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THE OMNICHANNEL PHENOMENON: UNVEILING THE ROLE OF CHANNEL
INTEGRATION FOR CONSUMERS AND RETAILERS

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1. INTRODUCTION

The continuous development of digital technologies that has characterized recent years has increased the complexity of the market environment, with rapid changes in consumers' lifestyles and their approach to consumption, brands and distribution channels (Kraus et al. 2021). The massive adoption of e-commerce, social media and mobile devices has deeply modified consumers' purchase behavior and decision-making processes (Herhausen et al., 2019; Pagani, Racat and Hofacker, 2019). In addition, their degree of technology readiness influences the ways in which they seek information and evaluate digitally enhanced experiences (Hickman, Kharouf and Sekhon, 2020).

In this context, many companies have initiated the transition process towards the "Omnichannel". This phenomenon is considered the new frontier in retailing: Beck and Rygl (2015) suggest it is "a form of multiple channel retailing" – similar to Multichannel and Cross-channel – in which retailers have full control over channel integration, while consumers have countless possibilities to interact with the brands. In Omnichannel systems, channels are connected through different combinations of integrated services and touchpoints, which customers can freely access. These include, but are not limited to: "stores, websites, social media, emails, ads, catalogs (for pre-purchase); cash, cards, coupons, loyalty cards (for payment); stores, home delivery, collection points (for delivery); post, stores and drop-off points (for return)" (Saghiri et al., 2017, p. 58).

Companies are then facing the emerging challenges required to manage Omnichannel strategies, such as maintaining substantial consistency of brand values, attributes and overall image across the different services, experiences and channels provided (Payne et al., 2017) and developing seamless and holistic experiences for their customers (Von Briel, 2018). Another notable feature of Omnichannel is the fact that the distinctions between distribution and communication channels have become blurred (Ailawadi and Farris, 2017); this forces practitioners to revise their management and marketing strategies in order to adapt to new circumstances (Picot-Coupey et al., 2016; Chen et al., 2018). While full of potential, these interventions are objectively difficult, risky and cost-intensive in terms of resources and investments.

Following the outbreak of the Covid-19 pandemic, Omnichannel has become increasingly significant for competing on the global markets, changing from a differentiating factor to a core element of the company's systems (Akter et al., 2021; Verhoef, 2021). On one hand, the periods of restrictions and lockdown forced retailers to close their offline channels – either permanently or temporarily – and resort to delivery services, rethinking their online

services in order to continue their activities (Wang et al., 2020). On the other hand, the crisis forced many consumers to convert to online channels and touchpoints out of necessity. Some customers, then, experienced new services for the first time, giving rise to behavior that will most likely be maintained after the pandemic (Arora et al., 2020).

Scholars are thus eliciting further research on Omnichannel and its effects on firms and customers, as well as a deeper understanding of the critical issues and success factors driving retailers' Omnichannel initiatives (Zhang et al., 2018; Hossain et al., 2020; Hajdas et al., 2020). Extant research, however, is addressing multiple and various topics under the Omnichannel "umbrella", including the concepts of Customer Experience, touchpoints and Customer Journey, that are closely related to that of Omnichannel. Moreover, as Omnichannel is a complex concept with a very wide scope (Saghiri et al., 2017), academic research has developed different streams of study and perspectives to analyze this phenomenon. The existence of such streams, which range from management to logistics to consumer behavior, leave scholars with a puzzling variety of contributions and the need for a comprehensive and consistent overview of Omnichannel retailing, as further developed in Chapter 2.

The present thesis aims to reconcile the different literature streams, identify the theoretical foundations of Omnichannel as well as its distinguished features and most important future research directions, from the perspective of both retailers and consumers. In addition, on the basis of the developed framework and research agenda, it aims to advance research on the stream that emerges as fundamental in order to achieve Omnichannel; namely, Channel Integration. Chapter 2 presents Study 1, a bibliometric literature review on Omnichannel. A clarification of the topic's theoretical background will be provided, as well as evidence of its fragmentation. Results show that the Omnichannel concept is founded on four main research streams, which have been analyzed and thoroughly described in terms of theories employed, topics and research objectives. Study 1 results were later used as a basis for Study 2, which involved a discussion with a panel of experts on Omnichannel. Starting from the results of the bibliometric review in Study 1, the experts commented on the past, present and future of Omnichannel, namely: its antecedents and theoretical foundations, the state-of-the-art on existing research and significant gaps to be addressed in the future. Chapter 3 presents the results of Study 2, analyzed through qualitative techniques, as well as the research agenda that emerged from the integration of the expert interviews with the most recent contributions in literature. Results from Studies 1 and 2 stress the major role played by Channel Integration as a feature characterizing Omnichannel and generating seamlessness. Study 3, presented in

Chapter 4, focuses on Channel Integration, investigated through the perspective of Omnichannel customer journeys. This quantitative research set out to identify which touchpoints adopted by customers impact the perception of Channel Integration in two different sectors. Also, by means of a Structural Equation Model (SEM), it will be shown that Channel Integration has a positive effect on Patronage Intention, thus supporting the idea that, although challenging to implement, Omnichannel is beneficial for companies. Finally, the conclusions summarize the findings, provide information on the theoretical and managerial contributions of the three studies and offer suggestions for future research.

2. STUDY 1 – DEFINING OMNICHANNEL: A SYSTEMATIC LITERATURE REVIEW WITH BIBLIOMETRIC TECHNIQUES

2.1 – Theoretical background: framing the Omnichannel concept

Defining the Omnichannel phenomenon is extremely challenging, due to its multifaceted nature, its strict relation to other constructs – such as Customer Experience, Customer Journey, Touchpoints – and its development from previous forms of retailing (e.g., Multichannel, Cross-channel). This section gives an overview of this topic according to these features, stressing the need to clarify the intellectual foundation of extant academic literature.

2.1.1 – The evolution of retailing strategies from single channel to Omnichannel

The Omnichannel concept follows a progressive evolution in retailing, and the transition from operating on a single channel to integrating multiple channels. The term “Omnichannel” itself recalls a derivation from its antecedents, “Multichannel” and “Cross-channel”, to the point that some authors used them as synonyms (Mirsch et al, 2016; Galipoglu et al., 2018). Moreover, a few definitions of Omnichannel describe such phenomenon as “an evolution of Multichannel retailing” (Piotrowicz et al., 2014, p.6) or “a coordinated multichannel offer” (Levy et al., 2013, p.6)

Adding new channels to the pre-existing distribution mix has impacted both brick-and mortar and pure-click retailers, who must consider opportunities (synergies) and threats (cannibalization issues) (Avery et al., 2012; Hansen and Sia, 2015). In Multichannel, more than one channel is employed, to expand shopping options for consumers. The renowned focus on customers clearly emerges from Neslin et al. (2006, p. 96)’s definition of Multichannel Management: “design, deployment, coordination and evaluation of channels to enhance customer value through effective customer acquisition, retention and development”. According to Goersch (2002), customers perceive several benefits from Multichannel retailing, namely: the perception of convenience and control over the purchase, the possibility to acquire key information about the product, the brand and the retailer (which results in increased awareness and trust) and receive personalized services (enhanced support). In Multichannel systems, however, channels are developed and managed separately. From the retailers’ perspective, it may expose them to overstock, overselling or even channel cannibalization (Neslin and Shankar, 2009). From a strategic point of view, it is important for retailers to maintain consistency of prices, product and brand information across channels, as well as effectively manage the acquired data related to sales and

customers. Each channel being independent may easily lead to imbalances between one channel and another and potential overall conflicts: the information available online and offline may differ, as well as the prices charged or available promotions.

The consequent evolution of the retail paradigm therefore involves the introduction of integration between channels, mostly through the development of integrated and synergic services. The most common services relate to logistics – such as Buy-Online-Pickup-in-Store, Curbside Pickup Services, Home delivery – or cross-promotion (e.g., coupons received online and to be redeemed offline). These so-called Cross-Channel strategies offer customers a higher level of service and convenience, leading to increased consumer confidence, loyalty and conversion rates (Schramm-Klein et al., 2011; Cao and Li, 2015). In addition, as pointed out by Avery et al. (2012), increasing opportunities online through a conscious Cross-Channel strategy also generates more traffic towards the physical store, which plays a new role within the overall channel structure. Finally, Cross-Channel strategies have proved to be efficient in preserving customer retention and limiting potentially opportunistic behaviors such as showrooming and webrooming (Flavià, Gurrea and Orús, 2020; Goraya et al., 2020)

The Cross-Channel model, and the renowned attention towards integration, has laid the groundwork for Omnichannel. Grewal et al. (2017) state that integrating channels has become an essential precondition for dealing with the high competition among retailers. The distinctive characteristic of Omnichannel retailing is the synergetic and data-driven management of all channels, to optimize the customer experience and the retailer's performance (Verhoef, Kannan and Inman, 2015). Other authors stress the need for the retailers to design a “seamless shopping experience” for their customers, providing guidance for them while they move freely across channels (Sopadjieva et al, 2017). Moreover, as stressed by Juaneda-Ayensa et al. (2016), in Omnichannel retailing the integration is achieved through two conditions: first, a composite strategy that merges the goals defined for each channel at a higher level, and, second, the interaction between the customer and the brand, which projects its unique identity on the channels and touchpoints adopted.

The “perfect integration of physical and digital” evoked by Rigby (2011, p. 72) requires a complete renewal of both types of channels, as well as a redefinition of their strategic role as part of a broader experience. Alexander and Blazquez Cano (2020) suggest that, in Omnichannel retailing, the store “is the cognitive and emotional apex where the interaction between the firm and the customer takes place” (p. 2), and call for new store designs centered on storytelling, technology and immersive experiences, socialization and human

interactions. Omnichannel stores integrate the advantages brought to the consumer by the online channels (such as fast collection of information, price transparency and time-saving purchase processes) with enhanced sensory experiences and extended support from sales personnel (e.g., the possibility to return products purchased on the website).

A direct consequence of such integration and the massive employment of digital and cognitive technologies is the disappearance of boundaries between physical and digital (so-called “phygital”) (Piotrowicz et al., 2014), with the purpose of maximizing customer engagement (Mele and Russo-Spena, 2022). Brynjolfsson et al. (2013) point out that companies are turning to new business models, with a view to helping and engaging customers, rather than focusing on transactions.

What emerges is that the overall evolution of retailing has followed the increasing need to provide more value to ever-demanding customers, who require a seamless, fulfilling experience as well as major choices in terms of services provided through the different phases of their journey.

2.1.2 – Omnichannel Customer Experience, Customer Journeys, Touchpoints

By nature, the Omnichannel concept is strongly bound to the concepts of Customer Experience, Customer Journey and Touchpoints. As such, a brief clarification regarding the terms used and current state of research in these areas is required to gain a better understanding of the investigated topic.

Customer Experience has been defined as “the internal and subjective response customers have to any direct or indirect contact with a company” (Meyer and Schwager, 2007, p.2). It is a multidimensional experience that encompasses the interaction with products, shopping spaces and brands (Brakus, Schmitt, Zarantonello, 2009), either unplanned or actively initiated by the customer, throughout the three phases of the purchase process (Lemon and Verhoef, 2016; Jiang, Luk, and Cardinali, 2018). Customer Experience contributes considerably to the customer’s final evaluation at the end of the purchase process, thus influencing the impulse to repeat the purchase and long-term Customer Loyalty (Homburg et al., 2017). From a managerial point of view, Customer Experience Management requires companies to carefully design and monitor the different channels and touchpoints that allow interaction with customers. Academics have pointed out the influence of the environment on the Customer Experience, distinguishing between Online Customer Experience and In-Store Customer Experience, as well as between the different drivers and dimensions involved (Rose et al., 2012; Bustamante and Rubio, 2017). In Omnichannel, Customer Experience is characterized for being “consistent” across channels and “seamless” (Polo and Sese, 2016).

Seamlessness is the trait that radically separates Omnichannel from its antecedents; in addition, offering customers a seamless shopping experience “is one of the vital objectives of Omnichannel marketing” (Chang and Li, 2022, p. 2). The study by Rodriguez-Torrico et al (2020) identifies three dimensions that define a seamless Omnichannel Experience: consistency – as the perceived coherence of all retail channels –, freedom in channel selection and channel synchronization. While freedom refers to customers’ ease in selecting different channels for various interactions, synchronization expresses the absence of rupture when moving non-sequentially from one channel to another.

In this sense, touchpoints are key in Omnichannel systems, in order to connect channels, guide consumer choices by reducing uncertainty and confusion and enrich Customer Experiences, either online or in-store (Zhang et al., 2018).

