appleyard (2007; the first authors coining the OS concept with the meaning of a new approach to strategy) defined OS as a strategy that implements OI-practices, thus as a strategy characterized by distributed innovation processes.<sup>243</sup> In 2017 these authors furthermore explained that OS evolved to encompass two primary dimensions: a *process* dimension (or process branch),<sup>244</sup> which “explores the systems that can enhance strategy formulation” investigating the *effects of a wider participation in the strategy determination process* and the “improving of transparency inside and outside the [focal] firm” (Appleyard and Chesbrough, 2017: 310), and a *content dimension* (or content branch)<sup>245</sup> which “examines the ability of organizations to sustain themselves economically with an open approach to innovation” (Appleyard and Chesbrough, 2017: 310), *investigating the dynamics and challenges* of the OI approaches. Tavakoli and co-authors (2017), in reviewing the literature to conceptualize OS as-a-practice, highlight that there is no consensus –neither about what OS is nor about how it should be tackled to develop research issues and theoretical insights. The current research-phase considers OS in its meaning of OI-strategy, thus as a strategy that implements OI-practices (according to the above mentioned content branch definition of Chesbrough and Appleyard), however without considering merely the practices that purposively open-up the R&D innovation processes, but instead, comprising each process needed to formulate the strategy statement<sup>246</sup> and its execution, evaluation and adjustments; therefore the current research considers each of these processes as potential loci of (open) innovation.<sup>247</sup> Moreover, it interprets OI-strategy as a continuum between open and closed strategies (Appleyard and Chesbrough, 2017; Huizingh, 2011; Sandulli and Chesbrough, 2009) and agrees that OI-strategy is “an emerging information [and communication] technology (I[C]T)-enabled strategizing practice”

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<sup>243</sup> As re-defined by Chesbrough and Bogers (2014: 17).

<sup>244</sup> Branch among others investigated by Whittington *et al.*, 2011 and Hautz *et al.*, 2017.

<sup>245</sup> Branch investigated by Chesbrough and Appleyard (2007), Appleyard and Chesbrough (2017).

<sup>246</sup> Considered by Whittington and co-author in the process branch as above mentioned.

<sup>247</sup> Interestingly, the museum's CFO Eric van Ginkel, during the Swatch Event in the Rijksmuseum (July 2018) launching a co-designed and co-branded series of watches, shared details about the collaboration (boosted through an action-research project), explaining that their open-strategy started in 2013 through the Rijksstudio open-source-platform and the opening for-free of some museum's spaces (e.g. the gardens hosting different temporary exhibitions and a coffee-break area) but after this first actions of openness, they strive to open every other possible process of the museum's management, in every new possible direction it will take. E.g. the CFO reminded the partnership with the Louvre which contemplates a collection sharing of two important Rembrandt's artworks and their co-restoration, and co-exposition (six month each).

(Tavakoli, *et al.*, 2017: 163), thus that OI-strategy is bolstered by ICT, but stressing as well that OI-strategy also creates the conditions for a strategic use of ICT. The current research also agrees with Whittington and colleagues (2017) that OS is a wider concept than OI, but it does not consider their framework, of *transparency* and *inclusion* dimensions of the strategy formulation process, as sufficient for explaining why and how OS is a wider umbrella concept compared to OI. Below the dissimilarities are proposed, which emerged by contrasting the successful OI of the public museum's case-study with the prevailing firms' OI paradigm.

### ***5.1 Going beyond the profit-maximizing ethos towards a multi-dimensional construct of OI-effectiveness***

As aforementioned, the OI paradigm has a *profit-maximizing ethos*. In this regard, it is quite interesting recalling, that tackling the divergent views on OI, Chesbrough and Bogers (2014: 21) emphasised that “after the initial inventions by users, business models help to further advance the relevant products and processes by capturing some of the public good knowledge, attracting capital, scaling the innovations, and thereby creating an economically sustainable business or industry”. Thus, as evidenced by the major authors, OI-strategy is mainly a paradigm of how to improve the focal firm's performance (Chesbrough and Bogers, 2014) concentrating on its economic sustainability, looking to enhance its opportunity to capture tangible and intangible resources –spread in the surrounding ecosystem in which the organization is nested–, by opening-up processes beyond the organization's boundaries. And coherently, Appleyard and Chesbrough concentrate their research upon OI practises on “examin[ing] the ability of organizations *to sustain themselves economically* with an open approach to innovation” (Chesbrough and Appleyard; 2007)” (Appleyard and Chesbrough, 2017: 310; italic added<sup>248</sup>). But since the early stage of the case-study research in 2013 –inquiring into the *antecedents*<sup>249</sup> and logics of action which were leading the public museum's innovation of the strategy–, it became self-evident that their *initial motivations* to adopt openness were different from the *profit-maximizing logic* and in particular were neither prone to a defensive nor to a monetary, economic offensive perspective.<sup>250</sup>

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<sup>248</sup> What they describe as the content-branch of OS.

<sup>249</sup> Defined also as the *influencing factors* for changing towards an open model (Frankenberger *et al.*, 2014), or *the drivers behind the decisions* of openness, and identified by Appleyard and Chesbrough (2017) as important characteristics which must be understood to investigate the dynamics (the evolution) of Open strategies.

<sup>250</sup> According to Huizingh (2011; reflecting upon *OI-content*), an approach to study *OI-effectiveness* is investigating into the reasons why firms open-up a previously proprietary strategy; the author reminds that empirical studies have distinguished between *offensive* (e.g. increasing growth) and *defensive* (e.g. decreasing costs and risks) motives, stressing that the former are most observed. The Museum was looking for growth, but principally not for an economic one, but for a process of growing the accessibility to its collection, engaging a larger worldwide, contemporary community (considered –the society– the most important stakeholder of the museum) and of *converting* this openness into socio-cultural and business value for stakeholders and for the museum itself as well.

Some emblematic contents of the research qualitative data are<sup>251</sup>:

“On April 13th, 2013 Her Majesty the Queen opened the new Rijksmuseum. This date not only marked the end of the ten years of renovation and interior design of the museum but especially also a new start: *an open museum*. The Rijksmuseum wants to be open, open in the stories it tells, with an open view on the history of The Netherlands, *open towards the society of today, open in the sharing of knowledge and skills*. The Rijksmuseum is the national museum of art and history, *it connects people, art and history*. It is the museum of The Netherlands *for the world*. The *Rijksmuseum plays an active role in the society, it inspires and enriches the sense for beauty, [and the] awareness of time*” (Rijksmuseum annual report 2013: 24, the first after its re-opening; self-translated from Dutch); “*the collection is of everyone*” (Dibbits)<sup>252</sup>; “[the Rijksmuseum open strategy aims] *to connect people art and history*” (Gorgels)<sup>253</sup> and to “*make art more democratic ... (Gorgels, Dibbits and Crebolder too) “We look to get them [–everyone–] inspired”* (Dibbits)<sup>254</sup>; “Rijksstudio is exceptional ... because we actively encourage users to be creative in this way, using the collection of the Rijksmuseum available [through the digital-open-source platform Rijksstudio] not only wherever and whenever, but also for every artistic [and commercial] development”. “The reasons behind this [the Rijksstudio and Rijksstudio Award] are strictly not commercial; making a profit is not a goal in itself. The Rijksmuseum is doing this to stimulate and facilitate new talent.” (Volkers, 2016); “*But we need to find funds to boost it*” (Crebolder)<sup>255</sup>. We strive to balance social and business innovation development because “we also have the responsibility of around 600 employees, which means 600 families that depend on the capacity of the museum of developing its economic sustainability” beside the responsibility of creating value for the community” (van Ginkel)<sup>256</sup>

The interpretation of these contents enable to realise that the Museum was planning for the openness of its strategy, by creating a digital open-content of their collection, mostly for spreading the Cultural Heritage into the wider community with the main issue of “*play[ing] an active role in the society*” and getting the public involved and inspired.

The public museum’s OI-strategy definition<sup>257</sup> was substantially guided by the value that “the collection is of everyone” and driven by the ethical and socio-cultural commitment of “connect[ing]

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<sup>251</sup> The following sentences are of the earlier face-to-face interviews<sup>251</sup> with the main museum’s directors involved in the innovation of the strategy and few convention proceedings of important for the digital project managers as e.g. Linda Volkers and Peter Gorgels, respectively the Marketing and Digital manager.

<sup>252</sup> Taco Dibbits first interview in 2014; at the time Director of the collection and member of the board and since 2016 Rijksmuseum’s General Director.

<sup>253</sup> Peter Gorgels interviewed in 2014; Digital Communication manager, responsible for the digital open-source project Rijksstudio.

<sup>254</sup> Content expressed by Dibbits in 2014 and repeated by Crebolder during the event Rijksstudio-Award in 2017 and also during the event that launched the co-production of co-branded Swatch-Rijksmuseum watches in 2018.

<sup>255</sup> From a colloquy with Crebolder (current Director of Development and Media, since 2018 member of the board) during a trip to the Biennale in Venice in 2015 where the research had boosted a meeting with the swiss company Swatch to propose a *transformational* (Austin, 2000; Collaboration continuum between non-profits and businesses organizations) collaboration-model through an action-research project.

<sup>256</sup> Erik van Ginkel, the Rijksmuseum CFO during the last interview January 2020.

<sup>257</sup> It is important to stress that in the earlier stage of the Museum’s building-renovation-project and its renewed strategy, a think-tank and groups of Amsterdam’s citizens have been involved, thus inclusiveness and transparency are dimensions institutionalised in the dynamics of the museum strategy definition and its innovation.



people, art and history”, and therefore it can be claimed that its OS definition was (and still is) conceived for playing an active role in the society (interpreted by the research as the aim of creating public *value* for the wider community, thus as an externally-oriented sustainability aim) by making art and culture more accessible for stimulating people to value Cultural Heritage.<sup>258</sup> Interestingly, not merely the OS definition, but also its implementation is continuously conceived for playing an active role in the society, by heightening the level of cultural participation through the lowering of the threshold to experience culture and art (Cavriani, 2016).

Interestingly, during the 2017 Rijksstudio Award, to the question “what, in short, is your strategy, the Rijksmuseum strategy actually?” the General Director Taco Dibbits answered:

“I don’t have a strategy, I have *ideology*,<sup>259</sup> I want *everyone* to be *inspired* just by the images of *artwork*”. He continued explaining that Art must be seen like the naming of the winner project of this award (Art never sleeps), it never sleeps, it is always waiting to inspire. “The Rijksmuseum wants to inspire as much of the society as possible, in any possible way, it wants Art to be democratic”.

And Collins and Porras (1991), writing about “organizational vision and visionary organizations”, claimed that

“At the broadest level, vision consists of two major components –a *Guiding Philosophy* that, in the context of expected future environments, leads to a *Tangible Image*. ... The guiding philosophy is where vision begins. It then permeates an organization –its decisions, its policies, its actions– throughout all phases of the organization’s evolution. The guiding philosophy is a system of fundamental motivating assumptions, principles, values, and tenets. ... The guiding philosophy serves as the organization’s “generic code” ... always present as a shaping force” (Collins and Porras, 1991: 33,34).

Operatively the OI implementation at the Rijksmuseum started with the development of the digital-open-platform Rijksstudio, aiming to unleash and spread the main structural capital of the Museum (its collection) into the wider community –“to get them inspired” and “striving to boost the creativity” and knowledge of the society– and aiming to link a broad-based contemporary audience with art and history and to boost cultural experiences to *everyone, whenever and everywhere, democratizing* the art consumption and linking the broad-based contemporary audience with art and history (as noted in the vision and mission of the Museum and in the annual report 2013).<sup>260</sup>

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<sup>258</sup> The virtuous circle of Thurley explains that “by understanding the historic environment people value it; by valuing it, they will want to care for it; by caring for it they will help people enjoy it; by enjoying the historic environment comes a thirst to understand” (Thurley, 2005: 26), which provokes a thirst to support and take care of it.

<sup>259</sup> Conceived by Dibbits as a philosophic vision of what Art and Cultural Heritage might mean for the society and the human well-being, and what this philosophic vision means for the arts management, which in general needs to engage as much as possible people to get in contact with Art.