Touchpoints can be defined as interactions of any kind between the company or the brand and customers, including information exchange or purchase transactions, each of which constitutes a variable influencing the Customer Experience and single moments-of-truth (Herhausen et al, 2019). As Lemon and Verhoef (2016) state, touchpoints have increased a company’s possibility to reach potential customers at different stages of the Customer Journey, as well as facilitate their journey through channels. The Customer Journey, in fact, has been defined as “the process or sequence of touchpoints that a customer goes through to access or consumer a product or service” (Tueanrat et al., p. 1). Companies, for their part, face the challenge of managing a wide range of different touchpoints, of different nature and owned by different actors, and creating a holistic strategy to provide a fulfilling Customer Experience (Baxendale et al., 2015).

Today, customers expect consistent, integrated service and experience, regardless of the channel used (Piotrowicz and Cuthbertson, 2014), despite showing preferences for different touchpoints and/or touchpoint combinations (Herhausen et al., 2019). Any Omnichannel strategy must therefore necessarily take into account the fact that the variety of channels used by customers leads to the need to manage and monitor a growing number of touchpoints. For Acquila-Natale and Chaparro-Pelàez (2020), the number and type of customer touchpoints adopted are one of the six dimensions that measure the degree of integration in Omnichannel systems. Moreover, Omnichannel integration among touchpoints and channels usually requires companies to redesign their traditional assets and strategies, thus influencing their management practices.

2.1.3 – The emergence of different research perceptions through Omnichannel definitions

The complexity of the Omnichannel phenomenon, as well as the interest expressed by different disciplines, has led to multiple studies addressing Omnichannel from a wide range of perspectives. For instance, an exhaustive investigation of Omnichannel cannot disregard the study of both sides of consumption and management. This is clearly expressed by Beck and Rygl's conceptualization (2015), which distinguishes between Multichannel, Cross-Channel and Omnichannel using both customer-oriented and retailer-oriented variables. Omnichannel is described as a situation where customers can trigger full integration with the company or the brand and retailers have partial or full control over channel integration.

As a consequence of the multiple perspectives involved, when identifying the key features of Omnichannel, in literature authors have adopted the point of view of their specific field of interest, thus generating a fragmented image of the phenomenon. The word "Omnichannel" itself has been used by different authors in different forms: "Omnichannel", "Omni-channel" (with delimiters), or "Omni channel" (with a space), which quite clearly indicates the lack of a common standard.

A comparison between Omnichannel definitions shows that authors tend to focus on different facets or elements, coherently with the objective of their study. This emerges by comparing, for instance, the views expressed by Juaneda-Ayensa et al. (2016) and Melacini et al. (2018). While the former express that "the dominant characteristic of omnichannel retailing is that the strategy is centered on the customer and the customer's shopping experience (...)" (p. 3), the latter state that "OC [omnichannel] retailing is first and foremost a major logistics challenge because e-commerce differs from traditional retail in many aspects" (p. 392). Lynch and Barnes (2020, p. 2) suggest that "omnichannel retailing is geared towards serving customers when and how they want", and this "has consequences for operational retail strategy, since the approach digresses away from the more silo-like perspective of multichannel retailing research". An even wider perspective on Omnichannel is proposed by Saghiri et al. (2017, p. 54), who define Omnichannel as a system involving not only consumers and retailers, but an entire supply chain as well: "The idea of the omnichannel has been introduced, where a holistic view of all channels is provided to the consumer and supply chain members (...)". Other authors include the brand as a crucial feature in Omnichannel: "[Omnichannel is] the synergetic integration of customer touchpoints and communication opportunities for the purpose of creating a unified brand experience regardless of channel, platform or stage in the selling process" (Cummins et al., 2016, p. 5). Recent contributions pair the concept of Omnichannel with Touchpoints, Customer Journey and Customer Experience. Lemon and Verhoef (2016) state that any

Omnichannel strategy must necessarily consider the fact that the variety of channels used by customers leads to the need to manage and monitor a growing number of touchpoints of different natures and owned by different actors. As is well synthesized by Huré et al. (2017, p. 315), “omni-channel could be referred to as the complete alignment of the different channels and touch-points, resulting in [...] customer experience”. This contributes significantly to the final evaluation made by the customer, thus influencing the impulse to repeat the purchase, and customer loyalty in the long term (Srivastava and Kaul, 2016). Table 2.1 provides a comprehensive list of Omnichannel definitions from the early days to the most recent conceptual developments, showing the relevant elements stressed by each conceptualization.

Tab. 2.1: Main Omnichannel definitions (2011-2020)

AUTHORS	DEFINITION
Rigby (2011, p.67)	“Omnichannel retailing [is] an integrated sales experience that melts the advantages of physical stores with the information-rich experience of online shopping.”
Brynjolfsson, Hu, and Rahman (2013, p. 2)	“In the omnichannel retailing experience, the distinctions between physical and online will vanish, turning the world into a showroom without walls.”
Levy et al. (2013, p. 67)	“[Omnichannel retailing is] a coordinated multichannel offering that provides a seamless experience when using all of the retailer’s shopping channels.”
Herhausen et al. (2015, p. 322)	“Omni-channel integration may appear in combination by simultaneously providing online terminals in physical stores and a physical store locator in mobile channels.”
Verhoef, Kannan and Inman (2015, p. 176)	“Omnichannel management is the synergetic management of the numerous available channels and customer touchpoints, in such a way that the customer experience across channels and the performance over channels is optimized.”
Bernon, Cullen and Gorst (2016, p...)	“Omni-channel retailing is a seamless approach to retailing that offers a single and unified shopping experience across all retail channel formats.”
Cummins et al. (2016, p. 5)	“[Omnichannel is] the synergetic integration of customer touchpoints and communication opportunities for the purpose of creating a unified brand experience regardless of channel, platform or stage in the selling process.”
Hubner, Holzapfel and Kuhn (2016a, p. 257)	“Omnichannel (...) requires ‘real-time, channel agnostic visibility’ across the distribution systems.”
Juaneda-Ayensa et al. (2016, p. 3)	“The dominant characteristic of the omnichannel retailing is that the strategy is centered on the customer and the customer’s shopping experience (...).”
Ailawadi and Farris (2017, p. 120)	“The concept of omnichannel accepts the inevitability of needing to employ multiple channels and is focused on integrating activities within and across channels to correspond to how consumers shop.”
Huré et al. (2017, p. 315)	“Omni-channel could be referred to as the complete alignment of the different channels and touch-points, resulting in [...] customer experience”

Gao and Su (2017, p. 2478)	“Omnichannel retailing has the goal of providing customers with a seamless shopping experience through all available shopping channels.”
Melacini et al. (2018, p. 392)	“OC [omnichannel] retailing is first and foremost a major logistics challenge because e-commerce differs from the traditional retail in many aspects.”
Alexander and Blazquez Cano (2020)	“The concept of omnichannel represents a shift in the retail paradigm precisely because it is rooted in consumer behavior (...) and its emphasis is the interplay between channels and brands.”
Lynch and Barnes (2020, p. 2)	“Omnichannel retailing is geared towards serving customers when and how they want [which] has consequences for operational retail strategy, since the approach digresses away from the more silo-like perspective of multichannel retailing research.”

2.2 – Objectives and research design

The main consideration that emerges from the proposed compiling summary on Omnichannel is that literature in this domain is extremely fragmented and involves a variety of disciplines. This is relevant in order to identify and connect relevant topics related to Omnichannel, and to clarify its intellectual foundations, leading to a deeper understanding of the phenomenon as well as more targeted future research directions.

In the present research, such goal has been expressed according to the following research questions:

RQ1. *What are the main streams of research with respect to the Omnichannel phenomenon?*

RQ2. *What are the theoretical foundations of Omnichannel research?*

Study 1 was designed to answer these questions through a systematic literature review conducted with bibliometric techniques. The techniques employed include a variety of descriptive bibliometrics, which allowed us to capture the scope of Omnichannel literature, and a co-citation analysis (Backhaus, Lugger and Koch, 2011). The latter technique uses citations to recreate a topical network: this method brings out the multiple research streams concerned with the phenomenon under study (in the form of the so-called “research clusters”) and identifies “core” papers for each stream. Results from the co-citation analysis were further subjected to a content analysis, in order to compare the identified clusters and reveal the intellectual foundations that each stream has employed to deal with the Omnichannel concept (Krippendorff, 2012). A comprehensive framework to systematize the existing Omnichannel research streams is proposed as the final contribution of this study.

2.3 – Methodology

The methodology chosen for this study is that of the scoping systematic literature review. Literature reviews stem from medical research, but have long been widespread in other disciplines, including business, management and marketing (Senivongse et al., 2017). Systematic literature reviews (SLRs) are “based on a clearly formulated question, identify relevant studies, appraise their quality and summarize the evidence by use of explicit methodology” (Khan et al., 2003, p. 118). Among systematic literature reviews, scoping reviews are preferred when the topic is relatively innovative and has not yet been extensively reviewed, or when its nature is complex and heterogeneous. They use rigorous methods to identify relevant literature on a certain topic area and to map a complete overview (Arksey and O’Malley, 2005; Pham et al., 2014). In the present study, the SLR approach was used to identify a dataset of articles that represent the various fields of the academic debate on Omnichannel research. The corresponding bibliographic metadata were then extracted to perform quantitative bibliometric analyses; among these, the co-citation analysis was employed to set out the most relevant contributions. Finally, the qualitative interpretation of results was provided through a content analysis applied to a second selection of papers based on citations. The various steps of the study are discussed below.

2.3.1 – Literature search:

The rigorous procedure defined for systematic literature reviews requires researchers to define a-priori criteria for the selection of articles to be included. This serves to maintain objectivity in selecting papers, by limiting the subjective intervention of researchers while preparing the refined dataset (Denyer et al., 2003). For this study, the selection of papers and data extraction were conducted according to the PRISMA four-phase diagram (Moher et al., 2009) to ensure effective reporting of sources.

The search was conducted on the electronic database ISI Web of Knowledge Core collection (Web of Science or WoS). The native interface of this source is suitable for bibliometric analysis and is considered as “the gold standard for citation analysis” (Harzing and Alakangas, 2016, p. 791), since it provides standardized reference items and a rich set of metadata (Fetscherin and Heinrich, 2015) belonging to multiple disciplines (Merigó et al., 2015). The terms used for the search were title, subject and abstract. The keywords identified included the word “Omnichannel” in its different forms, such as “Omnichannel”, “Omni-channel” (with delimiters) and “Omni channel” (with a space). As suggested by Zupic and Čater (2015), including alternative spellings can identify a wider set of contributions, which is preferable for scoping reviews. Although excluding other terms (i.e. concepts and topics

that the Omnichannel is related to) might be considered as a limitation, the research approach we adopted is that of identifying Omnichannel's theoretical foundations. As such, a narrow selection of papers is needed; otherwise, we would have faced the risk of identifying collateral research streams stemming from other concepts (e.g. Customer Experience or Customer Journeys) and not from Omnichannel.

As for selection terms, only papers with an available abstract and written in English were considered; subsequently, the dataset was then filtered by the exclusion of grey literature, non-academic literature and conference proceedings. In this process, the original dataset output from WebOfScience was fully hand-checked and revised with the help of two other members of the research group. During the set-up of the database to be used in further analyses, the spelling of "Omnichannel" was harmonized; also, we accounted for other relevant spelling errors in keywords, names and/or journals. As for the timespan, the search was conducted on the entire range available for the Web of Science database, namely 1985-2020 up to the end of November 2020, when the data were extracted.

The procedure resulted in the identification of 314 articles, mainly pertaining to the WoS classification categories "business", "management", and "operations research management science", and in the extraction of their corresponding bibliographic metadata to be further processed (such as the 8,704 citations).

2.3.2 – Bibliometric analyses:

Bibliometric analyses are usually performed to identify and classify specific research fields. Quantitative bibliometric research can identify how knowledge is generated and its evolution over time, as well as key journals, key papers and influential scholars for each observed time period (Backhaus, Lugger and Koch, 2011). Acedo and Casillas (2005, p. 622) therefore suggest that combining the bibliometric approach with the qualitative interpretation of results is "complementary in gaining an understanding of the structure of a field of study". According to Ferreira et al. (2016), developing a map of conceptual frameworks employed with reference to a certain topic offers a holistic view of the topic itself to be obtained, the understanding of its relationships with other key research subjects/areas to be enhanced, and attention to be focused on emerging research gaps.

These analyses comprise a wide range of techniques, serving different purposes. The following techniques were applied to the aforementioned 314 articles, with the purpose of identifying the most relevant contributions in literature, to be later subjected to a thorough qualitative analysis and interpretation:

a. *Descriptive mapping techniques*: these analyses were performed on the dataset collecting metadata from all 314 papers. First of all, we identified the evolutionary process of Omnichannel literature by computing the *annual scientific production* year by year. Secondly, we used the so-called “*three-field analysis*”, which uses keyword co-occurrence to identify relationships among metadata fields. This preliminary analysis suggested the existence of links between various intellectual roots and research contents, as well as identifying the 15 most frequently cited papers (Aria and Cuccurullo, 2017). We then applied the science mapping rules of Bradford’s Law (Brookes, 1969) and Lotka’s Law (Pao, 1985) to assess respectively “core” journals in the sample – i.e. most dedicated to the subject – and most influential authors. *Bradford’s Law* arranges journals in descending order of the number of articles they have published on a subject, thereby identifying three so-called “zones”. Zone 1 includes those journals that have published about 1/3 of all existing papers on such subject. The *Lotka’s Law* proportion describes the frequency of publication by authors in a given field and distinguishes between “occasional” authors, who have written only one article, and dedicated authors. Finally, we examined the papers in the dataset to identify the most widespread research methodologies and investigated settings. The data were compiled in a single spreadsheet for *coding*, according to the dimensions of the methodology used (distinguishing between theoretical and empirical studies and, among those, identifying the quantitative, qualitative or mixed method techniques applied) and industry (isolating papers with a specific setting from those that did not focus on a specific product category or industry, or adopted a multi-industry perspective).

b. *Co-citation analysis*: co-citation analysis is a statistical method that uses references as the main unit of measurement of affinity and proximity between papers. It aims to identify publication clusters that represent the intellectual foundations of a scientific discipline or school of thought (White and Griffith, 1981; Ramos-Rodriguez and Ruiz-Navarro, 2004; Galipoglu et al., 2018). Huber et al. (2014) state that co-citation analysis has proved particularly useful in marketing literature. Co-citation analysis is frequently used in science mapping, since it is based on the assumption that publications that are frequently cited together are relevant to the same topic (Hjørland, 2013). The basis of co-citation analysis is the concept of “citation frequency”, namely a unit of measurement given by the total number of citations of a single document across all references in the sample (Garfield, 1979). Co-citation analysis calculates “citation frequency” by using pairs of papers to check whether both papers co-occur in the reference list of a third publication. The process is then iterated for every paper in the sample, leading to the construction of a network (Aria and Cuccurullo, 2017). The final network shows the most influential publications in the form of thematic

clusters, which are derived from the citation list of all papers in the sample. As such, most of the citations retrieved pre-date the publications on the field, thus identifying the theoretical foundations of the topic. One output of co-citation analysis is centrality measures, network indexes that enrich the resulting clusters' framework by identifying most important constituents (Donthu et al., 2021). In this study, we focused on the betweenness centrality index, computed for each paper of the different clusters. Betweenness centrality refers to an object – so-called “node” in the network context – to carry information between unconnected nodes, acting as “bridges”. Betweenness centrality is measured as:

$$B(u) = \frac{\sum_{v,w} \delta_{v,w}(u)}{\delta_{v,w}},$$

where $(\delta_{v,w}(u))$ is the total number of shorter paths passing through a node, and the denominator $(\delta_{v,w})$ is the total number of shorter paths in the entire network, thus defining a ranked hierarchy. Papers with a high betweenness centrality index are acknowledged as conceptually linking theories and research contributions (Abbasi et al., 2012).

Co-citation analyses can be conducted using a variety of grouping algorithms. In this study, we chose to adopt the Louvain Clustering Algorithm,

$$\sigma = \frac{\sqrt{N} \cdot (f - f_0)}{\sqrt{f_0(1 - f_0)}},$$

where N is the number of publications within the cluster, f is the proportion of publications within the cluster and f_0 is the proportion of publications within the database (Grauwin and Jensen, 2011). It was developed for group detection in very large networks (Blondel et al., 2008); therefore, it is suitable for our network, composed of 8,704 citations. Furthermore, being a non-hierarchical algorithm, the Louvain procedure aids the discovery of the total number of clusters without pre-assumptions (Traag et al., 2019).

Both descriptive mapping techniques and co-citation analyses were conducted with the support of the software “bibliometrix”, an R-based package validated for science mapping. This tool enables analysis on three levels: “sources”, “authors”, and “documents”, which correspond respectively to the identification of “conceptual”, “intellectual” and “social” structures of scientific disciplines. While the “conceptual structure” refers to the relationships between theoretical concepts, identified by the words used (i.e., keywords, titles, abstracts), the “intellectual structure” expresses the relationship between papers (and theories) by analyzing references; finally, the “social structure” refers to the identification of authors and research groups devoted to a certain field (Aria and Cuccurullo, 2017). To facilitate the interpretation of the results, we also integrated the outputs with a graphic network using the VOSviewer tool (van Eck and Waltman, 2010).

2.3.3 – Content-based analysis:

The co-citation analysis produced the most cited papers and identified relevant research clusters that act as theoretical foundations for the Omnichannel domain. The naming of the clusters – as well as the thematic interpretation of the papers populating them – was determined by a subsequent content analysis. Content analysis is a technique first introduced in political science, that has been later largely adopted in the marketing field, for example in advertising and consumer behavior studies (Vespestad and Clancy, 2021). As stressed by Seuring and Gold (2012), the specific strength of content analysis is its broad scope and dual level of analysis, that combines coding and categorization of texts' content with interpretation of their latent content. Content analysis has been praised as enabling independent and text-driven analyses of the literature, aimed at gaining theoretical insights (Vespestad and Clancy, 2021); in this sense, it has been successfully applied in combination with bibliometric reviews (Cheng et al., 2016). This qualitative synthesis of texts aims to discover concepts, themes and relationships within and across the clusters identified (Krippendorff, 2012), as well as to identify theoretical developments and emergent research themes. Moreover, Biesenthal and Wilden (2014) suggest that, by shifting the analysis to the actual texts, content analysis may offer the researcher conceptual insights on the research fields involved and their interrelations.

In reviewing and analyzing papers, we adopted an inductive approach through an iterative approach (Eisenhardt, 1989). Each researchers identified topics for the clusters separately, and then compared them, in order to increase the overall reliability of the research (Kolbe and Burnett, 1991). In describing the clusters, the technique of summarizing content to a further abstraction level has been adopted (Seuring and Gold, 2012), to show connections between each cluster's topics.

2.4 – Results

This section presents the main results of Study 1. For length and clarity purposes, we provide a synthesis of the descriptive statistics of the database, focusing on the co-citation and content analyses. The complete tables and visualizations are provided in Appendix A.

2.4.1 – Results: descriptive mapping analyses:

It should first be noted that, although the research was conducted on the entire timespan available in the Web of Science database – 1985-2020 -, the output has a timespan of January 2011-November 2020 (Table 2.2). A conspicuous increase in the number of publications can be identified in the period 2016-2020. This increase may be attributable to an explicit interest in Omnichannel expressed by the Journal of Retailing, which, in June 2015, published the special issue “Multi-channel Retailing”, emphasizing the transition to Omnichannel. In addition, between the end of 2015 and 2016, many important papers about touchpoints and customer experience were published, including Baxendale (2015), Lemon and Verhoef (2016), Stein and Ramasheshan, (2016), all referring – more or less explicitly – to the new retail phenomenon.

Tab. 2.2 – Annual scientific production on Omnichannel (2011-2020)

YEAR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
N° ARTICLES	1	0	1	2	11	25	37	68	97	72

One of the main contributions of the aforementioned Journal of Retailing’s 2015 special issue is also the most frequently cited paper: it is the introduction paper by Verhoef et al., “From Multi-Channel Retailing to Omni-Channel Retailing”. Table I, provided in appendix A, refers to the 15 most influential publications in Omnichannel, identified by co-occurrence; local citations (i.e., number of citations by other papers in the retrieved database) and global citation count (i.e., total number of citations received) are reported. What is to be noted is the variety of themes covered by these papers, such as channel choice and customer experience, operations management, logistics, e-commerce and opportunistic consumer behaviors.

We then proceeded to identify the “core” journals and authors, i.e., those most dedicated to the Omnichannel subject. As for journals, Table 2.3 lists the 10 journals that, according to Bradford’s Law, published 1/3 of all papers on the subjects. Among them, the International Journal of Retail and Distribution Management, the International Journal of Physical Distribution and Logistics Management and the Journal of Retailing and Consumer Services stand out, as combined they published 20% of all papers on Omnichannel.

Tab. 2.3 – *Most influential journals publishing studies on Omnichannel (Bradford’s Law)*

SOURCE	RANK.	FREQ.	CUM. FREQ.
International Journal of Retail and Distribution Management	1	28	28
International Journal of Physical Distribution and Logistics Management	2	18	46
Journal of Retailing and Consumer Services	3	17	63
Sustainability	4	12	75
Decision Support Systems	5	10	85
International Journal of Production Economics	6	8	93
International Review of Retail Distribution and Consumer Services	7	7	107
Electronic Commerce Research and Applications	8	7	100
Management Science	9	7	114
Journal of Interactive Marketing	10	6	120

As for authors, those with the highest number of published papers on Omnichannel were identified by applying Lotka’s Law. As shown in Table 2.4, it emerged that about 86% of the authors had published only one paper on Omnichannel. 119 authors had more than one paper, while 12 were the most prolific (4, 5 or 6 papers). The author that contributed most to the field is Santiago Gallino (6 papers). Further details are provided in Appendix A, Table II, included the H-Index measuring their productivity and the impact of their published works.

Tab. 2.4 – Authors and number of publications about Omnichannel (Lotka’s Law)

DOCUMENTS WRITTEN	N° OF AUTHORS	PROPORTION OF AUTHORS
1	714	85.7%
2	79	9.4%
3	28	3.3%
4	8	0.91%
5	3	0.37%
6	1	0.13%
	833	100%

Finally, we coded each of the 314 papers according to the research methodology and investigated settings. Above all, it is noted that the majority of papers feature at least one or more empirical studies (82%); of these, most studies employ quantitative methodologies (66%), mainly surveys and mathematical models. The latter appear particularly widespread in logistics and operations studies. Qualitative methodologies are applied in 33% of the papers, mostly case studies and in-depth interviews. Only 1% of papers adopted a mixed method research design.

As regards settings, 53% of the Omnichannel papers included a focus on a specific industry: namely, fashion, apparel and accessories, food and grocery, multi-category retailing and consumer electronics. Services, both public and private, appear almost unexplored – with the exception of banking – as well as B2B and wholesale commerce. Most of the studies – especially in the consumer behavior area – use industries as a mere setting, without really taking into account their peculiarities. For example, fashion, apparel and accessories or consumer electronics are often used to investigate the Millennials consumer segment. Other papers do not explicitly refer to an industry, such as in the logistics domain, where mathematical models and algorithms are developed based on a hypothetical company’s needs, organization and assets. It should be noted that less than 1% of all the papers are multi-industry studies comparing behavior or strategies across sectors.

2.4.2 – Results: co-citation analysis:

Running the co-citation analysis resulted in the selection of 50 papers, most cited by peers, categorized into four research clusters. For each cluster, core papers were identified based on a high betweenness centrality index, which is provided in the discussion. Some of the research clusters include papers focused on the development of research methods and procedures: following Gurzki and Woisetschläger (2016), it is reasonable to not consider such papers in further analyses, in order to improve the interpretation of the results. The details of each of the 50 papers – authors, publication year, title, source – are provided in Appendix A, along with the network and density visualizations of the four clusters (Tables III; Figures I-II).

A content analysis was then conducted on the 4 research clusters, as well as each of the contributions composing them. Clusters were labelled following the main areas addressed: Cluster 1 – Consumer Behavior; Cluster 2 – Strategic Management; Cluster 3 – Channel Management Issues; and Cluster 4 – Channel Integration.

a. Cluster 1 - Consumer Behavior:

Cluster 1 comprises 18 papers concerned with a variety of topics within Consumer Behavior. It includes three literature reviews and has a mean year of publication of 2010. Contributions in this cluster span the 2005-2017 period and clearly show the Multichannel origin of Omnichannel research. In fact, the word Omnichannel itself started being employed only in 2015; in the same year, papers (Baxendale et al., 2015; Lemon and Verhoef, 2016) use the word “touchpoints” for the first time. The paper by Verhoef et al. (2015), which proposes Omnichannel and touchpoints as the language of the “new paradigm”, is the main node of the cluster, with a centrality measure of 38.61.

Papers in this cluster reflect the need to make sense of the emerging phenomenon of consumer shopping across channels. Authors investigate Multichannel shoppers’ characteristics, drivers and effects on channel and company sales, in the short and longer term (e.g., Kumar and Venkatesan, 2005; Konus et al., 2008). The need to assess the size and impact of the Multichannel segment in the customer base and to develop effective Multichannel management approaches such as Customer Relationship Management emerges (Venkatesan et al., 2007), as well as the concept of Customer Experience, though declined through alternative paradigms, e.g., the R-F-M model (Ansari et al., 2008), or a form of integrated channel loyalty influenced by different usage and shopping situations (Gensler et al., 2012). In later studies, however, Customer Experience is conceived as a determinant of

channel choice, usually paired with the concept of enjoyment (Melis et al., 2015; Pauwels and Neslin, 2015).