<sup>260</sup> By creating this digital-virtual museum without borders of space and time –thus ideally able to boost cultural experience whenever and everywhere–, they brought people in contact with the collection even without visiting the new Rijksmuseum building. Moreover, the Rijksmuseum enhanced the contemporary digital era mechanisms to engage the contemporary, young audience (that they named *art snackers*) which is typically critical for museums.

Interpreting the data of the case-study through Huizingh's (2011) process/outcome matrix<sup>261</sup>, the Museum's first OS-action was a *public-innovation* one,<sup>262</sup> in which the processes, of digitalizing the museum's collection and creating the Rijksstudio open-source-platform, were closed whereas the outcome –the Rijksstudio digital-content– was open: available without sharing restrictions (totally copyright-free), no “thumbnails” or watermarks and to the highest possible image-resolution, to let the data-base become an open-source of real value for any users, and in particular also for professional uses<sup>263</sup> and commercial development-projects as well,<sup>264</sup> besides private projects of *common innovations* (Swann, 2017).<sup>265</sup> The museum stimulated *common innovations* and boosted the utilization and *viralization* of Rijksstudio also through stable partnerships with two open-platforms Etsy and Peecho (Cavriani, 2016). Through this partnering the museum extended both the applications of Rijksstudio and its community, by reaching millions of potential new followers<sup>266</sup>. These collaborations have enhanced the creative use of Rijksstudio, beside extending the sharing and cropping of the museum's collection (Gorgels, 2013), respectively exploring and exploiting the digital-era technologies and trends. This emergent strategizing has stepped-up the engagement of the public by fuelling the adoption of the platform –succeeding in a typical tactical goal of open-source strategies (West and Gallegher, 2006; Boudreau, 2010; Appleyard and Chesbrough, 2017). Evaluating the dynamics of openness, the *public-innovation* strategy has been enhanced by an *open-source practice*, in which both processes and outcomes are open and by which the Museum also strengthened its openness reinforcing the OI-strategy-effectiveness of creating *public value*, by “converting”<sup>267</sup> the output of the public-innovation strategy (the open-content platform) into a *desirable outcome* (Smyrk, 1995).<sup>268</sup> “Outcomes are the result of outputs being utilised by stakeholders” (Smyrk, 1995: 4); the “impacts upon those who enjoy the value/goods [the output] in question, or upon states of nature important to those people” (Alford and O'Flynn, 2009: 175); the “outcomes represent the effectiveness with which the utilisation of the output has taken place” (Cavriani, 2016). The *outputs* (of a public organization) are the *available public goods* that the organization unleashes, but they are not necessarily considered valuable by the people, thus they are

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<sup>261</sup> See the following table 3. at the end of the paragraph, which recaps the different phases of the Rijksmuseum's dynamics of openness, explaining and enhancing Huizingh's (2011) process/outcome matrix.

<sup>262</sup> In which “all the [digitalized-collection cultural-content] information ... is public” (Baldwin and von Hippel, 2011: 1400; Chesbrough and Bogers, 2014: 21).

<sup>263</sup> E.g. the development path of *design-driven-innovation* projects (Verganti, 2008) as the one developed with the Dutch design firm Droog and analysed in the earlier research-phase by proposing a specific design-driven-innovation approach: the design-to-boost-culture (Calcagno, Cavriani, 2014).

<sup>264</sup> Whereas the previous idea was available only for private non-commercial ones.

<sup>265</sup> *Common innovations* mean “producers who design and assemble finished products out of ordinary components and ... they become users [or sellers] of their own products”. (Swann, 2017: 229)

<sup>266</sup> Etsy is the world's largest peer-to-peer e-commerce on handmade and vintage (having around 40 million clients), for both amateurs and professionals, whereas Peecho is a cloud-print on-demand service

<sup>267</sup> Has the CFO van Ginkel explained the Rijksmuseum strives “to *convert the collection into connections* and the connection in multiple kinds of value, for the Museum and the community”

<sup>268</sup> See footnote 242.

not necessarily outcomes. As the concept of outcomes contemplates but is not restricted to outputs, also the concept of *public value* contemplates but is not restricted to public goods. In fact, public value and public goods are both “jointly consumed, ... non-excludable and indivisible”, but “public value encompasses not only *outputs* [available public goods] but also *outcomes*” (Alford and O’Flynn, 2009: 175; italic added). Not insignificantly, Smyrk referred to *desirable outcomes*, in fact not all (public) outcomes are necessarily desirable, but just the ones “which accrue to society at large as public-good benefits (Throsby, 2005: 8). Interestingly, Rijksstudio has transformed a public good *de jure* –the Museum is actually public thus its collection is a public good– into a public good *de jure and de facto*.<sup>269</sup>

The emergent strategizing, of fuelling the adoption of the platform through the above-mentioned partnering and through other activities such as the Rijksstudio Award, has also entailed strategic spillovers<sup>270</sup> as an important growth of Rijksmuseum’s *resonance*, meaning an increase of its *reputational capital* (Cavriani, 2017) through *impression management*<sup>271</sup> processes linked to its OI-strategy. The increase of the *reputational capital* and also of the connected *relational capital*, are the main (intangible) resources enhanced strategically by the Rijksmuseum to drive partnerships-development and to grow its competitive advantages by *converting the collection into connections* (relational capital) and therefore into multiple kinds of value –economic, social, cultural and human. The Rijksmuseum opens-up flows of tangible and intangible resources, with selected agents –through partnerships strategized mostly by private OI– and with the community as a whole –through the open-source Rijksstudio or the Rijksstudio Award. But the main resources enhanced among the opening of the Museum’s value chain have been intangible, boosting what the research claims as an Open Intellectual Capital innovation strategy (Cavriani, 2017).

Concluding, there is no question that the drivers behind the decisions of opening-up a previously proprietary approach have been appreciably different from the *profit-maximizing ethos* of the prevailing OI paradigm, notwithstanding that the Museum has obviously also taken into consideration the responsibility of boosting its *profits* during the execution, evaluation and adjustment of its *open-source* practise.<sup>272</sup> The Museum clearly strives for revenues, but *as a ‘by-product of the*

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<sup>269</sup> Chesbrough and Appleyard (2007: 60) remind that “in its purest form, the value created through an open process would approach that of a public good. It would be ‘*non-rival*’ in that when someone ‘consumed’ it, it would not degrade the experience of a subsequent user. It also would be ‘*un-excludable*’ so all comers could gain access”. Before the digital-open-platform the factual situation was that the art collection (a public good) was excludable: its accessibility was excluded after closing time, and for people that cannot physically reach the brick-and-mortar museum. The digital-open-platform *granted greater levels of access* (Boudreau, 2010) lowering the threshold to experience culture and art and thus boosting a *de facto* non-excludable use of the public good.

<sup>270</sup> “If the management board had not boosted synergies, neither in the implementation of the strategy nor in the development of alliances, the effectiveness of the strategy process would have been less significant, despite its game-changing copyright-free, open digital collection” (Cavriani, 2016:109).

<sup>271</sup> For more details about these mechanisms see Gegenhuber and Dobusch (2017).

<sup>272</sup> As clearly highlighted by the statement of Crebolder “But we need to find funds to boost it” and by the statement of the CFO van Ginkel “we also have the responsibility of around 600 employees etc.

*OI-strategy* and not as its main issue. In fact, although arts management professionals claim that “to be successful an arts organization cannot be guided [just] by money” (Chong, 2010: 21), public museums have an economical dimension of the sustainability to fulfil and therefore they need to exploit the digital-era (and every possible opportunity of growth) not only to pioneer public value creation and enhance *social innovation* –boosting at the same time excellence, audience development and integrity (Chong, 2010)–, but also to develop financial stability *by exploring* new ways of capturing economic value diversifying the revenue stream (Chong, 2010) and by developing strategy-flexibility enhancing exploration and exploitation of the organizations tangible-intangible resources and capabilities<sup>273</sup>.

The critical in-depth qualitative analysis of the case-study suggests thus an *upside-down* set of beliefs and logics of action to drive the initial motivations behind the openness and to make strategic sense of innovation communities, ecosystems, networks and in particular their implications, that the Museum evaluates not merely for the development of competitive advantage, but, above all, for playing a role in the society by nurturing the ecosystem in which the Museum is nested, having a regenerative impact on its various forms of capital. The Museum formulates and evaluates the effectiveness of its *OI-strategy* through other forms of value than just the monetary, economic wealth, in particular through the development of desirable outcomes for the society and the wider community and thus with the aim to boost *desirable social innovation*<sup>274</sup>. But as clearly highlighted by the CFO van Ginkel “we also have the responsibility of around 600 employees, which means 600 families that depend on the capacity of the museum of developing its economic sustainability, beside the responsibility of creating value for the community”; this integrated multiple commitment *asks for “balancing”*<sup>275</sup> the economic value capturing with the social and cultural value” dissemination.

In the following table 3, enhancing Huizingh’s (2011) process/outcome open/closed matrix, the dynamics of Rijksmuseum’s openness at the extra-organizational, organizational and inter-organizational levels are schematised in 3 phases.

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<sup>273</sup> According to Chong (2010: 19) art organizations’ commitments are: “to excellence and artistic integrity; to accessibility and audience development; and to public accountability and cost effectiveness”; and their “primary challenge ...[is] the mission conflict... given the resource constraints” (Chong, 2010: 8).

<sup>274</sup> For further details see afterwards in paragraph 6.

<sup>275</sup> Term used explicitly by the CFO van Ginkel during the last interview, January 2020.

PHASE 1	<b>CREATION OF the RIJKSSTUDIO:</b> creation of digitalized artworks of the museum's collection and the open content Rijksstudio platform	mostly a <b>PUBLIC INNOVATION</b> practice, but integrated with open processes (collaboration with KPN)
PHASE 2	<b>ENHANCEMENT of the RIJKSTUDIO and CREATION/ENHANCEMENT of the RIJKSTUDIO AWARD</b>	mostly an <b>OPEN-SOURCE OI</b> practice but integrated with a <b>PRIVATE-OI</b> (coupled open process and close outcomes)
PHASE 3	<b>CREATION/ENHANCEMENT of openness</b> "in every possible process of the organization" (Erik van Ginkele, CFO Informal interview in 2018) *	mostly integrating <b>public innovation practices with open processes</b> , and <b>open-source practices integrated with private-OI practices</b>
LEVEL OF ANALYSIS	PROCESSES	
	OPEN	CLOSE
EXTRA-ORG. society and the wider community	<p><b>1.</b> the outcome of the digitalization process of the museum's collection –the Rijksstudio– is <b>public</b></p> <p><b>2.</b> the Rijksstudio is an <b>open-source platform</b></p> <p><b>3.</b> e.g. <b>Operation Night Watch</b></p>	<p><b>2.</b> <i>user-centered innovation processes: public innovation **</i></p> <ul style="list-style-type: none"> <li>• common innovation processes (everyone and in particular amateurs)</li> <li>• design-driven-innovation processes (professionals, design manufacturing, and service companies)</li> </ul> <p>through <b>collaboration with ETSY</b>, especially amateurs or young talents in design are facilitated to make and offer on the global on-line peer-to-peer marketplace their projects.</p> <p><b>3.</b> e.g. <b>Operation Night Watch</b>; an <b>open-accessibility-research and conservation project</b>; the <b>co-acquiring and co-exhibiting partnership with the Louvre</b></p>
ORG.	<p><b>2.</b> the outcomes of these processes are close, the museum together with the finalists will decide under which conditions their projects are placed on the market and/exhibited in the museum <b>i.e. private-OI</b>, user-centered innovation</p>	<p><b>2.</b> Rijksstudio Award competition calls <b>EVERYONE</b> to be creative and submit their projects, which through a meritocratic path will be selected and the first three will be exhibited in the Rijksmuseum, facilitated in the actual production, and the selling co-branded</p> <p><b>3.</b> e.g. <b>Operation Night Watch</b></p>
INTER-ORG. collaborating co-developing co-branding	<p><b>2.</b> the outcomes of these processes are close, the museum together with the partner co-decide under which conditions the co-project is placed on the market <b>i.e. private-OI</b></p>	<p><b>1.</b> digitalization at the highest possible resolution and with image-first</p> <p><b>1.</b> the platform <b>Rijksstudio</b> and the <b>new website of the Rijksmuseum</b> are hosted by <b>KPN</b></p> <p><b>2.</b> Rijksmuseum co-develop, <b>co-brand</b>, co-design, co-merchandise and co-place in the market projects with professionals and design, manufacturing and service companies <b>STUDIO DROOG</b>, <b>SWATCH</b>, <b>HEINEKEN</b>, <b>ALBERT HEIJN</b>, <b>PHILIPS</b>, <b>KPN</b> ... the team of experts which selects the design projects and private sponsors which prize the winners of the competition</p> <p><b>3.</b> e.g. <b>Operation Night Watch</b></p>

\* Interestingly, Van Ginkele (the Rijksmuseum's CFO) explained that the Rijksstudio was the starting point of their open approach, but after strategizing it the museum is actually striving to open every possible process of the museum.  
\*\* In *public innovation* (open outcomes and closed processes) the outflows are for free. In this kind of practices the user and producer become indistinguishable and the Rijksmuseum does not "interfere" in their decision allowing them to do whatever they want, with "just" the limitation of not using the *Rijksmuseum brand in their projects*. The museum intervened just by establishing the collaboration with ETSY, and therefore facilitating the users-producers "capability of action" in using the open-source. Although *public innovation* is characterized by open outcomes and closed processes, in this specific case the processes to implement the Rijksstudio public innovation activity were partly closed and partly open, made in collaboration with the Dutch telecommunication company KPN.