Earlier works are centered on the offline-online dichotomy, while later works explore a new scenario in which the customer's purchase process becomes a dynamic journey across a wider range of channels and touchpoints. Consequently, effective management of the customer journey calls for an innovative approach, namely, Customer Experience Management (CEM) (Verhoef et al., 2015; Lemon and Verhoef, 2016; Grewal et al., 2017). Another common trait of the papers in this cluster is the attention paid to the managerial consequences of the behavior investigated, such as channel migration and cannibalization, or the experiential effect on consumers gradually adopting new channels and/or touchpoints. The "reasons why" and implications of these studies show an explicit managerial focus. For example, studies centered on customer segmentation are strongly related to the managerial need to understand – and possibly influence – different consumers' choice drivers and behavior across channels (e.g., Verhoef et al., 2007; Neslin and Shankar, 2009; Avery et al., 2012; Pauwels and Neslin, 2015; Wang et al., 2015).

As far as theories are concerned, in Cluster 1 various established Consumer Behavior theories are employed to explain the specific Multichannel behavior that each paper addresses, e.g., Theory of Reasoned Action, in Verhoef et al. (2007); Utility-based models, in Gensler et al. (2012), Konus et al. (2008), and Melis et al. (2015); Social Exchange Theory, in Venkatesan et al. (2007). With their works, Lemon and Verhoef (2016) and Baxendale et al. (2015) mark a moment of disruption. Rather than a new theory, these authors propose their novel approach based on touchpoints, which represent the basis for many future studies. Also, this approach dramatically shifts the focus from the consumers' response to functional needs to the affective and experiential dimension, leading towards a new vision of the brands involved.

b. Cluster 2 - Strategic Management:

Cluster 2 is labeled after management strategies. It is composed of nine papers and has a mean year of publication of 2014. Papers in Cluster 2 question how to compete effectively in the new environment by combining channels, as is well described by Brynjolfsson et al. (2013), which is the main node of the cluster (centrality 15.78).

Channels are considered to be information and product fulfilment combinations (Bell et al., 2014) that lead to the identification of different Omnichannel solutions such as Buy-Online-Pickup-In-Store or "click-and-collect" (Gallino and Moreno, 2014; Gao and Su, 2017a), and showrooming (Rapp et al., 2015; Gao and Su, 2017b; Bell et al., 2018). The companies

investigated in these studies face the transition from managing a dichotomous configuration (online-offline) to multiple combinations of channels and touchpoints.

In contrast to Cluster 1, here the evaluation of the impact of such solutions is not constrained to channel or company sales but focuses on their effect on competitive advantage. It is within this strand, for example, that Ofek et al. (2011) address channel profitability on the bases of price definition and in-store service levels, and Rapp et al. (2015) study the strategic role of salespeople as they deal with showrooming behavior. In these contributions, services are proposed as necessary for value creation, and to guide consumers in navigating between channels. In this sense, both Bell, Gallino and Moreno (2015) and Gao and Su (2017a) present the showroom as an important node for connecting online and offline channels and touchpoints, with a potential to prevent or limit migration or the emergence of opportunistic behaviors. Brynjolfsson et al. (2015) capitalize on the development of strategic best practices for retailers during their transitions towards Omnichannel in managing their overall assortment and marketing mix levers, with a focus on information sharing to provide more customer value and support customers in their purchase process.

c. Cluster 3 - Channel Management issues

Cluster 3 is concerned with Channel Management issues and includes fourteen papers, four of which are literature reviews. The mean year of publication for this cluster is 2015. The papers in this cluster address channel management issues on two levels: on one hand, some works address specific operational issues related to the company's adoption of a new channel, such as inventory planning (Hubner et al., 2016a), last-mile distribution (Bernon et al., 2016), and back-end fulfilment (Ishfaq et al., 2016). The macro-evolution of retailing systems and the strategic and organizational dynamics guiding a business's processes pass through the study of the various operational and logistical (forward and backwards) phases, also in order to evaluate the outsourcing of highly specialized activities to experienced suppliers or providers. On the other hand, some papers aim to show the consequences of such adoption on a higher level – notably, the impact on the entire organization of the retail firm of the choice to go Multi- or Omni-channel and the subsequent need to reorganize and integrate processes and flows. Cao's work (2014), by showing that Cross-channel provides more value but requires changes across several aspects of the retail business model – retail concept, flow management, HR organization and management, and relationship management –, is an example of the latter. Cao's holistic vision was highly influential for many authors in the coming years. Picot-Coupey et al. (2016), for example, stress how Omnichannel companies deal with a wide range of interrelated challenges that differ in scope

but can be traced back to strategy definition and strategy implementation (namely, “operational, development-related challenges”), and call for a new, fluid model for the effective redesign of channels. Earlier works focus on the specific issue of adding a second channel in companies that have long been single-channel (online-to-offline and vice versa), while later papers try to address the greater complexity that has arisen since the onset of Omnichannel. The work of Beck and Rygl (2015) acknowledges such complexity by proposing a taxonomy of the various Channel Management situations that companies need to address. Ailawadi and Farris (2017) propose new metrics for gauging the performance of the new Multi- and Omni-realities. Lewis et al. (2014) suggest that companies should undergo a deep cultural revolution, in order to engage staff at all levels of the company, from the top to the bottom, in understanding and embracing Omnichannel.

It is worth noting that the majority of works in this cluster adopt an interpretivist approach by means of qualitative methodologies, such as Delphi studies, and single or multiple case studies. For example, Piotrowicz and Cuthbertson (2014), the central paper of the cluster (centrality 10.84), gather practitioners’ opinions through focus groups, and the abovementioned 2014 work of Cao is based on a thorough construction of the case study of a Chinese Omnichannel retailer.

d. Cluster 4 - Channel Integration:

Finally, Cluster 4 is centered on Channel Integration, from the consumer perspective (channel integration perception) and from the management perspective (channel integration execution). It includes nine papers¹ and has a mean year of publication of 2011; the central node of the cluster is Cao and Li, 2015, with 10.47 betweenness centrality. Studies in this cluster explore the impact of channel integration on key company outcomes, such as customer retention (Bendoly et al., 2005) and satisfaction (Herhausen et al., 2015), and highlight the central role of consumer perception of such integration. Several consumer behavior theories are invoked to explain how perceptions of integration are formed, e.g., Mental Accounting Theory, in Bendoly et al. (2005), the Unified Theory of Acceptance and Use of Technology, in Juaneda-Ayensa et al. (2016) and Technology Diffusion Theory (Herhausen et al., 2015). As far as integration execution is concerned, studies rely on Resource-Based-View approaches (Cao and Li, 2015; Oh et al., 2012). This cluster stresses the role of information technology in both Omnichannel perception (Juaneda-Ayensa et al.,

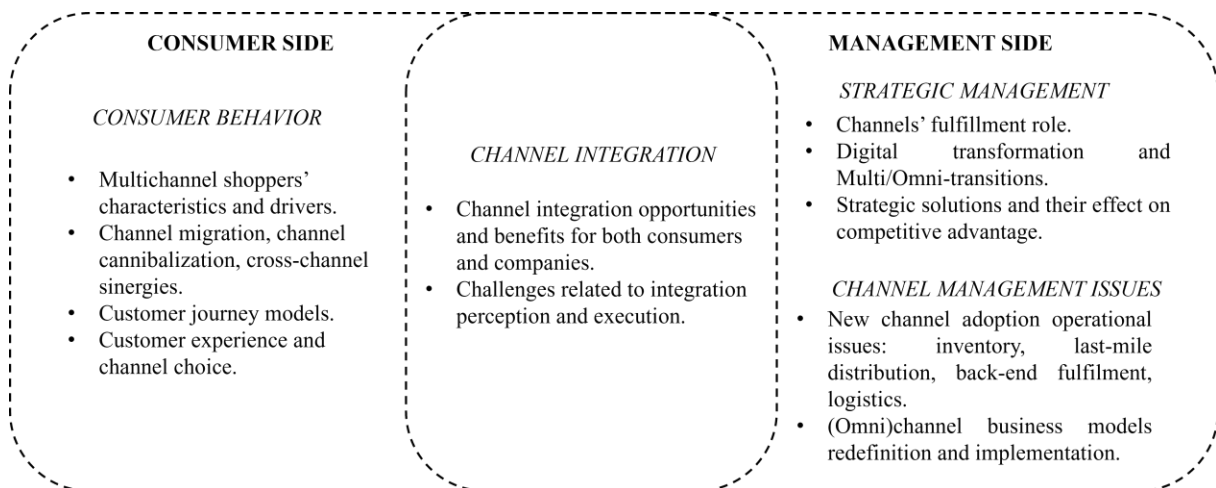
¹ As requested by reviewers, we share the percentages of papers per each cluster: Cluster 1 = 36%; Cluster 2 = 18%; Cluster 3 = 28%; Cluster 4 = 18%. It is to be stressed that these percentages refer to the 50 relevant papers identified through the co-citation analysis, and not to the 314 that comprise the original sample. To avoid confusion, we have reserved a footnote for this information.

2016) and execution (Saghiri et al., 2017). In sum, works in this cluster suggest that the journey to Omnichannel requires integration on two sides simultaneously: back-end operations and front-end perceptions. Zhang et al. (2010) stress how such process is related to both macro-investments (e.g., the adoption of integrated, digital infrastructures for data management, to effectively interpret consumer analytics and develop new performance metrics, able to compare the results obtained in the multiple channels and touchpoints adopted) and micro-strategies (accurate planning of each retail mix component).

2.5 – Discussion

Omnichannel is found to be a complex phenomenon, rooted in four key areas: Consumer Behavior, Strategic Management, Channel Management issues and Channel Integration. Such variety stresses and highlights the variety of contributions and intellectual foundations that emerge around Omnichannel, while also underlining how the different research perspectives of Omnichannel studies are interconnected. Figure 2.1 shows the resulting research framework of the Omnichannel field, as well as main topics investigated.

Fig. 2.1 – Omnichannel streams of research: clusters and main topics



At the overall level, it should be noted that there is no widely accepted definition of Omnichannel, and many studies still focus on the difference between Multichannel and Cross-channel, which emerged as antecedents of Omnichannel, the latter representing a further phase within an evolutionary process related to technological advancements.

In an Omnichannel continuum perspective, as advocated by Beck and Rygl (2015) and Neslin (2022), Channel Integration appears as the most promising area for future research in this domain. Channel Integration, defined as “the degree to which a firm coordinates the objectives, design and deployment of its channels to create synergies for the firm and offer particular benefits to its consumers” (Cao and Li, 2015, p. 200), appears to be a key requirement for developing Omnichannel systems. Firstly, since Channel Integration connects both the consumer and company perspectives, it is most suitable for designing seamless services and Customer Experiences. It is also shown that integration has a strong impact on the issues and topics raised by the other clusters-research areas: influences and consequences on consumer behavior; strategies for value creation in a competitive perspective; and design of effective distribution systems, organizational and logistics infrastructures. Secondly, Channel Integration comprises a wide range of situations retailers are facing in their Omnichannel transitions. Integration can, in fact, be schematized according to its direction, “offline-driven” and “online-driven”. In this sense, specific issues are addressed, responding to the different needs of those retailers that are adding new channels to their assets, whether traditional brick-and-mortar or digital natives. Finally, on an empirical basis, many case studies and in-depth management interviews stress how this is the main challenge in the shift from Multichannel to Omnichannel retailing. These factors thus contribute to making Channel Integration the “true core” of Omnichannel.

Through the cluster and content analysis, we also assessed the theoretical foundations of Omnichannel research. Quite interestingly, theoretical developments in the Omnichannel domain are found to be rather scarce. No theory has been specifically developed for Omnichannel, and the theories employed – in all of the four areas identified – are usually pre-existing ones adapted to the specific phenomenon under study. This raises a debate on whether Omnichannel should merely be considered a new setting, which calls for new testing of existing theories, or an entirely new domain that deserves specific theoretical developments, because of its characteristics and its overall complexity.

Since the bibliometric analysis hereby presented has been conducted in 2020, it is worth to specify that we continuously monitored the keywords and criteria used for the research in 2021 and in 2022. Based on the new contributions published on Omnichannel, that we were able to track, we may affirm that these papers can be still traced back to the four research clusters we identified. Furthermore, we already integrated in Study 2 many studies published in 2021.