Table 3. Dynamics of Rijksmuseum's openness at the extra-, inter-, and organizational levels. 276

276 The dynamics of the Rijksmuseum's openness are proposed in three main phases: Phase 1 typed in blue color and preceded by 1; Phase 2 typed in black color and preceded by 2; Phase 3 typed in red color and preceded by 3. The different phases are proposed following Huizingh's (2011) process/outcome matrix, which, by considering if the outcomes and the processes are open or closed, proposes 4 different types of innovation: a *public innovation* (open outcomes and closed processes); an *open-source OI*-practice (both open outcomes and processes), a *private-OI* (closed outcomes and open processes) and a closed innovation (both closed outcomes and processes).

## 5.2 From firm-centered to extra-organization-centered OI-effectiveness

The prevailing OI paradigm, besides having a profit-maximising ethos, is also firm-centered. Analysing the case-study qualitative data, it can be claimed that the socio-cultural *externally-orientated*-sustainability (Baumgartner and Ebner, 2010) has definitely been put forward as the main strategic goal of the Museum's OI-strategy. And investigating the Rijksmuseum's OI-effectiveness (by contrasting its antecedents and outcome), it emerged inductively that the main OI-commitments are not focal-organization centric, but extra-organization-centered; in fact the society and the wider community are considered by the Museum as the most "strategic" stakeholders of the openness. This could be considered as a win-win strategy which benefits the community, companies and all organizations in general, given that environments are potential sources of knowledge for all organizations (Holmes and Smart, 2009: 396). But, what makes the case-study more interesting is that this public cultural organization has been driven by the socio-cultural externally-orientated-sustainability issue, without overlooking the aim of boosting synergies to drive also the organization's economic sustainability (Cavriani, 2016).<sup>277</sup> Because of this multiple-level view of the OI-commitments of the Museum (explicitly explained also by its CFO), the specific empirical setting of the research could reveal new "opportunities for conceptualising and understanding OI processes further" (Bogers *et al.*, 2017:9) and, by so doing, could enhance the ability to learn and assess the link between OI and SD. It requires not merely researching into "the role of users and communities for OI" (Table 1. Bogers *et al.*, 2017: 12) but requires also to understand the role of OI in boosting and driving regenerative impacts on the users and the community in which a specific organization is nested.

As emerged from the analysis of the qualitative and quantitative<sup>278</sup> data, the Rijksmuseum started its OI-strategy by implementing a public-innovation path with the main commitment of spreading its potential of knowledge, creativity and *moral imagination* into the wider international and contemporary community. And it has stepped-up its openness enhancing the open-source strategy through a mix of other activities (e.g. by partnering with other open-content-platforms, or with other firms –Droog, Swatch, KPN, Philips, Heineken and others– and by developing projects as the Rijksstudio Award; all activities characterized by multilevel and multidimensional open processes and outcomes with the ecosystem and between the partners) which are all boosting the

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<sup>277</sup> Erik van Ginkel explained in the last vis a vis interview (January 2020) that the Rijksmuseum does not have shareholders to whom to distribute dividends but has the society as the most important stakeholder to whom to distribute value. And this value is interpreted by the Museum directors as a multidimensional, complex concept; the board developed its strategy striving to *convert* the *collection* of the museum into *connections and into* different kinds of value for different, fluid categories of internal and external shareholders, in which beside the society there are also for example the employees, around 600 families that expect the museum to be able to pay their salaries.

<sup>278</sup> With quantitative data is meant the numeric measurements (e.g. about the economic impact of the development department, about the revenues of the Museum, about the visitors etc.) made available during the interview with the managers of the museum or published in the annual reports in Dutch language, publicly available on the website of the Rijksmuseum.

engagement and use of the open-source-platform, continuously striving to unleash the *desirable social impacts* coherent with the main object of arts organizations. In fact, Cultural Heritage is unmistakably recognised as an engine of economic development (Sacco, Blessi and Nuccio, 2008) and cultural organizations are asked to spread their potential of knowledge, creativity and moral imagination (Werhane, 1999) for being a hub of inspiration and education for the society; cultural organizations are asked to lead in flourishing cultural and social achievements and boosting social innovation and fine-tuning of the society's public values (Bozeman, 2007).

These OI-processes are definitely extra-organization-centered in their commitments, focused on flourishing cultural and social achievements and boosting a regenerative impact onto the community, or as the Museum states: driven to “*play an active role in the society*” (annual report, 2013:24). But as explicitly stated by the head of the Development and Media Department Crebolder, “*we need to find funds to boost it*”. Thus, besides the extra-organizational commitment of creating public value, the Rijksmuseum has also enhanced opportunities for driving organization-centered positive synergies (Cavriani, 2016). In particular the openness of the strategy has been very effective to drive positive synergies of value creation between the *social innovation* success of the Museum –developed through the public-innovation outcomes– and the connected increased resonance of the Rijksmuseum. Through *impression management* mechanisms the social innovation spillovers of the Rijksmuseum's OI-strategy pushed up the *reputational capital* of the Museum itself. The *reputational capital* firstly increased through the ground-breaking digital-open-strategy spillovers and, afterwards, through few emerging activities that the Museum is continually implementing and which are constantly raising the engagement, use and resonance of the collection-open-content (in particular the partnerships development strategy of the Museum; Cavriani, 2016). As a consequence, the Rijksstudio and the activities around this public-innovation/open-source practice, are continually raising the capacity of the Rijksmuseum of attracting stable partnerships.<sup>279</sup> Another spillover which emerged from the data is an empowerment dimension of the Museum thanks to increased capabilities and access to resources<sup>280</sup> (Mouleart *et al.*, 2005), that boosted the development of new competitive advantages.

Thus, substantially, thanks to these partnerships the Development Department is driving a differentiation and growth of the revenues, reinforcing its economic sustainability,<sup>281</sup> with own

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<sup>279</sup> Interestingly, the Rijksmuseum has procedures for the engagement of a partnership which have standards about the time and the value of the resources which are flowing across the organizational boundaries, but this value is not merely evaluated in monetary terms, but also knowledge, intellectual and relational capital are considered as strategic (Cavriani, 2017; interview with Erik van Ginkel). For example, the partnership boosted by the research (enhancing an interventionist approach to research) between the Rijksmuseum and Swatch has been implemented following these procedures, thus considering the wider potential of *transferred value* and *interactional value* of this collaboration (Austin and Seitanidi, 2012)

<sup>280</sup> But of course, differently from the OI-firm-centered framework, this is an outcome not merely for the focal organization (or the network of organizations) but for the community.

<sup>281</sup> In absolute terms and in the quality of the revenues too, enhancing the organization's planning capability.

revenues counting for 64% of total revenues (annual report 2018: 250<sup>282</sup>), thus far above the norm defined by the Dutch government (“eigen inkomsten norm” of 21,5%). Interestingly, these partnerships are enhanced by the extra-organizational-centered OI-strategy of the Museum, which is as well increasing its capacity to reach other economic support e.g. from citizens, the Friends of the museum, sponsorships and public funds as from the BankGiro Lottery. And the public funds entrusted to the Museum are mostly invested in *social innovation* projects as the one with KPN<sup>283</sup>. Manifestly, the Museum strongly perceives as a crucial responsibility the request to reach what the research interpreted as SD, integrating the short-term with the long-term aspects of driving sustainability (Dyllick and Hockerts, 2002). Nevertheless, as explicitly stressed by its CFO, the Rijksmuseum also strives to reinforce its competitiveness and economic sustainability, looking to “balance” it with its socio-cultural commitment. Thus, it is consistent to support the proposition that its economic sustainability is achieved as a by-product of its extra-organization-centered OI-strategy, although it is not driven coincidentally, but with a clear strategy. The latter proposition is coherent with the action that the Development Department has been reinforced already since the year 2010 (three years before the Museum’s re-opening and before the launch of the Rijksstudio open-source-platform) and it is continuing to grow in its organic. Furthermore, the head of the department entered in 2018 in Rijksmuseum’s board of directors: a significant sign that the organization follows the strategy.<sup>284</sup> Actually the Development Department creates one third of the own revenues of the Rijksmuseum.

Baumgartner and Ebner (2010: 76) underline that “although many companies investigate sustainability management and publish sustainability reports, their main focus in this endeavour remains unclear. Often, it seems that sustainability issues are pursued more coincidentally than with a clear strategy.” The SD debate and issue has become more and more important –a kind of meta-commitment of all organizations– but with the profit-maximizing perspective it is at best pursued as a “by-product” and not as the main strategic focus of the OI-strategy.<sup>285</sup>

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<sup>282</sup> According the last interview in January 2020 with the CFO van Ginkel the own revenues increased during 2019 (official data not yet available) and he confirmed that one third of it comes from the Development Department.

<sup>283</sup> For example, the company collaborates with the Rijksmuseum which regularly receives guests in the museum accompanied by KPN volunteers, to get a tour of the highlights of the Rijksmuseum’s collection, looking to make efforts to prevent or break cycles of social isolation of “vulnerable groups” –“the elderly, people with learning difficulties or long-term and chronically ill children” for whom a museum visit is not always obvious (<https://overons.kpn/en/kpn-in-the-netherlands/at-the-heart-of-society/kpn-mooiste-contact-fonds>).

<sup>284</sup> It is interesting that, in the 2012 report of the “Raad voor Cultuur” (the Dutch Council for Culture, advising the government and the parliament about cultural organizations and best public funds policies), a rather negative opinion was given about the new vision, mission and strategizing of the Rijksmuseum, but the defined innovation of strategy, guided by the *organization culture*, has been strategized, despite the negative feedback of the “experts”, in a period of strong reductions of the state subsidies. The Council was also sceptic about the creation of the new Development Department, which since then has proven to be one of the most strategic departments of the Museum. In its last advice report at the paragraph Entrepreneurship the Raad voor Cultuur wrote “The Rijksmuseum is a financially healthy institute, with a high liquidity and solvency” (May 2016: 283; referring to the period 2017-2020; self-translated).

<sup>285</sup> And mostly, not even to the same degree as the economic sustainability issue.



The overturning of the logics of strategy definition and its strategizing, as emerged from the case-study, are not without significant impact; in fact, the *dynamics of OI-strategy* are mainly influenced by the organization's culture (Appleyard and Chesbrough; 2017; Kratzer *et al.*, 2017; Huizingh, 2011) and SD is also an issue of perspectives –the latter could drive the reviewing of the mindset for stimulating the SD (Payne and Rainborn, 2001).

Organizations that strive to commit SD as the main strategic issue, embrace Edvinsson's encouragement to “keep looking for those invisible opportunity spaces, which [he] think[s] of as *capital in waiting*”, “hidden values and future impact” (2013:169,166, emphasis added).

### **5.3 The primary tension towards SD**

According to the prevailing OI-strategy paradigm, the *primary tension* (conflicting commitments) addressed by firms which challenge the openness “rests with the need to secure an economic return in the face of relinquishing control over critical assets and capabilities” (Appleyard and Chesbrough 2017: 310; Barney, 1991; Chesbrough *et al.*, 2014). Appleyard and Chesbrough (2017: 310) stress that “the reconciliation of this tension is how we define Open Strategy: a firm's justification for participating in an open initiative, including its ability to capture value from the initiative”. But although the ability to capture value from the initiative of openness remains an important commitment in every kind of organization, the perspectives of how to conceptualize the loci of value creation and capturing in public organizations are, in a way, of a wider scope as a consequence of their main institutional issue of creating public value for the society and the wider community in which they are nested (Moore, 1995).

This core institutional-commitment creates dissimilarities in the content of the public organizations' OI-commitments and in the evaluation of its effectiveness, which becomes multi-dimensional and multilevel. From the data-analysis it emerged that these dissimilarities also have an impact on the *public organization's primary tension*, which is of a *wider scope* and manifests itself in the challenge of *integrating*<sup>286</sup> *what is good for the individual agent* (for the research-setting the individual organization) *and what is good for the larger system* (for the research-setting the broader system's key stakeholders or, put differently, the society and the wider community) (Reeves, *et al.*, 2016; CASs). Also Rijksmuseum's CFO van Ginkel clearly explained that their strategizing is a constant *balance between the aim of driving social and cultural innovation* –coherent with the Museum's commitment “to have a role into the society” (Rijksmuseum annual report 2013: 24) by contributing to social and cultural sustainability and societal well-being, regenerating the ecosystem's various

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<sup>286</sup> Integrating conceived in the sense of uniting the differences into new shared commitments that strive to satisfy all the interests to lead SD (Morse, 2010 referring to Follett, 1918), overcoming inherent conceptual and related operational boundaries.

forms of capital–, *and the need of boosting business innovation by enhancing innovative ways of generating revenues for the economic sustainability of the Museum* (in italic the CFO’s statement).

This tension is coherent with the engagement to the SD complex commitment interpreted at a macro-level and therefore the current research described the SD as the reconciliation of the above-mentioned wider tension –between what is good for the individual agent and what is good for the larger system. By investigating the Museum’s strategizing it is possible to have more insight about how to manage this wider tension; it came out that the *social innovation issue* needs to *explicitly* enter in the organizations’ commitments, to be achieved not merely coincidentally (at best as a by-product of the strategy),<sup>287</sup> but as part of the strategic focus –as also claimed by Baumgartner and Ebner (2010).

This different focus of the main challenging tension to be managed by the OI-strategy provides a thought-provoking consideration about how it is possible to capture potential benefits of OI-strategy *of a fairly large magnitude*, conceived by the research as the SD commitment. Within this perspective the public organization takes on the responsibility for SD as the organization’s main issue and in doing such, it strives to contribute positively to the system while receiving benefits sufficient to justify participation, boosting positive synergies in the CASS’ cycle. Social innovation integrated with business innovation could be interpreted as a path for driving SD.<sup>288</sup>

#### ***5.4 The in-bound, out-bound and coupled OI processes and the under-exploitation of OI***

“The information needed to innovate... is widely distributed” (von Hippel, 2005: 14), and it has become evident that “neither the locus of innovation nor [the locus of its] exploitation need [to] lie within companies’ own boundaries” (Enkel *et al.*, 2009: 2; von Hippel, 1988). OI literature, underlining that as a consequence of having distributed potential loci of innovation also the innovation processes need to be distributed, points out three core processes: in-bound or outside-in, out-bound or inside-out and coupled processes (Gassmann and Enkel, 2004; Enkel *et al.*, 2009). Generally in literature, *inbound* processes refer to the internal use of external knowledge (innovation, resources and capabilities), thus they enrich an organization’s own knowledge by integrating the knowledge from outside the focal organization. *Outbound* processes refer to the external exploitation of internal knowledge “by channelling ideas [–which are not exploited internally–] to the external environment” (Enkel *et al.*, 2009). The *coupled* OI processes are the ones which integrate inbound and outbound flows of knowledge, mostly implemented by partnerships with complementary

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<sup>287</sup> E.g. through the so-called externalities or knowledge spillovers.

<sup>288</sup> For further details see afterwards in paragraph 6.

companies or by strategic networks with complementary resources and in which “give and take are crucial for success” (Gassmann and Enkel, 2004: 1).

Moreover, despite Chesbrough’s and Crowther’s (2006) observation that every inbound effort by definition generates a reciprocal outbound effort, according to most of the OI research, firms perform more inbound activities (West and Bogers, 2014; West, *et al.*, 2014; Chiaroni *et al.*, 2010; Huizingh 2011). Furthermore, according to Lichtenthaler (2010) and Lichtenthaler and Lichtenthaler (2009)<sup>289</sup> *inbound* activities correspond to the exploration of external knowledge that can subsequently be used internally, whereas *outbound* activities correspond to the exploitation of the existing internal base of ideas, knowledge, technologies or intellectual property, mainly for a market expansion (Chesbrough, 2003; e.g. through a licencing-out or a selling strategy) or for improving incremental innovation performance. In any case, *outbound activities are always conceived as exploitation paths for the focal firm* (Huizingh, 2011; West & Bogers, 2014). Also Piller and West (2014; who in analysing the locus of coupled OI processes draw a distinction between the bidirectional and interactive coupled OI processes<sup>290</sup>) propose to leverage this open practise as an exploitative opportunity and not as an explorative one. This is not surprising considering the OI paradigm perspective.

Interestingly, one of the suggested opportunities for research in OI practises is to get a better insight about how organizations can capture the potential benefits of OI-Strategy with a fairly large magnitude<sup>291</sup> (Lichtenthaler, 2010; cited by Huizingh, 2011) for example overcoming its under-exploitation (Chesbrough, 2003a; van der Vrande *et al.*, 2009; Huizingh, 2011), that Gambardella and Panico (2014) claimed to be caused by the resistance of the different agents to transfer resources, the power to take decisions and the power to manage the outcomes of the collaboration.

The current research, in addition to the prevailing OI-research claim of under-exploitation, asserts that there is also an *un-exploration* of the OI-strategy –in particular of the outbound, coupled processes– which, as a negative spillover, also causes an under-exploitation of the OI paradigm.

In fact, no empirical studies result on outbound activities driven by exploration (March, 1991; Hoffmann, 2007), for example boosted towards non-economic and non-focal-organization-centered benefits. The main OI ethos does not seem to take into consideration the commitment of nurturing and regenerating the community knowledge, being instead focused on gaining economic advantages from the public, external loci of knowledge and innovation.

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<sup>289</sup> But also other authors like van de Vrande *et al.*, 2009)

<sup>290</sup> They are “qualitatively and quantitatively different from the bidirectional form. ...the knowledge creation takes place outside one particular firm [actor]. ... the external joint creation of innovation differs... in where the innovation (or innovative knowledge) is created, by whom, in how the process is governed and how the returns can be appropriated” (Piller and West, 2014: 38, 39).

<sup>291</sup> Considered by the research the OI strategized by linking it to SD.

Rijksmuseum's OI-strategy has been driven by an *explorative, outbound process* (strategized through a public-innovation activity) aimed to unleash and spread its potential of innovative knowledge, creativity and *moral imagination*<sup>292</sup> into the wider community –to boost socio-cultural innovation, fine-tuning of the society's public values (Bozeman 2007) and potential economic development of the community, considering that Cultural Heritage is generally recognised as an engine for economic development (Sacco *et al.*, 2008), being a stimulus for innovation by boosting creativity.<sup>293</sup> The Museum enhanced the increased competitive advantage connected to the growth of its reputational capital (growth connected to effective mechanisms of impression management), by boosting the engagement of many partnerships, few of them being also *transformational partnerships* (Austin, 2000). The Museum has also *emergently integrated exploration with exploitation* by enhancing important strategic opportunities of knowledge learning (March, 1991) when approaching these partners, and also when approaching the users (especially through the Rijksstudio Award project). Thus the organization enhanced interactive coupled OI processes not merely with other organizations (profit and non-profits) and with the local and national government, by boosting different sorts of partnerships –from *philanthropic to transformational* (Austin, 2000), predilecting the latter–, but the Museum enhanced interactive coupled OI processes also with the community (common users/producers). And these OI-practises are not merely driven by the short-term goal of its economic organization-centric performance, instead they are pursued for succeeding in the main issue of being a hub of social and cultural innovation to flourish the various forms of capital of the ecosystem in which the Museum is nested. These considerations allow to claim that the Rijksmuseum is explicitly embracing the SD complex commitment, capturing the potential benefits of OI-strategy of a fairly large magnitude by linking OI to SD. Its interactive coupled processes take place by outbound flows which explore new ways to regenerate the surrounding socio-cultural environment besides improving the Museum's economic performance. But interestingly, in order to integrate the social-cultural goals for the wider community (social innovation) and the economic sustainability, the Rijksmuseum has explored new paths to capture opportunities of economic value not “simply” elsewhere in the value chain, as suggested by Appleyard and Chesbrough (2017), but by radically innovating its value chain.

Without exploring but just exploiting outbound processes (considering that exploration, and not exploitation, drives radical-innovation processes; March, 1991), the prevailing OI-strategy is not predisposed to explore and value new radically-innovative paths of capturing opportunities of economic value through radical innovations of the value chains. The case-study qualitative data show

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<sup>292</sup> To have more details about this concept see Werhane, (1999)

<sup>293</sup> Especially for the so-called Culture and Creative Industries (CCIs).

that in order to link OI with SD strategies of radical innovation of the value chain are necessary. And data also reveal that *outbound processes implemented with an explorative approach* could boost more radically-innovative coupled processes, which are also able to drive effective radically-innovative exploitation-strategies –by radically innovating the existing value chain and thereby capturing economic value, diversifying and increasing the revenue stream.<sup>294</sup>

In essence, the main ethos of the prevailing OI-strategy and its connected approach of implementing the processes (less outbound and never with an explorative approach) appear to place limits for taking into account the SD issue (as defined by the research). Linking SD with OI asks for balancing exploration and exploitation (March, 1991) of the OI (collaborative) processes, and in particular of the outbound OI-processes, which seems to be unexplored.

The contrasting between the prevailing OI paradigm and the Rijksmuseum case-study OI-strategy is schematised in an Explorative Conceptual Framework in the following table 4.

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<sup>294</sup> This statement derives from current data collected by action-research on the Swatch-Rijksmuseum collaboration.