3. STUDY 2 – THE FUTURE OF OMNICHANNEL: THE EXPERTS’ PERSPECTIVE²

3.1 – Objectives and research design

While Study 1 resulted in a comprehensive overview of the Omnichannel phenomenon, as well as the identification of its theoretical foundations, the need emerged to identify relevant future research directions, for each cluster, as well as to review major issues, theories and methodologies.

Study 2, therefore, aims to answer the following research question:

RQ3. What emerging opportunities for new research on Omnichannel can be identified?

A mixed-method approach was adopted, combining the aforementioned systematic literature review and bibliometric analyses with a panel discussion by field experts, focused on the review results and emerging topics (Heyvaert et al., 2013). To our knowledge, this was the first attempt to involve experts in validating and expanding literature review findings and research directions in the Omnichannel domain. The experts offered various insights on the future of Omnichannel research, which were later integrated following an assessment of the most recent contributions in literature. Following this task, Study 2 provides a final research agenda comprising all Omnichannel research streams as well as the expert validation of the previously described four-cluster Omnichannel framework.

3.2 – Methodology

Consulting experts in a specific field is generally acknowledged as a good practice in exploratory research, as a way to evaluate and cross-check the completeness of findings. Such practice is particularly relevant when combined with literature reviews (Petticrew and Roberts, 2008). The approach combining a systematic literature review is defined “mixed method research synthesis”, or MMRS (Sandelowski et al., 2012). It allows researchers to exploit the benefits of both qualitative and quantitative methodologies, for a deeper and more robust understanding of complex phenomena, identifying critical aspects and any discrepancies in order to obtain “more complete, concrete and nuanced answers [...] to complex research questions” (Heyvaert et al., 2013, p. 671). Moreover, it should be noted

² Studies 1 and 2 were published altogether in the International Journal of Retail and Distribution Management, under a CC-BY license, as a gold open access paper. Reference: Salvietti, G., Ziliani, C., Teller, C., Ieva, M. and Ranfagni, S. (2022), "Omnichannel retailing and post-pandemic recovery: building a research agenda", International Journal of Retail and Distribution Management, Vol. 50 No. 8/9, pp. 1156-1181. <https://doi.org/10.1108/IJRDM-10-2021-0485>.

that this methodology was successfully adopted in previous studies in marketing and management (Hall, 2011; Pohlmann and Kaartemo, 2017; Mortazavi et al., 2021).

In the present study, we proceeded by discussing the past, present and future of the Omnichannel domain with a panel of experts of notable academic and managerial backgrounds. This was particularly important since Omnichannel is becoming increasingly relevant for both academics and practitioners, also due to the rapid and multiple changes driven by the Covid-19 pandemic (Guthrie et al., 2021; Verhoef, 2021).

The panel was selected to comprise academics with expertise in the Multi-, Cross- or Omnichannel topics worldwide. Data collection started in April 2021, and was performed in two rounds by means of an online survey. For the first round, seventeen potential participants were contacted; upon completion of the questionnaire, they were asked to put forward the names of other experts. The second round involved fifteen academics, for a total of thirty-two experts contacted. To encourage participation, the experts were told they would have the opportunity to receive the research outcomes (Li et al., 2011). At the end of the second round, we estimated to have reached saturation, given the emerging topics.

Eighteen experts successfully completed the survey, either in the first or the second round. All of them had past experience in Multi- or Omnichannel (two to ten years) and in retailing generally (eleven to twenty years). They all work in different continents: Europe – Spain, Austria, United Kingdom, France, Belgium, Ireland, Switzerland and Finland –, Australia and New Zealand, United States. As far as their studies are concerned, all experts worked in both B2B and B2C environments, across retailing and consumer behavior. Five of them had published almost exclusively in academic journals, while the others had also written books and editorials for practitioners. Moreover, thirteen experts regularly provide their expertise to manufacturing and retail firms: eight had consulted on specific Multi-, Cross-, or Omnichannel issues including channel integration, in-store customer experience, channel diversification and the development of e-commerce touchpoints. Due to their background, these experts possess the necessary competencies to analyze the bibliometric outputs from Study one and discuss the theories and frameworks identified; because of their professional relations with retailers and practitioners, they are also able to understand their perspective, needs and objectives. Moreover, the overall heterogeneity of their profiles also accounts for fostering different opinions within the panel, which is particularly important in forecasting (Spickermann et al., 2014). Further details about the experts are provided in Appendix B (Table IV).

As for data collection, experts were presented with a web-based administered survey, composed of six sections. Preferred questions were open-ended, as they allowed the respondents to freely express themselves without feeling constrained. In addition, since some questions required a brief and precise answer, the experts were subsequently asked to comment on their short statements and justify them, ensuring a constant focus through the various stages of the journey (Von Briel, 2018).

In the first and second sections, the experts were asked to review a summary of the results that had emerged from Study 1, with a specific focus on research clusters and Omnichannel theoretical underpinnings (e.g., *“Tell us which of the four you think should receive more attention from researchers for better understanding the phenomenon of Omnichannel distribution”*). They were also asked to suggest which theories today could contribute most to the development of this field (*“What are the main reasons why so little theory has been used in the context of Omnichannel research?”*; *“In your opinion, what theories would be so useful in helping to understand and investigate the phenomena related to Omnichannel?”*; *“Do you think that theories need to be developed for Omnichannel research – irrespective of which of the four clusters described above they pertain to?”*). In the third and fourth sections, the experts commented on the most appropriate methodologies and on industries and settings that warranted further attention. In the fifth section, they suggested which topics and research areas academics should focus on (*“What are the most important phenomena/themes/research questions that – from your point of view - need to be researched in the future? And why?”*). Finally, in the sixth section, based on their experience with companies, they provided a list of Omnichannel issues that were most pressing from the practitioners’ perspective (*“Based on your experience with companies across the supply chain, what Omnichannel issues “keep managers awake at night”?”*; *“And which is the most pressing issue that needs solving from a practitioner’s point of view?”*). The questionnaire is provided in full in Appendix B (Table V).

At the end of the two rounds, data were gathered and separately examined by two members of the research group, who also performed a first coding of qualitative data. About 16 pages of qualitative data were analyzed. A third researcher was then involved in solving issues and harmonization; finally, the results were shared and discussed with the research group as a whole. This procedure was chosen in order to ensure the reliability of the research through intercoding (Kolbe and Burnett, 1991).

3.3 – Results

As anticipated, experts were asked to discuss various aspects of Omnichannel. The results are given according to the topics addressed in the questionnaire: validation of the Omnichannel research clusters; theories and theory development on Omnichannel; research designs and settings for future studies; and major challenges and needs of Omnichannel research.

3.3.1 – Validation of Omnichannel research clusters:

The experts were presented with the research clusters that emerged from Study 1, which represent the theoretical foundations of Omnichannel – Consumer Behavior, Strategic Management, Channel Management Issues and Channel Integration – and were asked to choose which of them should receive priority in the post-pandemic society as an area for future research.

Interestingly, eleven experts chose Channel Integration, as it is the key to seamlessness. It is considered a “basis for superior customer value” and “to create long-term sustainable business models”. According to them, Channel Integration embodies the “holistic perspective to Omnichannel marketing” and can be the key to integrating the four research areas. They suggest that “understanding Omnichannel demands seamless, highly integrated approaches” (...) and “academic and practitioner knowledge needs to consider an integrated and holistic approach to the topic”. Future research on this topic is also elicited since “[Integration] is often referred to in vague terms (...) or rarely measured clearly”, thus raising the issue of accurately measuring channel contribution.

Consumer Behavior in Omnichannel environments is considered a “basis for strategy development and/or redesign”, and to “gain a better understanding of consumers’ desires and future expectations”. The experts also suggested that Omnichannel is an interesting setting in which to investigate recent consumer behavior disruptions, such as consumers’ increased reliance on the online and mobile channels and demand for seamless experiences. As pointed out, such behaviors have become even more strategic in light of recent events: “we need to understand what has changed with the pandemic, especially for the young segment”. As for Strategic Management, the experts suggested that “understanding companies’ issues is crucial to provide effective managerial implications”, and that a stronger understanding of companies’ perspectives also has implications for academic research: “understand how management conceptualize the undergoing changes, in order to propose valid theoretical frameworks”. It is noted that, from a strategic point of view, “companies have only a limited understanding of complex customer journeys”. This

condition is considered as particularly true for the stages that – though influential for the purposes of purchasing or developing a long-term brand relationship – are very far from the companies’ touchpoints (either online- or offline-based). Finally, very little attention has been devoted to Channel Management Issues. Many experts consider this as a very narrow topic, that would deserve further attention, as well as the development of conceptual frameworks drawn from actual practice.

Overall, the comments received on the Channel Integration, Consumer Behavior and Strategic Management areas are in line with what emerged from the analysis of theoretical foundations (see Study 1, par. 2.4).

3.3.2 – Need for theory development in Omnichannel:

The experts provided several explanations for the fact that, in the Omnichannel domain, theories are scarcely used, thus confirming our findings (Study 1, section 5). These reasons why can be grouped as follows:

- a. The *recency of the Omnichannel phenomenon*: the rapid and disruptive changes contribute to a quick obsolescence of frameworks, making it difficult to identify a robust and comprehensive model.
- b. The *interdisciplinarity of Omnichannel*, which requires interconnection among different disciplines (the experts suggested HR, information management, business informatics and data analytics), some of which “marketing scholars are not familiar with”. This perspective is in line with the vision of a highly integrated approach to Omnichannel.
- c. The *managerial orientation of Omnichannel*. Since retailing is mostly practitioner-oriented, Omnichannel research is perceived as “very descriptive and operational in nature”, mostly focused on empirical issues.
- d. *Omnichannel as a mere setting*. A few experts suggested that Omnichannel may be a mere condition triggering certain behavior on the consumer side.
- e. *Research design and data collection issues* due to Omnichannel complexity. Researchers may face issues in investigating more than two channels at once and in measuring their integration. Furthermore, it may be difficult to obtain quantitative or qualitative Omnichannel data from companies.

Experts were also asked to comment on the possible need for new theory development. According to six experts, Omnichannel does not need new theories. Existing theories are a perfect fit, on the company side (e.g., Resource-Based View, Transaction Cost Theory, Principal-Agent Theory) as well as on the consumers' side (e.g., Technology Acceptance Model, Goal Theory, Information Processing theories, Congruence Theory). Four of these experts also suggested that it may be too early for the development of dedicated, native, Omnichannel theories, confirming the idea of recency as one of its issues.

The other twelve experts believed that specific theories should be developed for Omnichannel, though adopting different perspectives. Five of them suggested that these theories should emerge from each of the research areas in which Omnichannel is rooted, recognizing that each cluster has a greater depth that could result in viable models. Conversely, the others called for a general theory of Omnichannel that could consider the interactions among all systems and actors involved, leading to “an acknowledged definition of Omnichannel”. For example, one expert recommended holistic research approaches to be adopted “to provide an exploratory and inductive understanding of the complexities of 'Omni'”. Grounded theory approaches are proposed, as well as a focus on social systems (e.g., STC triadic approach) and how they influence individual behavior while being influenced by Omni-settings; another expert suggested that “Omnichannel should be treated as a condition that affect human psychology and decision-making process”.

The lack of consensus on whether Omnichannel needs theories of its own emerging from the experts' opinions confirms the multiple perspectives that could be adopted to address this topic.

3.3.3 – Design and settings for Omnichannel research:

The experts were presented with findings from Study 1 referring to the adoption of methodologies in the Omnichannel domain (par 2.3) and asked to suggest methodologies for future studies. Almost all the experts suggested that qualitative methodologies are preferable for exploring Omnichannel phenomena, given their novelty (In-depth interviews and diary approach, but also netnography techniques); mixed methods were also recommended for a comprehensive understanding of the topic. Among the quantitative methodologies, the researchers suggested field experiments, big data analytics and customer data obtained by companies as valuable methods for investigating Omnichannel “in practice”.

With regard to the research settings, the experts suggested that the following industries should be considered for future Omnichannel research: home furniture, luxury, automotive and personal care. Among services, health services, hospitality and tourism, construction and education were mentioned. The experts also proposed that B2B and C2C relations be analyzed, the latter “since consumers are engaging in Omnichannel selling and purchasing of second-hand goods from each other”. A few experts proposed that a retail business model perspective was more interesting than an industry focus. This is consistent with the recent effort of many companies to develop new business models by integrating or abandoning channels or touchpoints. Experts suggested that “most research has a focus on brick-and-mortar retailers, while pure digital players transitioning to Omnichannel models are of specific interest and scarcely studied.”; a further focus on data was also advocated, as “data is the main unifying aspect of channels, and the biggest difference between newer models and older ones”.