CONTENT	PREVAILING OI PARADIGM (in firms)	OI IN A PUBLIC (CULTURAL) ORGANIZATION (the case-study setting)
<p>⇒ it concerns the decisions to become more open</p> <p>⇒ the drivers to open strategic orientation (Huizingh, 2011:4)</p> <p>⇒ the driver behind the decisions of openness (Appleyard and Chesbrough, 2017)</p> <p>⇒ logics of action of the innovation of the strategy (towards openness)</p> <p>⇒ influencing factors for changing towards an open model (Frankenberger et al., 2014)</p> <p>⇒ the initial motivations to open up a previously proprietary strategy</p> <p>⇒ the reasons why firms open up their innovation processes (Huizingh, 2011)</p>	<p>⇒ <b>THE MAIN ETHOS</b> ** profit-maximizing logic of Chesbrough (West and Bogers, 2017); *** the profit from innovation ethos of Teece.</p> <p>⇒ <b>DRIVERS BEHIND OPENNESS</b> (the factors driving strategic choices; Appleyard and Chesbrough, 2017):</p> <ul style="list-style-type: none"> <li>▪ <i>firm-driven and market-driven</i> (Appleyard and Chesbrough, 2017), mostly offensive or defensive (Huizingh, 2011)</li> <li>▪ to foster growth (offensive), sales and operating profits (Ahn et al., 2013)</li> <li>▪ to foster competitiveness</li> <li>▪ for the need to create and capture new value (Frankenberger et al., 2014)</li> <li>▪ to reduce cost (defensive)</li> <li>▪ to increase efficiency (both offensive and defensive)</li> <li>▪ to manage complexity and uncertainty (both)</li> <li>▪ to exploit the external resources, knowledge and innovation capability</li> <li>▪ to exploit the unused internal tangible and intangible resources</li> <li>▪ because of business model inconsistency (Frankenberger et al., 2014)</li> <li>▪ because of previous experience with collaboration (Frankenberger et al., 2014)</li> <li>▪ selling complements (West and Gallagher, 2006)</li> <li>▪ attracting donated complements (West and Gallagher, 2006)</li> </ul>	<p>⇒ <b>THE MAIN ETHOS</b> of performing a role in society by producing [and disseminating] value for the community with the resources entrusted thereto (Moore, 1995:12), thus disseminating public value (Moore, 1995) for playing a role in the society and the wider community****</p> <p>⇒ <b>DRIVERS BEHIND OPENNESS:</b> (the factors driving strategic choices; Appleyard and Chesbrough, 2017):</p> <ul style="list-style-type: none"> <li>▪ <i>positive social impact-driven</i> (Stephan et al., 2016), **** mostly collaborative and looking for long-term value creation and dissemination</li> <li>▪ to disseminate (cultural, social, human and economic) <i>public value</i> into the ecosystem in which the organization is nested</li> <li>▪ to create <i>shared value</i> with the society and the wider community and with partners, sharing resources and co-creating public-value (<b>open strategy keystone role</b>)</li> <li>▪ to democratize value (the public organization's structural capital) for the most contemporary vast community</li> <li>▪ to look for long-term value development</li> <li>▪ to boost positive synergies-development in the different forms of value (not merely monetary but also social, cultural, human) and for the ecosystem (not merely for the focal organization)</li> </ul>

**ANTECEDENT \***

\* Important characteristics which must be understood to investigate the dynamics –the evolution–of OI strategy (Appleyard and Chesbrough, 2017). Interestingly, “strategic orientation ... influences the strength and direction of an outward looking focus” (Huizingh, 2011:4)

\*\* Intending the set of the distinctive spirit, belief, ideas, aims and moral attitudes that are typical of a particular group (the organization, or partnerships between organizations, or the wider community).

\*\*\* “On “examin[ing] the ability of organizations to *sustain themselves economically* with an open approach to innovation” (Chesbrough and Appleyard; 2007)” (Appleyard and Chesbrough, 2017: 310; Gassmann and Enkel (2004: 14) aver that OI “can be summarized as an approach that enriches companies’ innovativeness ... to gain them competitive advantage”.

\*\*\*\* The society and the wider community: an elastic stakeholder-category that is gaining more and more importance.

\*\*\*\*\* According to Stephan and colleagues (et al., 2016:1) *positive social changes* are “transformational processes to advance societal well-being”, thus processes that activate a positive change or spillovers (desirable social innovation) into the community or the wider socio-cultural and economic environment.

Table 4. Explorative Conceptual Framework.

CONTENT	PREVAILING OI PARADIGM (in firms)	OI IN A PUBLIC (CULTURAL) ORGANIZATION (the case-study setting)
<p>conflicting commitments</p> <p style="text-align: center;"><b>PRIMARY TENSION</b></p>	<ul style="list-style-type: none"> <li>▪ the <i>primary tension</i> addressed by firms which challenge the openness “rests with the <i>need to secure an economic return</i> in the face of relinquishing control over critical assets and capabilities” (Appleyard and Chesbrough 2017: 310; Barney, 1991; Chesbrough et al., 2014)</li> <li>▪ the reconciliation of this tension is how Appleyard and Chesbrough (2017:310) define “Open Strategy: a firm’s justification for participating in an open initiative, including its ability to capture value from the initiative”</li> <li>▪ a firm-centered primary tension</li> </ul>	<ul style="list-style-type: none"> <li>▪ the public organization’s primary tension, manifests itself in the challenge of integrating <i>what is good for the individual agent</i> –for the research-setting the individual organization– and <i>what is good for the larger system</i> (Reeves, et al., 2016; CASS) –for the research-setting the broader system’s key stakeholders that is the society and the wider community.</li> <li>▪ a multi-level primary tension (also extra-organizational)</li> </ul>
<p style="text-align: center;"><b>LEVEL OF COMMITMENT</b></p> <p style="text-align: center;"><b>LEVEL OF ANALYSIS OF THE EFFECTIVENESS</b></p>	<ul style="list-style-type: none"> <li>▪ thus, the main commitments are also firm-centered to boost the focal-firm innovativeness for driving competitive advantage and boost the revenue growth</li> <li>▪ even if the OI research refers to an extra-organizational level the research object and the effectiveness evaluation refers always to the unit considered by the research as the center of reference for the strategy, a multilevel-cross-perspective of the OI commitment and the evaluation of its effectiveness which integrate more levels is not really implemented</li> </ul>	<ul style="list-style-type: none"> <li>▪ thus, the <i>main commitments</i> are also <i>multi-level</i> striving to integrate the organization and its ecosystems commitments</li> <li>▪ <i>extra-organizational</i> (community and society): to perform a role in society by producing [and disseminating] value for the community with the resources entrusted thereto (Moore, 1995)</li> <li>▪ <i>level of the focal organization</i>: the Museum has also taken into consideration the responsibility of boosting its <i>profits</i> during the execution, evaluation and adjustment of its <i>open-source</i> OI practise</li> <li>▪ strives for profits but as a <i>‘by-product of the OI strategy</i></li> </ul> <p>developing economic stability by <i>exploring</i> new ways of capturing economic value, by diversifying the revenue stream (Chong, 2010) and developing strategy-flexibility</p>

Table 4 continued. Explorative Conceptual Framework.

CONTENT		PREVAILING OI PARADIGM (in firms)	OI IN A PUBLIC (CULTURAL) ORGANIZATION (the case-study setting)
	<b>EFFECTIVENESS •</b>	<ul style="list-style-type: none"> <li>the evaluation of the OI-strategy is focused on business innovation performance (outcomes) and thus is an evaluation of monetary-economic benefits of the OI practices, for the focal-organization's competitiveness and its profit-maximization</li> <li>it fails to enhance OI potential benefits to a <i>fairly large magnitude</i> (Huizingh, 2011:3)</li> </ul>	<ul style="list-style-type: none"> <li>the evaluation of the OI-strategy is based on a <i>multidimensional</i> effectiveness (not merely financial benefits and not merely business-innovation performance) besides a <i>multilevel</i> performance-concept (organizational and extra-organizational-centered)</li> <li>the strategy evaluation looks to the <i>chain of effects</i> from immediate to long-term strategic consequences (Huizingh, 2011:3) for the focal-organization and the ecosystem in which the organization is nested (CASS lens)</li> <li>it looks to enhance OI potential benefits to a fairly large magnitude **</li> </ul>
<p>⇒ the process/outcome matrix gives a classification of the content of openness (Huizingh, 2011)</p> <p>⇒ it highlights 4 OI-practices:</p> <ul style="list-style-type: none"> <li><i>closed innovation</i>: proprietary inhouse innovation</li> <li><i>private OI</i>: proprietary innovation (close outcomes), open processes</li> <li><i>public innovation</i>: close processes, open outcomes</li> <li><i>open source innovation</i>: both processes and outcomes are open</li> </ul>	<b>PROCESS/OUTCOME MATRIX</b>	<ul style="list-style-type: none"> <li>OI is mostly <i>private-open innovation</i>: open processes, close outcomes thus a proprietary innovation (also when there are partnerships, the outcomes are close, thus they are proprietary innovations of the partners)***</li> <li>there are <i>open-source projects</i> in the hi-tech field, but not in other fields, literature asks for research on this topic</li> <li>there are <i>user-centered OI</i>, mostly <i>private OI</i> ****: implemented especially in the hi-tech field and in the design sector, looking to enhance the knowledge and the recourses of the community to develop business innovation</li> </ul>	<ul style="list-style-type: none"> <li>started with a <i>public innovation</i>: the process of the digitalization of the Rijksmuseum's artwork collection has been close, ***** the output of the process has been the Rijksstudio digital- artwork-content, which has become an open outcome, publicly available to everybody copy-right free for any use</li> <li>continued with an <i>open-source innovation</i>:***** the Rijksstudio open-source platform enhanced by partnering other open-source platforms (Etzy and Pecho) has boosted both open processes and outcomes through –and for– the development of <i>common innovation</i> (Swann, 2017) and <i>design-driven-innovation</i> projects (Verganti, 2008 e.g. with Droog, Swatch, Heineken); propelling the adoption of the cultural heritage open-platform and driving the development of <i>desirable social innovation</i> ***** (Stephan et al., 2016).</li> <li><i>integrated with a private OI</i>: to develop partnership boosting bi-focal innovation and therefore also revenue growth for the Rijksmuseum</li> </ul>

\* The evaluation of the OI-effectiveness depends on the OI-drivers and the strategic orientation which influences the dynamics of the outward looking focus.

\*\* Construed by the research as the Sustainability issue with an external orientation, interpreted as SD at a macro-level, thus as a 'responsibility' that each individual organization has of nurturing the ecosystem in which it is nested (Allee, 2000; Porter and Kramer, 2006; 201), for safeguarding the commons for future generations

\*\*\* Many well-known case-studies belong to this category (Huizingh, 2011: 3).

\*\*\*\* *User-centered* research is focused to understand further "the role of users and communities for OI" (Bogers et al., 2017:12; tab 12) but not vice versa.

\*\*\*\*\* Not insignificant for its spillovers (firstly the propelling of the adoption), the digitalization (close process) has been made at the highest professional standards, to be of value also for professional applications.

\*\*\*\*\*The open source activity has strengthened the Museum openness: transforming the output of the public-innovation strategy (the open-content) into a desirable outcome (Smyrk, 1995). It has reinforced the OI-strategy-effectiveness of creating public value.

\*\*\*\*\*E.g. boosting the emanation by the Dutch government of a law which guarantees the museum's free entrance until the age of 18.

Table 4 continued. Explorative Conceptual Framework



CONTENT		PREVAILING OI PARADIGM (in firms)	OI IN A PUBLIC (CULTURAL) ORGANIZATION (the case-study setting)
<p>⇒ <i>in-bound processes</i> refer to the internal use of external knowledge</p> <p>⇒ <i>out-bound processes</i> refer to the <i>external exploitation</i> of internal knowledge “by channelling ideas to the external environment” (Enkel et al., 2009)</p> <p>⇒ <i>coupled processes</i> are the ones which integrate inbound and outbound flows of knowledge, mostly by partnerships with complementary companies (or in strategic networks) where “give and take are crucial for success” (Gassmann and Enkel, 2004:1)</p>	<p><b>INBOUND OUTBOUND COUPLED PROCESSES</b></p>	<ul style="list-style-type: none"> <li>▪ according to most of the OI literature, firms perform more inbound activities (West and Bogers, 2014; West, et al., 2014; Chiaroni et al., 2010; Huizingh 2011)</li> <li>▪ according to Lichtenhaler (2010) and Lichtenhaler and Lichtenhaler (2009) inbound activities correspond to the <i>exploration</i> of external knowledge that can subsequently be used internally, whereas outbound activities correspond to the <i>exploitation</i> of the existing internal base of ideas, knowledge, technologies or IP for a market expansion (Chesbrough, 2003), e.g. through a licensing-out or a selling strategy, or for improving incremental innovation performance (Huizingh, 2011; West &amp; Bogers, 2014); in any case always for the focal firm.</li> <li>▪ No empirical studies result on outbound activities which are driven by exploration *</li> </ul>	<ul style="list-style-type: none"> <li>▪ the OI-strategy started with an outbound OI process, an outflow of internal resources (the Museum’s structural capital, its cultural heritage)</li> <li>▪ and this outbound OI activity (as all the others) has been strategized by disseminating knowledge (cultural capital) to the external environment as <i>external exploitation of internal knowledge</i></li> </ul>

\* For getting insight about exploration and exploitation concepts see March (1991) Hoffmann (2007) and Hoang and Rothaermel (2010).

Table 4 continued. Explorative Conceptual Framework.

## 6. Discussion and conclusions

Limitations of the research are connected with the explorative single-case-study research. Single case-study investigations could have generalization limits but can also be very powerful when paradigmatic.

The research embraces the claim that it has become essential to face the increasing complexity by considering business and society as nested systems in an increasingly complex world and thus (coherently with the CASs lens suggestions) claims for a macro-level SD framework as the ideal one for purposively investing in safeguarding the commons for future generations. Analysing the successful OI-strategy implementation of a leading public museum, the research investigated what aspects of OI-activities make the concept effective for the SD by addressing the major dissimilarities with the prevailing OI paradigm –proposing an Explorative Conceptual Framework. Finally, the research enhanced this framework by proposing some thought-provoking issues for committing OI management to SD.

Because of the breadth and depth of the SD issue, linking OI-strategy with the SD entails to a broader OI perspective and a wider analysis of the OI-spillovers.

The SD meta-commitment imposes (1) a *multi-level construct of OI-effectiveness* going beyond the typical firm-centric OI paradigm, and thus including benefits at an extra-organizational level besides the focal-organization level; moreover, it imposes (2) a *multi-dimensional construct of OI-effectiveness* which also includes non-financial benefits and *desirable social innovation* outcomes<sup>295</sup>, moving away from the orthodoxy of the mere profit maximization. Coherently with these claims the OI-strategy case-study effectiveness has been assessed by taking into account what the Museum achieved in terms of desirable outcomes and not merely in terms of its outputs, and by analysing not merely its ability to create economic value for the focal organization, but also its ability to disseminate socio-cultural and economic value into the wider environment in which it is nested. The SD meta-commitment also seems to impose (3) to process more outbound practices, and the latter also with an *explorative approach* and not merely with an exploitative short-term one –with the aim to explore a chain of OI effects towards long-term strategies consequences.

The Rijksmuseum, through its OI-strategy, strives to drive *positive social change*, releasing and shifting resources (e.g. cultural knowledge and social values fine-tuning campaigns), leveraging the potential of society's socio-cultural and economic development. Its main motivation to open-up has been to pro-actively affect positive changes in targets outside of the organizational boundaries,

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<sup>295</sup> *Desirable social innovation*, which is “the creation of new ideas *displaying a positive* impact on the quality or the quantity of life” (Pol and Ville, 2009: 884; italics added). For further details see paragraph 6.

but beside also the development of its economic sustainability at the organization-level has been proactively pursued.

To explore these invisible opportunity spaces of hidden values and capital in waiting of future positive social and societal impact –linking OI with SD– the research claims that organizations need to actively drive a regenerative impact on different forms of capital of the environment in which they are nested, not approaching it only as a by-product of the strategy. To put forward the SD as the main strategic goal (as an explicit core commitment), an *integrated* set of beliefs and logics of action, able to integrate the socio-cultural and economic *externally-orientated*-sustainability with the focal-firm sustainability,<sup>296</sup> is necessary.

The thought-provoking issue which emerged from the analysis of the Explorative Conceptual Framework is that in order to link OI with SD a *mental-model shift is necessary to recalibrate the strategic focus* (Calton *et al.*, 2013), which *needs to explicitly integrate* the SD complex commitment into the logics of strategy definition, implementation and assessment of effectiveness. The explicit commitment to meet social needs is an activity that is not without significant impact, in fact it appears to be a necessary antecedent for driving the development of desirable social innovation –as stressed by Stephan and colleagues (*et al.*, 2016) the *intrinsic motivation* (thus as in the case-study the integration of this explicit “society-commitment” into the OI-strategy formulation and implementation) is the primary and thus necessary (although not sufficient) *enabling and supporting organizational practice* to drive (pervasive and embedded) positive societal change.<sup>297</sup>

Operatively, it is needed to *decentralise the firm as the locus of strategic commitments*. Thus, the OI-commitment and the connected OI-strategy have to become *extra-organizational* too, or in other words *multilevel-centered*,<sup>298</sup> driven to create and capture value for the focal unit (e.g. the organization) that is formulating and implementing the OI-strategy, as well as for the socio-economic environment in which the focal unit is nested.

Moreover, the main ethos of the OI-strategy must not be the profit-maximization, instead it should embrace multiple goals –social, cultural and economic– which operatively means that it needs to have a *multidimensional* OI-commitment and effectiveness, considering other evaluation-forms than just the monetary wealth. In this instance the mental-model shift consists in understanding that organizations need to look beyond what their firms own or control, not merely in order to address

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<sup>296</sup>The highlighted upside-down perspective.

<sup>297</sup> According to Stephan and colleagues (*et al.*, 2016:1) *positive social change* are “transformational processes to advance societal well-being”, thus processes that activate a positive change or spillovers (desirable social innovation) into the community or the wider socio-cultural and economic environment. This spillovers could have e.g. an empowerment dimension, like an increasing capability and access to resources (Mouleart *et al.*, 2005); or they could disseminate *spillovers of knowledge* (as the Rijksmuseum as done *boosting the public innovation*), or new social practices or policies (for example, the Rijksmuseum has boosted a new regulation that the Dutch government promulgate, which let enter for-free into the public Dutch museums the young generation up until the age of 18; the so called *pure social innovation* by van der Have and Rubalcaba; 2016)

<sup>298</sup> Driven by multiple level and multi-dimensional perspective of value and interest (Calton *et al.*, 2013 suggest *system-centered*).

strategy-flexibility or improve innovation processes for their competitiveness and profit-maximization (the prevailing OI-strategy commitments), but also with the aim to create *public value* for the environment in which they are nested, looking to regenerate its various forms of capital.

The necessary mental-model-shift to recalibrate the interest of the specific, focal unit of analysis (whether firm, alliance or network) with the interest of what is good for the socio-cultural and economic environment in which the unit is nested, is lacking also in multilevel analysis.<sup>299</sup>

Finally, another quite significant thought-provoking issue –which suggests implications for the management of OI-strategies driven by the SD– emerged from the analysis of the Explorative Conceptual Framework; the research claims that *the un-exploration of outbound processes* decreases the capacity of organizations to drive radical innovation of their value chain. Un-exploration of outbound processes is a limit of the prevailing OI-practices to commit to SD.

The Rijksmuseum, to integrate the creation of the public value commitment with the development of its economic sustainability, has explored new paths to capture the opportunities of economic value not “simply” elsewhere in the value chain, but by radically innovating its value chain. The need to *radically innovate the value chain –if the issue is committing OI to SD–* operatively means the necessity to *explore outbound processes*.

## 7. Future research: Open Bifocal Innovation, OI committed to SD

The research stresses the need to revisit how firms that implement an OI strategy fit with their socio-cultural and human environment, for “opening up for managing business and societal challenges” (WOIC theme 2019). As a consequence of the interdependency between business and society, for safeguarding the commons for future generations, it is needed to go beyond the typical primary concern of leveraging internal and external knowledge to merely improve business innovation, and mostly just for the focal organization<sup>300</sup>. Social and societal challenges focus on specific “innovative solutions to socio-technical challenges or social problems” that are frequently embraced by business and management research as “opportunities and activities that leverage economic activity to pursue a social objective and implement social change” (Mair *et al.*, 2012: 353).

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<sup>299</sup> Importantly, in the prevailing OI research also when the level of analysis becomes multiple (West *et al.*, 2006; Chesbrough *et al.*, 2014; Bogers *et al.*, 2017), the profit-maximization ethos is generally the main pursuit (apart from the open social innovation lens; Chesbrough and Di Minin, 2014) and is mostly centered on the unit of analysis (firm, partnership or ecosystem) instead of on the wider system in which this unit of analysis is nested. Even when the research-focus is on the community level, the OI research topic remains “the role of users and communities [’ knowledge] for the OI” (Bogers *et al.*, 2017; tab.1:12), thus how OI processes can enhance the development of competitive advantages for the focal agent, but studies that have researched into the role of OI in boosting and driving regenerative impacts on the community are not proposed.

<sup>300</sup> As a consequence of this engagement for social equity beside economic growth, also private organizations are asked to “proactively think about the effects of the business on society at large” (Kok *et al.*, 2001: 31; Whetten *et al.*, 2002) and “even in areas not directly related to their business” (Scherer and Palazzo, 2007: 1096).

From the case-study data it emerged, that –although guided by the commitment of serving social objectives, coherent with its primary pursuit to succeed in helping and *transforming the social environment* (Mair *et al.*, 2012; Austin, 2000)–, the Museum is not just public-value or social-innovation-centric, and definitively is not merely business-innovation-centric (unlike the prevailing OI paradigm). Instead, the analysis of the openness dynamics, also concerning the partnerships e.g. with KPN<sup>301</sup>, Phillips<sup>302</sup> and Swatch, brought out that the Rijksmuseum strives to *integrate* social innovations (SIs) with business innovations (BIs) through its OI strategy. And this integration has been driven *by uniting the different sets* of the BIs and the SIs *into a new set* in which socio-cultural, human and also economic commitments are satisfied (Morse, 2010 referring to the integration concept of Follett, 1918).

The research agrees that business and social innovation can overlap,<sup>303</sup> but cannot be identified one with the other; in fact, “social innovations are not necessarily driven by the profit motive and business innovations need not to be social” (Pol and Ville, 2009: 881). Moreover, even though many “social innovations are business innovations as well, it would be a blunder ... not to encourage innovation without a profit motive” (Pol and Ville, 2009: 883).

According to Heiscala (2007: 59) SI means changes in at least one of the three social structures –cultural, normative and regulative– of society, that “enhance its collective power resources and improve its economic and social performance.” The current research agrees with this framework, but without considering the (dual) improvement of both economic and social performances of the society as a necessary condition for evaluating an innovation as social.

In any case, the main framework used by the research to analyse the case-study data is the one of Pol and Ville (2009). They distinguish SIs from BIs and also define other kinds of innovation (Borzaga and Bodini, 2014)<sup>304</sup> by evoking a mental shift in the perception of how innovation benefits human being and social well-being (Pol and Ville, 2009). In particular, they define an *innovation as social* “if the implied new idea has the *potential* to improve either the *quality or the quantity of life*” (Pol

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<sup>301</sup> An important ICT company in the Netherlands, which among others hosts the Rijksmuseum website and thus regularly contributes to making these artworks accessible for everyone in the Netherlands, also digitally; KPN has a co-project that focuses on vulnerable groups (People for whom a museum visit isn't always obvious, e.g. older or chronically ill people or people with other disabilities) and looks to have a social contact with them; volunteers are also involved to let them get a tour of the highlights of the Rijksmuseum collection (overons. KPN website)

<sup>302</sup>The project ‘Philips and Rijksmuseum improve people’s lives in MR scanner’ 2018; “the aim ... is to make MRI scans more comfortable for patients and to improve the outcomes of the scans by creating an environment of dynamic light, projection and sound in the imaging room as well as in the MRI bore. This special Dutch Masters performance is a result of an extensive collaboration between Philips, the Rijksmuseum and the Rotterdam Philharmonic Orchestra, Academic Medical Center Amsterdam and Erasmus Medical Center” (Philips.com). Philips and the Rijksmuseum were jointly awarded the SponsorRing Award 2018 for this project.

<sup>303</sup> Beneficial innovation spillovers available for-free to other firms or the wider community, are historically recognised as the *knowledge spillovers* (Schumpeter).

<sup>304</sup> They distinguish SI from BI, but also *desirable* from *deleterious social innovation* and *pure social innovation* as well. They stress that there are innovations that are neither business nor social. And, moreover, they remind a framework of five ideal types of social innovations suggested by Heiscala, (2007): technological, regulative, normative and cultural innovations. Because of the setting of the case-study the latter have been a useful definition.

and Ville, 2009: 881; italics added),<sup>305</sup> but specifying that they refer to the macro-level of the quality of life, which they define “as the set of valuable options that a group of people has the opportunity to select” (Pol and Ville, 2009: 882).<sup>306</sup> Pol and Ville suggest a new concept –the one of *bifocal innovation*– that considers the overlapping (the integration) of the sets of SIs and BIs, but with an additional distinction inside the SIs set: the bifocal concept includes only *desirable social innovations*, which are the ones that drive “the creation of new ideas *displaying a positive* impact on the quality or the quantity of life” (Pol and Ville, 2009: 884; italics added).