3.3.4 – Major challenges and needs for Omnichannel research:

The experts were asked to cite the most promising directions for future academic research and crucial Omnichannel issues for practitioners. Their suggestions can be arranged into five themes:

a. Evolution of the customer journey:

In Omnichannel contexts, researchers’ attention today should be devoted to understanding the customer journey. Research should include the design and redesign of journeys through the selection and management of touchpoints. The pandemic – and its consequent restrictions – have proven how circumstances can alter customer journeys, even preventing customers from accessing certain touchpoints or channels and forcing them to explore new alternatives. Moreover, as most customer journeys are complex and extended, they may include different actors other than the retailer, and steps such as complaints and returns. Experts point out that “this process (...) from attitude formation to after-sales behavior starts months before an actual purchase and has not really been investigated”. Finally, studying the customer journey is regarded as well-suited for the integration of competencies from different research areas, involving consumer behavior, operations and logistics.

b. Channel-related consumer behavior and experience:

It is crucial for companies to understand how Omnichannel influences consumers, in order to effectively manage the experience it offers. In this context, sub-topics of interest are customer loyalty and engagement, Omnichannel service quality and Omnichannel brand management. The experts noted how free-riding behaviors across channels, such as showrooming, webrooming and the quest for convenient prices, are now widespread, thus eliciting companies to focus on creating value for their customers and establishing long-term relationships with them. The experts suggested further research on purely digital players, to understand how they address customers' needs, which in turn questions the role of physical stores. They raised the question of "what contexts (products, markets, geographic and cultural contexts) enable or constrain good and bad consumer experiences in an Omnichannel world". Studies addressing the Omnichannel consumer experience might try to answer the question: do consumers really need or value Omnichannel? Or, conversely, does becoming Omnichannel for a company necessarily affect consumer perceptions positively?

c. Omnichannel strategy implementation:

Omnichannel companies are facing the challenge of implementing efficient and effective information systems that are crucial for internal and external data management. It is a huge and risky investment. Information systems are intertwined with last-mile logistics and delivery issues; the experts highlighted the extreme complexity of managing operational activities, as well as the need to implement customer satisfaction measurement and achieve a high level of personalization in delivery services. Today, service recovery issues have also become strategic. They should be considered from both the logistic efficiency and the customer experience perspectives, since returns and/or delivery failures can disorient consumers and activate entirely different journeys. Related to the above issues is the emerging need for companies to have constant control over the Omnichannel performance. Specifically, companies should develop metrics dedicated to measuring each channel's contribution to performance, and thus reconsider the internal and external costs of operations. Assessing the economic viability of Omnichannel may lead to the possibility of some companies finding it non-viable or unprofitable. The experts pointed to the challenges of increased competition and related price pressure, which have been further reinforced in this post-Covid period. They described Omnichannel as "a high-transparency context", in which it is difficult to make a profit when prices are being driven down; competing in such a context also requires "huge marketing and management costs for the company's digital presence". Finally, the experts suggested that attention should be paid to the role of channel

partners, and the trade-offs Omnichannel companies must face when deciding whether to outsource or internalize processes.

d. *Human resources management:*

The experts consider the increasing relevance of Omnichannel as an opportunity for an organizational renewal of companies, in a continuous effort to “innovate while maintaining the core business”. Firstly, today Omnichannel calls for the definition of new HR roles. HR contributes to the customer experience and is crucial for the perception of service quality: new skills are required, and companies must accordingly hire or train personnel specifically to accomplish those goals. Secondly, managing HR in an Omnichannel context also means that companies must “balance staff across physical and digital channels, optimizing staff deployment”. The experts also posed the question of which organizational cultures and leadership techniques might be more effective in coordinating and motivating HR to have a positive impact on “omni-success”.

e. *Digital transformation challenges:*

The experts suggested that, while studying the Omnichannel phenomenon, it would firstly be strategic to address issues related to the adopting of new technologies. On one hand, researchers and practitioners need to understand the opportunities and threats of highly transformative technologies such as Artificial Intelligence, Augmented and Virtual Reality, Marketing Automation software and the use of drones in logistics and delivery services. On the other hand, a balance must be found between physical assets and digitalization, as a basis for implementing the “Phygital” business model, as well as between complete integration and complete separation of channels through the Omnichannel continuum. Secondly, it should be noted that information systems – though costly – are fundamental in connecting channels while continuously providing both consumers and companies with updated data. Although information is acknowledged as key in Omnichannel, many aspects of information retrieval on the company’s side and information availability and evaluation on the consumers’ side deserve further investigation (e.g., which information is actually most useful on both sides, which channels/touchpoints and owned/managed by whom are considered as valuable). Finally, the experts mentioned that they considered as critical privacy and legal issues related to technology developments, the possibility of exploiting big data for management and marketing purposes and the increasing role of data science in retailing.

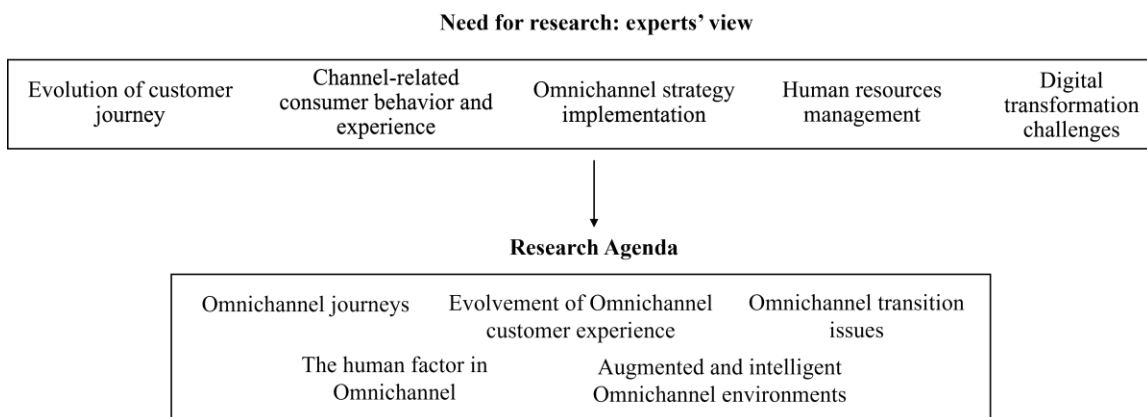
3.4 – Discussion

The survey conducted with the panel of experts shed light on the current status of Omnichannel research. Discussion of the theoretical foundations of Omnichannel and the most promising issues for future research in this domain led to a deeper understanding of the Omnichannel phenomenon and its various constituent elements. Moreover, Omnichannel was found to be a growing and promising field of research.

Concerning Omnichannel in the past, experts reviewed and validated the four-cluster framework originated by the results of Study 1, and agreed on considering the Channel Integration area as the “core” of Omnichannel. They also commented on the theory development issue in Omnichannel: while all confirming the scarcity of theories and suggesting possible explanations, they were divided on the need for further theory development, expressing different points of view. Those who deem new theories necessary also think that new theories rooted in the four different intellectual foundations of Omnichannel are more likely to emerge than a comprehensive, general theory of Omnichannel.

As for Omnichannel in the present and future, and consistent with RQ3, experts shared valuable insights, leading to the identification of five pillars comprising multiple topics as well as the dual perspective of companies and consumers. Based on these five pillars, a research agenda was developed by updating the insights received from experts with the most recent contributions on Omnichannel (Figure 3.1). Relevant research questions are listed and briefly discussed below.

Fig. 3.1 – Insights and implications for future Omnichannel research



The first direction for future research relates to *Omnichannel Journeys*. With the role of the physical store rapidly shifting from point of sale to point of experience, and with the emergence of new online sales channels such as livestream shopping and conversational commerce applications, it will be challenging for companies to understand how to maintain the consistency of their brand identity and value while integrating all the different channels, in order to offer a seamless but authentic experience. Specifically, designing Omnichannel journeys might require companies to develop ongoing interactions and coordination with a substantial number of channel partners and service providers. Despite the benefits related to their expertise in that domain, this is not without risks that also exceed the actual costs. How can companies manage such a complex network of relationships and/or control these partners'/providers' actions? What are the consequences when “the price companies must pay” to be Omnichannel is to relinquish control into the hands of more powerful players (e.g., platforms)? This becomes relevant for all companies, not only small and medium enterprises, since even market leaders may need to rely on other providers' services with a narrow and specific expertise. Given such complexity, on one hand, it would be of primary importance to understand whether a high degree of implemented channel integration is in fact beneficial for all companies. On the other, it should be investigated whether the effects of channel integration might vary across different types of customer journeys (long vs. short journeys; journeys with service failures) and across subgroups of customers (e.g., generational cohorts; brand detractors vs. brand lovers; deal-prone consumers; different cultural subgroups).

In this respect, monitoring *the evolution of Customer Experience* becomes relevant. Specifically, there is a need to explore the longitudinal dimensions of the Customer Experience, to appropriately investigate the role of time in touchpoint exposure. As potentially, all customer journeys could be different, we wonder, for example, if Omnichannel customers display Omnichannel behavior in every situation (either within the same brand or product category and across different shopping contexts). If so, is there an Omnichannel “fatigue” to such an extent that Omnichannel behavior can be abandoned? Are some consumer segments more likely to adopt (or abandon) Omnichannel behavior (e.g. deal-prone consumers) than others? Future studies on Customer Experience should also take into account the influence of the social context, considering that today customers rely increasingly on the so-called “social proof”. For example, in the fashion sector, companies are equipping their fitting rooms with smart mirrors, allowing customers to take high quality pictures of themselves to share on social media in real time; in addition, some stores feature specific advertising to indicate the items of clothing that received more “likes” on Facebook

and Instagram. It is therefore worth further investigating the role of reference groups, and particularly of friends and relatives acting as shopping companions, and how they may influence the experience with touchpoints. These questions are all relevant for understanding how to achieve customer engagement and customer loyalty in Omnichannel.

Thirdly, we suggest focusing on the *Omnichannel transition process and its peculiar issues*. It has become important to understand whether the transition from single channel to Omnichannel is a gradual process that entails going through a multi-channel phase or instead if a direct leap is preferable, and from what perspectives. The answer could differ by considering, for example, the company size, the product category sold by the retailer or the single channel initially chosen by the retailer. It is particularly important to understand whether any barriers and obstacles to the Omnichannel transition are specific or common to bricks-and-mortar retailers and online pure players. More generally, we should consider if it actually pays off in the long term to become Omnichannel, and, in order to do so, how to consistently measure Omnichannel success with reference to the short versus long term. Moreover, from a managerial point of view, Omnichannel is not simply a matter of introducing (or not) certain services (such as BOPS or click-and-collect): it is rather a problem of defining appropriate convenience thresholds in the delivery of these services. What should guide the setting of such thresholds? Besides, Omnichannel is also a matter of the brand transitioning to digital. In this sense, it becomes key to understand how companies can accomplish this while protecting their brand identity from being diluted. A notable accomplishment would be to identify how to measure the alignment between brand identity and brand image in the Omnichannel environment. Companies should also understand when it is beneficial and when detrimental to involve channel partners and service providers in the deployment of the Omnichannel transition. If channel partners are to manage several phases of the customer journey, how can companies display a consistent brand image from the pre-purchase to the after-sale stage?

A fourth avenue for future research is identified in the *human factor in Omnichannel*. This refers to both employees and consumers, who need to be trained in how to navigate the Omnichannel experience. Salespeople and customer service representatives are important human touchpoints that can be leveraged to educate consumers and point them towards taking the company-designed seamless journey. What training and what incentives are most effective in the Omnichannel employee-customer interaction? The human components will be key to enriching the value and social dimension of the customer's experience within a certain channel in order to prevent competitive showrooming or webrooming: is this the case in any channel and setting? The importance of preventing opportunistic behavior by

consumers is substantiated by a few recent studies that address forms of “loyal” showrooming and webrooming, where the shoppers limit their behaviors to the other channels owned and managed by the same retailer/brand. Although researchers have addressed other variables related to retailer, channel and consumer aspects, the influence of salespeople or customer service staff has not yet been investigated. Moreover, as far as customer education about Omnichannel is concerned, the role of content marketing and personalization could be further explored. The latter, defined as “the extent to which a customer perceives that the Omnichannel retailer provides its customers with individualized attention” (Shi et al., 2020), has been considered a fundamental dimension of the Omnichannel experience, influencing long-term customer loyalty.

Finally, the role of technology in the design of augmented and intelligent Omnichannel environments deserves further consideration. The disruption brought by emerging technologies and their increased use by consumers is attracting attention to how Artificial Intelligence and Augmented and Virtual Reality will change the customer journey and the environment in which this takes place. Focusing on the Omnichannel environment requires the adoption of a holistic approach, which takes into account the implementation of new technologies by companies and their adoption by consumers. Special attention should be paid to identifying the dark side of applying new technologies that have the potential to negatively influence consumer privacy and security.