To commit OI to SD, the current research proposes as a possible path the *Open Bifocal-Innovation perspective*. This perspective can be the base for recalibrating the OI in order to commit OI to the SD goal. It recalibrates the prevailing OI-strategy ethos into a *bifocal-innovation and multilevel-centered ethos*, driven to create socio-cultural and economic value for the focal unit and for the social and economic environment in which the focal unit is nested. It results to be an effective way to reconcile the wider primary tension between what is good for the individual organization and what is good for the larger system in which the organization is nested –that is the current research definition of the SD.

Differently from Dawson and Daniel (2010: 12), who claim for a “view that seeks to place the social innovation first,”<sup>307</sup> being therefore social-innovation-centric as the Open Social Innovation perspective (Chesbrough and Di Minin, 2014) and thus implementable only in social or public organizations, the *Open Bifocal-Innovation perspective* helps to identify different types of innovation that underpin different types of impact to which all kinds of organizations (profit and non-profit) shall be committed for pursuing SD.

The research proposes a next stage to explore the concept of *Open Bifocal Innovation* and its potential key-role in leading the creation of (cross-sectorial) partnerships or even ecosystems (intended as an ensemble of actors/organizations which share a transformative ambition) propelled towards SD.

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<sup>305</sup> Their use of potential is not trivial, considering the main impossible predictability of the future impact of social innovations.

<sup>306</sup> Therefore, it does not focus on specific individual choices (too subjective) but on the *set of valuable options*.

<sup>307</sup> As Chesbrough and Di Minin proposed with the Open Social Innovation perspective (2014).

## CHAPTER 5

### MAIN DISCUSSION AND CONCLUSIONS

## 1. Main discussion and conclusions

The research process has been characterized by a recursive approach among different, albeit connected, research phases guided by the main objective of the research: (RP) understanding how organizations –no matter whether profit or non-profit– can manage the tension *between what is good for the individual agent* (for the setting of the research the individual organization) *and what is good for the larger system* (the broader system’s key stakeholders or put differently the society and the wider community): the tension by which the research describes the SD issue.

The research strives for understanding how organizations can have a leading role in promoting SD in order to safeguard the commons for future generations and –due to the complex, dynamic, interconnected and less munificent scenario by which organizations are challenged– considers this tension as the primary tension which, firstly needs to be advocated by any organization and secondly needs to be propelled not coincidentally but with an explicit and focused strategy. To manage this primary tension proactively, it is necessary to understand how organizations can sustain their potential of value creation and dissemination over time. And, coherently with the fact that external conditions influence organizations, it entails to boost innovation and enhance competitiveness *not merely* within, but also outside the organizational boundaries; because ensuring the health of the competitive and socio-cultural context benefits both companies and the community –a win-win strategy. As a direct consequence of this perspective, the challenge to which focal organizations (as unit of analysis) are committed becomes wider: sustaining over time *also the potential of –the economic and socio-cultural– value creation of the environment in which the individual organization is nested.*

In certain phases the research has focused more on the specific field of the CCIs and of arts management (Cavriani, 2016; Cavriani and Calcagno, 2019)<sup>308</sup> and related to the research question (RQ1) how an innovation in strategy by an art museum through a ground-breaking digital-business strategy could be a source of competitive advantage, financial sustainability and socio-cultural development. In these phases, enhancing Chong’s (2010:19) framework of the three commitments of arts organizations –“to excellence and artistic integrity; to accessibility and audience development; and to public accountability and cost effectiveness”– which need to be mutually supported, the sustainability goal has been investigated by tackling in the first place the research question (RQ1) how (public) museums can address the challenge of reaching their economic-financial sustainability coherently with their primary institutional pursue of being sensitive to collective goals and performing a role in society.

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<sup>308</sup> It refers to the papers “Everyone’s collections at Art Museums: groundbreaking digital business strategy as cornerstone for synergies” published in 2016 on the Sinergie Italian journal of management, and to the paper “Open (Digital) Strategy for Museum sustainability” presented and discussed at the International Conference of Art and Culture (AIMAC) 2019.



This research-stage brought out that, to enhance the opportunity of the digital era and drive arts organizations' mutually supporting commitments –which means exceeding the primary challenges of the mission conflict between these commitments, given the resource constraints– it is necessary to conceive ICT as a strategic locus and consequently to align the museums *digital strategy* with the corporate strategy, and both need to be fitted with the aim to lead in the world of the digital image culture and open design, looking to attract new audiences by satisfying the needs of the 21<sup>st</sup> century visitors. But in addition arts organizations shall be guided by broader visions and missions than just the audience development, although in a new contemporary way: they shall be guided by a broader goal that contemplates the issue of “speak[ing] a role in society” pushing ahead sustainability-oriented logics of action to build a much larger, more inclusive base of accessibility to the arts, driving to encourage people to proactively use Cultural Heritage, stimulating the creativity of the society and the links between art and well-being, “touch[ing] people’s lives and those of future generations with art” (Wim Pijbes, 2016)<sup>309</sup> besides *exploring* new paths to develop a much larger and more inclusive base of support for the arts.

Ground-breaking open digital strategies (e.g. strategized by an open-source project, the OI practice par excellence) which enable to pioneer and explore the digital era opportunities, shall transform a public-good *de jure* –public museums’ collections– into a public-good also *de facto* (Cavriani, 2019),<sup>310</sup> disclosing value for the community and speaking a role in society, thus fulfilling the socio-cultural dimension of sustainability. But what makes the Rijksmuseum case-study more captivating and a prime case is that this strategic path has increased also its economical sustainability, boosting the diversification of its revenue-stream as a spillover-effect of the increased value of its *reputational capital*, letting the latter become a strategic core asset to manage the tension between the need to secure economic return in the face of relinquishing control over critical strategic assets and capabilities (the typical tension of open strategies). The ground-breaking open digital strategy has increased the value of this intangible asset –the reputational capital– enhancing the opportunity to exploit it by co-production and co-branding partnerships (increasing the value of other intangible

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<sup>309</sup> “I am delighted that we will continue on our common mission to touch people’s lives through the combination of technology, people-centric design and our cultural history” (Frans van Houten, in 2016, CEO of Royal Philips answering to Wim Pijbes and both speaking about the decision of continuing the collaboration Rijksmuseum and Philips.

<sup>310</sup> The *open-source practice* –in which both processes and outcomes are open has transformed a public good *de jure* –the Museum is actually public thus also its collection– in a public good *de jure and de facto*. Chesbrough and Appleyard (2007: 60) remind that “in its purest form, the value created through an open process would approach that of a public good. It would be “*non-rival*” in that when someone “consumed” it, it would not degrade the experience of a subsequent user. It also would be “*un-excludable*” so all comers could gain access”. Before the digital-open-platform the factual situation was that the art collection (a public good) was excludable: its accessibility was excluded after closing time, and for people that cannot physically reach the brick-and-mortar museum. Before the digital-open-platform the factual situation was that the art collection (a public good) was excludable: its accessibility was excluded after closing time, and for people that cannot physically reach the brick-and-mortar museum. The digital-open-platform *granted greater levels of access* (Boudreau, 2010) lowering the threshold to experience culture and art and thus boosting a *de facto non-excludable* use of the public good.

assets, in particular its *relational capital*; Cavriani, 2017) capturing economic value in the long-term chain of OI-effects which impacted on its value chain.

Thought-provokingly, the research also claims that a ground-breaking digital strategy is not enough to guarantee the effectiveness of developing economic sustainability in cultural organisations (Cavriani, 2016). In fact the growth of the Museum's *reputational capital*, which allowed to enhance the digital strategy for boosting the economic sustainability of the Rijksmuseum, highly depends on the capability of the organisation to implement such strategy by creating and maintaining a tight-fit with the overall corporate strategy, and also depends on the *museum capability of enhancing emergent strategies and alliances* (Cavriani, 2016). For example, the partnerships with actors such as the two open-platforms Etsy and Peecho and the Rijksstudio Award competition-project, have emerged as crucial for boosting the growth of the reputational capital, by heightening the community-engagement. Their positive economic synergies reinforced the competitiveness of the Museum and its effectiveness to drive economic sustainability (Cavriani, 2016). When the research enhanced the OI paradigm to investigate the mechanisms activated through the open-source OI-practice Rijksstudio, the data analysis revealed that the above mentioned partnering had fuelled (and is still fuelling) the adoption of the platform, stepping-up the engagement of the public, and therefore succeeding in a typical tactical goal of open-source strategies, that is boosting the engagement in the open-source projects (Cavriani, 2019).

Analysing the Rijksmuseum case, with the Intellectual Capital (IC) literature (Cavriani, 2017), has revealed that the *culture assets* (corporate culture, organizational values and management philosophy; Marr et. al., 2004), driven by the value of performing a role in society and not merely by the commitment of economical sustainability, result as the antecedent of an OI-strategy that could overcome the under-exploitation of this paradigm, capturing the potential benefits of OI-strategy of a fairly large magnitude linking OI to SD. These findings are coherent with the fact that the *dynamics of OI-strategy* are mainly influenced by the organization's culture and less by the external context (Huizingh, 2011), and that SD is also an issue of perspectives and not just of actions<sup>311</sup>. This also explains why the emerged overturning of the OI perspective implemented by the Rijksmuseum makes a difference in its capability of exploring and exploiting openness, boosting the integration between OI practises and SD. To confirm that strategic orientation influences the strength and direction of the outward looking focus, and that the definition and implementation of a strategy, and thus also of an OI-strategy, seems to be more a matter of strategy orientation than a matter of industry or of the external context (Huizingh, 2011), it is interesting that, in the 2012 report of the "Raad voor Cultuur",

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<sup>311</sup> As suggested by Payne and Rainbon (2001), because an explicit perspective in the organization's commitments to some extent helps to re-think the model of stimulating SD.

a rather negative opinion was given about the new vision, mission and strategizing of the Rijksmuseum, but the defined innovation of strategy, guided by the *organization culture* (its values and vision), has been strategized, despite the negative feedback of the “experts”, in a period of strong reductions of the state subsidies. The Council was also sceptic about the creation of the new Development Department, which since then has proven to be one of the most strategic departments of the Museum, and not surprisingly, in 2018 the Director of the Department, Hendrikje Crebolder, entered in the board of directors, and this department is currently boosting one third of the Rijksmuseum’s own-revenues.

The positive economic and socio-cultural performance of the Rijksmuseum shows that a multidimensional and multiple-level content of commitments leads to SD through positive spillover effects which are also emergent, and which can also exceed the Museum’s expectations, as the Rijksstudio results have done (Volkers, 2016). In this regard it is interesting to recall that in 2013, because of its ground-breaking open-source digital strategy –which has democratized the museum’s artwork collection and its Cultural Heritage consumption through the totally copyright-free, on-line Rijksstudio open-source platform<sup>312</sup>–, the BankGiro Lottery decided to sponsor the Rijksmuseum’s Rijksstudio project with a 1.1 million-euro grant.<sup>313</sup> In 2013 the Rijksmuseum received the British Guild of Travel Writers Award in the European Tourism Project category (London, 3 November 2013; website of the Rijksmuseum). Also in 2013, the Rijksmuseum won the “Best of the Web” Award (a European annual conference of Museums and the Web; website of mw2013.museumsandtheweb.com). In 2015 the Rijksmuseum won the European Museum of the Year Award (EMYA; website of the europeanforum.museum). In 2018 the partnering project of Rijksmuseum and Philips won the Dutch SponsorRing Award for the campaign “Philips and Rijksmuseum improve people’s lives in MR scanner” (website of Phillips.com). And the museum continues to develop its capacity of self-financing (its own revenues) which actually achieved the level of 64% of the total revenues (Rijksmuseum annual report 2018: 250), that is far above the norm defined by the Dutch government (“eigen inkomsten norm”) of 21,5%. Through its OI-practises the Rijksmuseum is enhancing positive synergies (Cavriani, 2016) deriving from the transfer flows of tangible-intangible resources between the organization and the community and between the organization and its partners (Cavriani, 2017).

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<sup>312</sup> Which has grown the accessibility by lowering the threshold to experience culture, art and history making it accessible and usable online to the widest possible audience.

<sup>313</sup> Managing director of the BankGiro Lottery, Marieke van Schaik, said “We are proud to be a partner of the Rijksmuseum [because] we are two organizations with the same mission”

As a consequence of the fact that the innovation of the strategy implemented by the Rijksmuseum definitely aimed at strengthening an outward looking focus strategized by OI-practises, the last stage of the research has focused on investigating the case through the lens of the OI paradigm. By analysing the collaboration of the Rijksmuseum with Swatch –which in the time being has focused on co-developing and co-branding a collection of watches, boosted by an open design-driven-innovation (Verganti, 2008), or more in particular a design-to-boost-culture innovation (Calcagno and Cavriani, 2014) approach–, the data show that if there is alignment in the values and if the OI is guided by socio-cultural sustainable commitments, the *cross-fertilization stickiness* –of the partnership’s flows of knowledge (and in general strategic resources and capabilities), and of the power-transfers to take decisions in the use of these transferred assets–, *drastically* decreases due to the atmosphere of trust between the partners. This is of particular interest for the research in OI-processes of collaboration, which claims an under-exploitation of the OI effectiveness because of resistance to transfer resources, assets and the power to take decisions<sup>314</sup>.

But more interesting, in suggesting opportunities for future research, different authors claimed that few researches have considered the implementation of the OI paradigm by new types of organizations, and in particular by non-profit/public ones, thus the setting of the research has encouraged investigations for proposing wider implications than just practical ones. In particular, being the case-study a public organization, and thus on one hand guided by its primordial commitment of playing a role in society (its public mission) by creating and apportioning-out socio-cultural and economic value among the wider community (disclosing public value), but at the same time, also explicitly pressured by the Dutch government (“eigen inkomsten norm”) to increase its economic sustainability, the Rijksmuseum immediately appeared as a significant, potentially explanatory case-study for having more insight about how to link OI-strategies to SD, which also responds to an explicit call for OI-research. Therefore, this research-stage has been particularly dense and important, striving to propose theoretical implications in OI literature beside practical implications for the sustainable management of arts organizations.

More specifically, the research aims of this phase were (1) to contribute to the debate about how to link OI-strategy with *sustainability* and (2) to propose thought-provoking issues to critically re-examine existing business and management OI-practises, in order to propose “responsible” (Visser, 2011) *logics of action* able to conceive strategies driven by the SD issue: to drive a *regenerative impact on the various forms of capital*<sup>315</sup> *of the organizations’ ecosystem* –striving to

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<sup>314</sup> The latter stressed by Gambardella and Panico (2014) in explaining the under-exploitation of OI practises.

<sup>315</sup> Which are: social, human, cultural, economical, natural and so on (Elkington, 2001:7).

achieve *positive social impacts* besides business development–, for safeguarding the commons for future generations.

This research stage firstly proposed an *Explorative Conceptual Framework* contrasting the contents, effectiveness and dynamics of OI-strategy in firms (the main OI-paradigm present in literature) with the OI-strategy implemented by the case-study's public-organization. Secondly, striving to enhance the emerged dissimilarities, the research provided thought-provoking issues about how it is possible to capture potential benefits of OI-strategy *of a fairly large magnitude*, construed by the research as the Sustainability issue, interpreted as the SD meta-commitment.

Because of the breadth and depth of the SD issue, linking OI-strategy with the SD entails to a broader OI perspective and a wider analysis of the OI-spillovers. The SD meta-commitment imposes a multi-level construct of OI-effectiveness, that goes beyond the typical firm-centric OI paradigm, and thus includes benefits at an extra-organizational level besides the focal-organization level. The OI-strategy effectiveness needs to be evaluated by analysing not merely its ability to create economic value for the focal organization, but also ascertaining its ability to disseminate socio-cultural and economic value into the wider environment in which it is nested. This perspective asks for a multi-dimensional construct of effectiveness, which needs to be evaluated by taking into account its outcomes, and not merely its outputs; and by considering other evaluation-forms than just the monetary wealth, thus including non-financial benefits and social innovation outcomes as well. As a consequence, the main ethos of the OI-strategy embraces multiple goals –social, cultural and economic– and not merely the profit-maximization, and therefore also the OI-commitments need to become multidimensional.

Quite an *important implication for the management* of OI-strategies committed to SD issue came out from the research: managers need to explore new paths to capture the opportunities of economic value not “simply” elsewhere in the value chain (as Appleyard and Chesbrough (2017) suggested for implementing OI-strategies successfully), but by radically innovating the organization's value chain. But another connected, significant thought-provoking issue (for the management of OI-strategies driven by the SD) emerged from the analysis of the Explorative Conceptual Framework; the research claims that *there is an un-exploration of outbound processes* and that this decreases the capacity of organizations to drive radical innovation of their value chain. Thus, the un-exploration of outbound processes is a limit of the prevailing OI-practices to commit to SD.

Summarizing, the main thought-provoking issues, proposed to critically re-examine existing business and management OI-practises in order to boost “responsible” *logics of action* able to conceive OI-strategies driven by the SD issue, are the following: the necessity (1) to *recalibrate the main strategic focus of focal organizations*, by *recalibrating the main profit-maximizing ethos*, considering

sustainability not merely as a “by-product” of the OI-strategy, and by *decentralising the firm as the locus of strategic commitments* and (2) to process more outbound practices and go beyond the *un-exploration of outbound* practices, approached merely with an exploitative attitude

To explore invisible opportunity spaces of hidden values and capital in waiting of future positive social and societal impact –linking OI with SD– the research claims that organizations need to drive a regenerative impact on different forms of capital of the environment in which they are nested, not only as a by-product of the strategy. An *integrated* set of beliefs and logics of action is necessary for the integration of the socio-cultural and economic *externally-orientated*-sustainability with the focal-firm sustainability, aiming to put forward the SD as the main strategic goal –thus as an explicit core commitment.<sup>316</sup> Therefore, in order to link OI with sustainability a *mental-model shift is necessary, to recalibrate the strategic focus* (Carlton *et al.*, 2013), which needs to explicitly integrate the SD complex commitment into the logics of strategy definition and implementation.<sup>317</sup> A *mental-model shift* is also needed for *decentralising the firm as the locus of strategic commitments*; letting the OI-commitment and the connected OI-strategy become *extra-organizational* too, thus *multilevel-centered*;<sup>318</sup> driven to create and capture value for the focal unit (e.g. the organization) that is formulating and implementing the OI-strategy, as well as for the social and economic environment in which it is nested. Paraphrasing the CASs perspective, organizations need to look beyond what their firms own or control, not merely in order to address strategy-flexibility or improve innovation processes for their competitiveness and profit-maximization, but also with the aim to create *public value*<sup>319</sup> for the environment in which they are nested, looking to regenerate its various forms of capital.

The research has stressed the need to go beyond the primary concern of leveraging internal and external knowledge to merely improve business innovation and mostly for the focal organization. And by deeply investigating this claim of looking to improve socio-cultural innovation besides the business one, the research entered into the topic of *social and business innovation*, agreeing that

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<sup>316</sup>The highlighted upside-down perspective.

<sup>317</sup> Activity that is not without significant impact, in fact the explicit commitment to meet social needs looks to be a necessary antecedent for driving *the development of desirable social innovation*; as stressed by Stephan and colleagues (*et al.*, 2016) the *intrinsic motivation* –thus as in the case-study the integration of this explicit commitment into the OI-strategy formulation and implementation– is the primary and thus necessary (although not sufficient) enabling and supporting organizational practice to drive (pervasive and embedded) *positive societal change*. According to Stephan and colleagues (*et al.*, 2016:1) *positive social change* are “transformational processes to advance societal well-being”, thus processes that activate a positive change or spillovers (desirable social innovation) into the community or the wider socio-cultural and economic environment. This spillovers could have e.g. an empowerment dimension, like an increasing capability and access to resources (Mouleart *et al.*, 2005); or they could disseminate *spillovers of knowledge* (as the Rijksmuseum as done boosting the public innovation), or new social practices or policies (For example, the Rijksmuseum has boosted a new regulation that the Dutch government promulgate, which let enter for-free into the public Dutch museums the young generation up until the age of 18; the so called pure social innovation by van der Have and Rubalcaba, 2016)

<sup>318</sup> Driven by multiple level and multi-dimensional perspective of value and interest (Carlton *et al.*, 2013) suggest *system-centered*.

<sup>319</sup> Or what Porter and Kramer (2006; 2011) call shared value.

business and social innovation can overlap<sup>320</sup> but cannot be identified one with the other; in fact “social innovations are not necessarily driven by the profit motives and business innovations need not to be social” (Pol and Ville, 2009: 881)<sup>321</sup>. From the case-study data, it emerges that although guided by the commitment of serving social objectives, and coherently with its primary pursuit to succeed in helping society, the Museum is not just *public-value and social-innovation-centric* and definitively is not merely *business-innovation-centric* (unlike the prevailing OI paradigm). The data analysis, in particular about partnerships as with KPN<sup>322</sup>, Phillips<sup>323</sup> and Swatch, brought out that the Rijksmuseum OI-strategy strives to *integrate* social innovation with business innovation, thus can be interpreted as *bifocal-innovation-centric*. And this integration *firstly is explicit*, and secondly is driven for uniting the different sets of business innovations and the social innovations into a new one, in which socio-cultural, human and also economic commitments are satisfied<sup>324</sup>.

“Commitment is what transforms a promise into reality”. A. Lincoln

To commit OI to SD, the research proposes as a possible path, the *Open Bifocal-Innovation perspective*, which explicitly (not coincidentally) recalibrates the OI-strategy profit-maximizing firm-centered ethos into a *bifocal-innovation ethos*, which is by its very conceptual nature *multilevel-centered* because driven to create socio-cultural and economic value for the focal unit and for the social and economic environment in which it is nested. It results to be an effective way to link OI to SD and reconcile the tension between what is good for the individual organization and what is good for the larger system in which the organization is nested.

The magnitude and complexity of the SD commitment, in a less munificent and less predictable scenario that worldwide communities are facing, “transcend capacities of individual organizations and sectors to deal with [it] adequately” (Austin, Seitanidi, 2012: 727). Thus,

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<sup>320</sup> Beneficial innovation spillovers available for-free to other firms or the wider community, are historically recognised as the *knowledge spillovers*.

<sup>321</sup> Even though many “social innovations are business innovations as well, it would be a blunder ... not to encourage innovation without a profit motive.” (Pol and Ville, 2009: 883). Moreover, “there are many sorts of innovation: business, social, artistic, ...”, and not all of them spill-over into *desirable social innovation*, being the desirable one those which “improves the macro-quality of life or extends life expectancy” (Pol and Ville, 2009: 878 and 882).

<sup>322</sup> An important ICT company in the Netherlands, which among others hosts the Rijksmuseum website and thus regularly contributes to making these artworks accessible for everyone in the Netherlands, also digitally; KPN has a co-project that focuses on vulnerable groups (People for whom a museum visit isn’t always obvious, e.g. older or chronically ill people or people with other disabilities) and looks to have a social contact with them; volunteers are also involved to let them get a tour of the highlights of the Rijksmuseum collection (overons.KPN website)

<sup>323</sup> The project ‘Philips and Rijksmuseum improve people’s lives in MR scanner’ 2018; “the aim ... is to make MRI scans more comfortable for patients and to improve the outcomes of the scans by creating an environment of dynamic light, projection and sound in the imaging room as well as in the MRI bore. This special Dutch Masters performance is a result of an extensive collaboration between Philips, the Rijksmuseum and the Rotterdam Philharmonic Orchestra, Academic Medical Center Amsterdam and Erasmus Medical Center” (Philips.com). Philips and the Rijksmuseum were jointly awarded the SponsorRing Award 2018 for this project.

<sup>324</sup> An approach to integration that Morse (2010) describe referring to Follett (1918).

responsibility for sustainability needs to be shared: “Sole responsibility is an oxymoron” in itself (Visser, 2011: 5), in any case each individual agent of the system is engaged in the complex SD commitment (Allee, 2000).

The research proposes a next stage to explore the concept of *Open Bifocal Innovation* and its potential key-role in leading the creation of (cross-sectorial) partnerships or even ecosystems (intended as an ensemble of actors/organizations which share a transformative ambition) propelled towards SD –committed to SD.



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