4. STUDY 3 – THE ROLE OF DISTINCTIVE TOUCHPOINTS IN CREATING CHANNEL INTEGRATION PERCEPTION IN OMNICHANNEL ENVIRONMENTS

Results from Studies 1 and 2 have pointed out that Channel Integration is a core feature of Omnichannel, as the basis of seamlessness, allowing consumers to move across touchpoints and channels. In addition, Channel Integration is an issue for both consumers and companies, suggesting it is a conceptual crux, with major implications for company practice. As a consequence, further investigation of Channel Integration is needed to understand consumer behavior in Omnichannel environments, as well as to support the evaluation of whether Omnichannel can be beneficial for companies. In the present study – that we label as “Study 3”, following the future research directions identified in Study 2, Channel Integration is investigated by adopting an Omnichannel Customer Journey perspective (Barwitz and Maas, 2018). In the following paragraph, a synthetic literature review on Channel Integration is provided to introduce the aim of the study as well as the model we propose and test.

4.1 – A synthetic literature review on Channel Integration

Channel Integration can be defined as “the degree to which different channels interact with each other” (Herhausen et al., 2015, p. 310). However, the concept of such interaction has been described differently in management and consumer behavior literature streams. In management, “integration” refers mostly to how channels are connected and provide access to information (Herhausen et al., 2015). Saghiri et al. (2017) point out that Omnichannel systems enable retailers to follow customers across channels and record relevant information about them (i.e., purchase history, in terms of product and customer data). Such knowledge allows retailers to create specific benefits for consumers, based on their shopping preferences (Verhoef et al., 2015), with the final goal of channel sales growth (Cao and Li, 2015). By adopting this perspective, Shi et al. (2020, p. 329) state that Channel Integration is “concerned with aligning information systems and operations at all channels to maintain a unified brand experience”. Conversely, in consumer behavior literature, “integration” is considered as the “extent to which customer perceives all information systems and management operations are unified and integrated well across channels” (Goraya et al., 2020, p. 2). Here, authors have stressed how integration perception could influence customer behavior in many ways. For example, it is debated whether integration makes it easier for

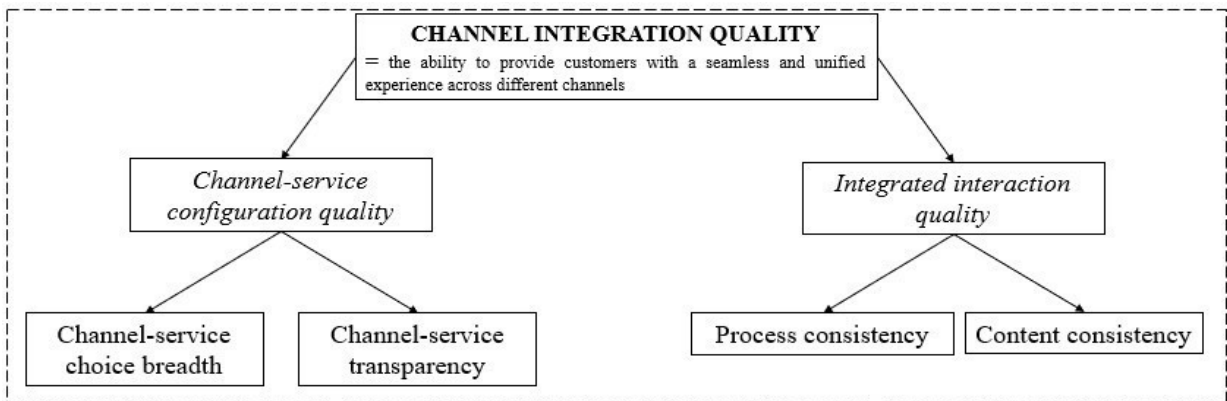
customers to indulge in opportunistic behaviors such as showrooming and webrooming (Schneider and Zielke, 2020; Manss et al., 2020), or whether it promotes inclination and loyalty towards retailers that are perceived as integrated (Flaviàn et al., 2016; Melis et al., 2015). Authors also work to provide retailers with actionable insights on how to manage Channel Integration in order to generate satisfying experiences for customers.

To sum up, Cao and Li (2015) provide a comprehensive definition of Channel Integration stressing its twofold nature: “the degree to which a firm coordinates the objectives, design and deployment of its channels to create synergies for the firm and offer particular benefits for its consumers”.

Traditionally, Channel Integration has been studied with reference to the direction of such integration: online-to-offline or offline-to-online (Swoboda and Winters, 2021a). Not only may the two types of integration involve different types of retailers (e.g., traditional brick-and-mortar retailers vs. digital natives), but they also pose different challenges, such as technological and strategic ones. A clear example of this relates to product availability: online-to-offline integration enabling customers to control the in-store assortment allows them to reduce the perceived opportunity costs before the actual encounter with the product (and the subsequent experience) (Wolny and Charoensuksai, 2014). Conversely, offline-to-online integration, e.g., through self-service information screens in the physical store, reduces the risk perceived by consumers when evaluating product characteristics online (i.e., colors, sizes, materials) (Herhausen et al., 2015).

Moreover, Cocco and Demoulin (2022) point out that Channel Integration in Omnichannel contexts implies several integration processes at different levels: service operations across channels (Cao and Li, 2015, Li et al., 2018); marketing mix elements (Frasquet and Miquel, 2017; Oh and Teo, 2010); logistics, fulfillment, IT planning and data (Mirzabeiki and Saghiri, 2020; Saghiri et al., 2017); and Channel Integration Quality. The latter appears to be particularly important for the key issue of companies willing to operate in Omnichannel environments, that is to maintain brand consistency across the multiple channels and touchpoints into which it is fragmented (Roy and Banerjee, 2014). Channel Integration Quality has in fact been defined as “the ability to provide customers with a seamless and unified experience across different channels” (Sousa and Voss, 2006, p. 365). Building on the model originally created by Sousa and Voss (2006) – see Fig. 4.1 - in a Multichannel retailing context, some authors propose new frameworks to address Channel Integration consistency issue in Omnichannel.

Fig. 4.1 – Channel Integration Quality model



Source: our reinterpretation of Sousa and Voss (2006)

The conceptual model proposed by Sousa and Voss (2006) describes Channel Integration Quality as composed by channel-service configuration quality and integrated interaction quality. The former includes the two sub-dimensions of channel-service choice breadth and channel service transparency. Channel choice breadth refers to the possibility for customers to freely use different channels to access a given service or accomplish preferred tasks. Channel service transparency refers to the degree to which customers are aware of the existence of all available channels as well as their differences in terms of service attributes. The latter – integrated interaction quality – is concerned with process and content consistency, to ensure a unified and consistent experience. Process consistency refers to having relevant and comparable process attributes across channels (e.g., brand attributes, brand image). Content consistency refers to consistent information exchanged with the customer through different channels; for instance, customers should receive the same response when inquiring through different channels, and their interactions with one channel should incorporate any past interactions with other channels (Oh and Teo, 2010).

Recent contributions dedicated to Omnichannel take into account the two dimensions of channel-service configuration and integrated interaction, by investigating the role of information, services offered or both. As regards information, studies have focused on how to provide personalized interfaces and recommendations based on consolidated transaction information (Gao et al., 2021b; Lee et al., 2019); this requires the continuous identification of consumers so as to follow them across channels. In addition, integrated promotion, product and price information should be not only consistent but also able to stimulate cross-channel interactions (e.g., offline advertisements for website-only discounts) (Li et al., 2019). As regards services, some authors test how different levels of service integration may

impact the customer experience (Shen et al., 2018). Quach et al. (2019) suggest that channel-service transparency and process consistency through integrated services can respectively improve the shopping experience and flow, while reducing privacy risks. The model proposed by the authors is concerned mostly with location-based services and marketing. Other more complex models integrate both information and services. Through the social exchange theory, Lee et al. (2019) incorporate the Integration Quality dimensions with customer engagement dimensions, identifying positive relationships between integrated interactions, channel-service configurations and the social connections that connote engagement. Finally, Hossain et al. (2019) have introduced another dimension into the Channel Integration Quality framework, i.e., assurance quality. Assurance quality refers to the trustworthiness of the channel structure, thus incorporating in the framework underlying risks and uncertainty embedded in various aspects of Omnichannel customer journeys. In the words of the authors, assurance quality includes the privacy and security of customers' personal information across online and offline channels as well as the accessibility of service recovery and customer feedback (Hossain et al., 2020).

Table 4.1 summarizes the evolution of Channel Integration Quality by identifying the different models and dimensions proposed through the years.

Tab. 4.1 – Overview of Channel Integration Quality dimensions

AUTHORS	DIMENSIONS
Sousa and Voss (2006); Shen et al. (2018); Lee et al. (2019)	Channel-service configuration quality: channel-service choice breadth and transparency. Integrated interaction quality: process consistency and content consistency.
Banerjee (2014)	Channel-service configuration quality: channel-service choice breadth and transparency; appropriateness of channels. Integrated interaction quality: process consistency and content consistency.
Oh and Teo (2010); Gao et al. (2021b)	Information quality: integrated promotion information; integrated product and pricing; integrated transaction information. Service quality: integrated information access; integrated order fulfillment; integrated customer service.
Quach et al. (2019) Hossain et al. (2019); Hossain et al. (2020); Gao and Huang (2021 – adapted)	Service integration: service consistency and service transparency. Channel-service configuration: breadth of channel choice; transparency of channels; appropriateness of channels. Content consistency: information consistency; transaction data integration. Process consistency: system consistency and image consistency Assurance quality: privacy; security; service recovery accessibility.

Despite the aforementioned quality-based models being predominant in Channel Integration literature, some authors have recently started to challenge this approach, suggesting focus should be shifted to other aspects of Omnichannel environments. Bèzes (2021) points out that the cues that form literal congruence of channels might be different from those that customers actually perceive as congruent. The author suggests that we should not only take into account integrated interactions, but also the perceived characteristics of each channel, attribute by attribute, in order to evaluate the channels' contribution to the overall judgement of congruence. Another notable attempt is that of Bahar et al. (2021), who tested the effect of one touchpoint only – namely, platforms – on integration. Analyzing the hospitality context from a managerial perspective, the authors stress the importance of platforms to enable interactions between firms and customers that would otherwise be impossible or very difficult, and point out that prior work on Channel Integration has focused only on direct and indirect channels in general.

Based on all the above, we notice that research is scarce when it comes to the role of touchpoints in defining the Channel Integration perception in Omnichannel contexts. Touchpoints are a primary component of shopping journeys that, in Omnichannel, customers should perceive as congruent and seamless. According to Verhoef et al. (2015), in fact, optimized levels of integration in Omnichannel should create synergies between all channels and all touchpoints. Our work, therefore, will open this new research direction by exploring the role of touchpoints and by adopting a customer journey perspective while investigating Channel Integration in Omnichannel.

4.2 – Theoretical background and research questions

Study 3 focuses on understanding how touchpoints contribute to Channel Integration, through channel-service configuration quality and integrated interactions. As touchpoints represent, in practice, any interaction between customers and retailers, it is sound to consider them as the embodiment of Channel Integration. The Channel Integration Quality model (Fig. 4.1) includes information and services among its components, and both of these proceed through touchpoints. Herhausen et al. (2019) suggest that information exchange through touchpoints is one of the variables influencing the Customer Experience. Moreover, they identify a specific customer segment (the so-called “extensive segment”) that use different types of touchpoints – with subsequent costs in terms of time and effort – to gain access to more information about products and brands. As regards services, Swoboda and Winters (2021b) identify various online-to-offline and offline-to-online services connecting

channels that are actually delivered through human and automated touchpoints. They point out that, for retailers, it is still a challenge to understand which integration services increase channel quality for customers, with subsequent behavioral outcomes. Finally, Gasparin et al. (2022) promote the adoption of customer-centric perspectives as “essential to unveil the neglected role of perceived connectivity of touchpoints in Omnichannel Journeys” (p. 2).

One of the fundamental questions in the study of touchpoints and the Customer Journey is trying to understand how customers shape their own journeys, considering they have become non-linear, complex and unstructured with Omnichannel (Santos and Goncalves, 2022). Some authors have attempted to map and schematize Customer Journeys by identifying combinations of touchpoints that customers sequentially and frequently use (Lemon and Verhoef, 2016). Use and exposure to different categories of touchpoints have been used as bases for segmentations, thus suggesting the existence of underlying behavioral patterns. For example, Hallikainen et al. (2019) identify four customer segments based on their preferences for functional, social or community touchpoints. Ieva and Ziliani (2018) combine exposure to multiple touchpoints and demographics, identifying six consumers segments that also have different loyalty intentions. At the same time, other Omnichannel shopping studies investigate which motivations and mental mechanisms orient consumers in the choice of touchpoints to interact with. So far, research on motivations for touchpoint choice has proven to be scarce, and mostly involving product category-based differences (e.g., hedonic vs. utilitarian products, or high vs. low involvement) (Flaviàn et al., 2016). Due to the novelty of the Omnichannel context for consumers, some authors have adopted theories such as the Innovation Diffusion Theory (IDT) to understand how customers process and evaluate their touchpoint choices (Shi et al., 2020). Conversely, we rely on Categorization Theory for the present study, which provides a more general, comprehensive explanation of how Omnichannel consumers behave when progressing in their Customer Journeys.

4.2.1 – Categorization Theory

According to the Categorization Theory, consumers use a cognitive scheme to memorize basic information, in order to evaluate new shopping experiences (which may relate to the brand, product, channel, touchpoint, etc.) more effectively (Mervis and Rosch, 1981). In this context, effectiveness is considered as less cognitive effort exerted, since processing new information can be quite stressful for the individual due to its relative novelty. Categorization influences the processes of storage, management and retrieval of information, especially when dealing with potentially overwhelming stimuli. Customers generate primary categories

– so-called “perceptual information” – around exemplar or prototype instances, and they rely on them when organizing the additional information they receive (Cantor, Mischel and Schwartz, 1982). If the existing primary categories are in line with new information, the latter is inserted within a pre-defined scheme through a top-down, assimilation process. Conversely, if primary categories are no longer suitable to interpret new information, the process is one of accommodation. In this case, customers proceed in a bottom-up fashion, leading to a redefinition of the cognitive scheme (Sujan and Bettman, 1989). Normally, such schemes are more complex than the previous ones, as they include the creation of secondary categories able to contain the new information. Regardless of the circumstances, assimilation and accommodation processes are activated on the basis of concrete and abstract cues.

The Categorization Theory has been extensively used in marketing to explain certain choice processes by consumers, given that individuals have an innate tendency to avoid unnecessary effort (Cohen and Basu, 1987). For example, Lee and Ganesh (1999) use product categories and country-of-origin as categories to clarify how customers simplify their purchase choices in international contexts; Lau and Phau (2007) apply categorization in luxury contexts to assess the impact of prestige on brand image and brand personality fit; Liu et al. (2017) rely on this theory to show that aesthetic product design has moderating effects on marketing mix effectiveness.

In retailing literature, the Categorization Theory was first applied to studies of Multichannel environments. When faced with the choice between channels – offline, online, mobile – offering diverse experiences, consumers may develop a form of loyalty for one specific channel. This tendency to remain anchored to that channel is caused by the channel evoking – by association – a unique pattern in the consumer’s mind during the customer journey (Balasubramanian et al., 2005). When visiting the retailer multiple times, new channels may be unconsciously perceived by the customer as new elements of the journey, difficult to be traced back to the pre-existing primary categories and therefore hard to appropriately evaluate. The customer will therefore tend to remain tied to the channel he or she is currently using, in order to reduce the cognitive load originating by evaluating new channels and their related potential opportunities and risks (Balasubramanian et al., 2005).

As far as Omnichannel retailing is concerned, authors stress that it is per se an extremely complex environment for consumers to process. Omnichannel allows multiple choices at each stage of the pre-, mid-, and post-purchase process. Moreover, during their journeys, customers find choices hard to make because of disturbances such as: task complexity (referring to ease of use and usability of the channels/touchpoints available for the specific task, such as search or purchase), trade-off difficulty (related to the possibility for customers

to evaluate pros and cons of a wide number of options in terms of products and brands, available on as many channels), retailer uncertainty (i.e., the perceived ambiguity and riskiness associated with the products and related services offered by the retailer) (Cortinas et al., 2019; Li et al., 2018; Ma, 2016). As a consequence, in a paper recently published in the *Journal of Retailing*, Rahman et al. (2022) suggest that nowadays customers need to develop new and specific cognitive processes for Omnichannel environments.

Following this direction, we therefore suggest that the new processes will be likely based on touchpoints rather than channels, as by definition Omnichannel overcomes the concept of “channel” itself. In the words of Shi et al. (2020), Omnichannel retailing is “a set of integrated processes and decisions that support a unified view (...) from product purchase, return and exchange standpoint, irrespective of the channel” (p. 329). Moreover, by adopting Neslin et al. (2006)’s definition of touchpoint – that is “a customer contact point, or a medium through which the firm and the customer interact” (p. 96) – it is paramount that touchpoints include channels but are not limited to them. Finally, as regards consumer behavior, Omnichannel customers are described as “channel-agnostic, as they use a myriad of touchpoints interchangeably to complete their shopping tasks” (Rahman et al., 2022, p. 3). Juaneda-Ayensa et al. (2015) stress that consumers “no longer access the channel, but rather are always in it or in several [channels] at once” (p. 3). In this study, we therefore rely on the Categorization Theory to justify and test the effect of touchpoints on Channel Integration perception.

4.2.2 – Patronage Intention

Authors have tested a wide range of outcomes attributable to Channel Integration. On the consumer side, several studies have shown that Channel Integration positively affects customer empowerment (Zhang et al., 2018), customer engagement (Gao and Huang, 2021) and customer satisfaction (Rodriguez-Torraco et al., 2020). As regards pay-offs for companies, Channel Integration has been studied as a driver for online and offline customer loyalty (Frasquet and Miquel, 2017), in terms of positive outcomes such as sales growth (Cao and Li, 2015), customer retention (Gensler et al, 2017; Gao et al, 2021a), willingness-to-pay (Herhausen et al., 2015), repurchase intention (Lee et al., 2019) and patronage intentions. As for the latter, Goraya et al. (2020) stress that “although the integrated channel-retailing model is becoming a trend among new age retailers, the patronage it creates among consumers is still not fully explicated” (p. 1). This study therefore aims to further test the relationship between Channel Integration and Patronage Intention.

Emrich et al. (2015) were the first to offer an understanding of the relationship between channel integration and patronage intentions. Their study tests different degrees of integration: findings reveal that full integration of assortment – offering the same assortment in the online and offline channels – may lead to higher patronage intentions by preventing customer confusion and frustration. Zhang et al. (2018) extend these results to other dimensions (such as price, promotion, customer service, and order fulfillment) and suggest that, in Omnichannel integrated contexts, customers' Patronage Intention is triggered by Channel Integration perception. This stems from customers being able to have a clear vision of the collateral benefits provided by online and offline channels, thus increasing their trust and satisfaction towards that retailer.

An interesting perspective on Patronage Intention is that of Chocarro et al. (2013), later adopted by Lim et al. (2022), suggesting that consumers' patronage intention and buying intentions may differ based on situational factors. In the cited studies, such factors are identified, respectively, in the structure of channel integration and in the type of retail outlets. Since this study is concerned with a major situational factor – i.e., the touchpoints encountered by customers during their shopping journeys – we decided to incorporate patronage intention as an outcome of Channel Integration.

As a conclusion, our study focuses on identifying those touchpoints that actively contribute to the generation of Channel Integration perception, with positive outcomes for retailers, that we identify in long-term loyalty through patronage intention. Research questions were then defined as follows:

RQ4. Which are the touchpoints, in the Grocery and Fashion sectors, that actively contribute to generating a positive perception of Channel Integration?

RQ5. Is Channel Integration perception beneficial for companies in terms of a positive effect on Patronage Intention?

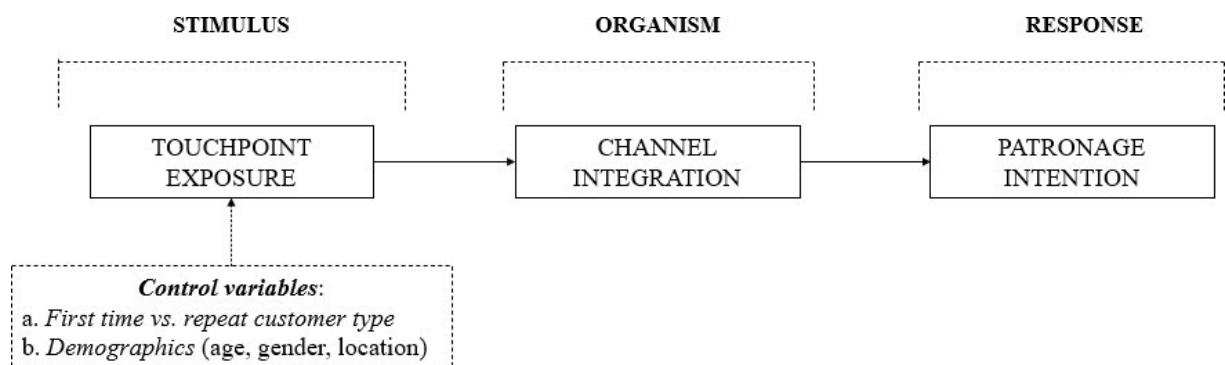
4.3 – Research framework

In order to answer the aforementioned research questions, a framework was developed relying on the Stimulus-Organism-Response (S-O-R) model. The S-O-R model describes relationships among a stimulus (S), the organism (O) – representing consumers' states elicited by the stimulus –, and the response (R), namely the consequent behavior activated by consumers (Mehrabian and Russell, 1974; Belk, 1975). This framework has been extensively used in Channel Integration studies, with Channel Integration assuming the role of either stimulus or organism. To cite some of the most influential examples, Zhang et al. (2018) and Pereira et al. (2022) use Channel Integration as a stimulus, in order to test its effect on customer empowerment in Omnichannel retail environments. Channel Integration Quality studies may use the S-O-R model to test the impact of each dimension on customers' perception of Integration, thus using it as an Organism, as in Hsieh et al. (2012). Nevertheless, to our knowledge, the S-O-R framework has never been used involving touchpoints in the role of stimuli. The closest attempts are studies focusing on the characteristics of specific channels or purchase points: for example, Chang et al. (2014) focus on physical stores and employ all store features, from ambient and design to social characteristics. Since the Stimulus (S) can be any marketing-related factor, it is reasonable to consider touchpoints as such; in fact, many works adopting the S-O-R framework have used environmental characteristics (e.g., e-commerce features, in Mummalaneni, 2005; retail store elements, in Chang et al., 2011). In the present study, as a situational factor, we consider the fact that customers can interact with and be exposed to a wide range of touchpoints during their journeys. In this sense, the availability of multiple touchpoints – especially when managed directly by the retailer – is considered as part of the environmental context in which customers shop. In literature, the Organism (O) comprises not only affective or cognitive states, such as satisfaction and pleasure, but also perceptions triggered in consumers' minds (Bagozzi, 1986). In this study, we consider Channel Integration as the Organism, as we want to test whether touchpoint exposure can enable an Integration perception. Finally, the Response (R) is any behavior displayed by consumers, elicited by perceptions and states, such as purchase intention (Kim and Lennon, 2013) or repurchase intention (Chopdar and Bakakrishnan, 2020). Following Cheah et al. (2020), in our model, we use patronage intention as the response.

The proposed model is presented in Fig. 4.2, and features two main effects: the effect of touchpoint exposure on Channel Integration perception, and the effect of Channel Integration perception on patronage intention. The rationale is that frequency of use of certain stimuli – namely, touchpoints – generates a perception of higher Channel Integration within the organism, which in turn provokes a positive response in terms of patronage intention towards the retailer.

Touchpoint exposure was chosen following previous research demonstrating that it can influence brand awareness (Yaveroglu and Donthu, 2008) and brand consideration (Baxendale et al. 2015) thus generating future loyalty outcomes. Moreover, different touchpoint exposure has been shown to have an effect on customer loyalty (Ieva and Ziliani, 2018). Those studies, however, aimed to identify touchpoint exposure patterns or to test its direct effects on customer behaviors. By adopting the S-O-R model, we instead test a mediation effect by the organism, namely, Channel Integration. Baxendale et al. (2015) showed how, after the encounter with touchpoints, customers develop emotional states that remain in their memories and may influence future brand evaluations. This is also consistent with the Categorization Theory we use, as the information related to touchpoint exposure is saved and later used to assess future journeys. In this study, we suggest such information may specifically affect the perception of Channel Integration – and, indirectly, the perception of the retailer, resulting in future patronage decisions. Moreover, we explicitly distinguish between touchpoint exposure – corresponding to the encounter rate of customers with the touchpoint – and any personal preference that customers might develop (Baxendale et al., 2015).

Fig. 4.2 – Touchpoint-Integration-Patronage Intention framework



Furthermore, in studying touchpoints in Omnichannel contexts, it is also important to stress that customers are – or should be – free to create their own journeys by visiting the touchpoints they prefer or deem more useful for their needs. Many variables can in fact influence customers' touchpoint choices. Among those most investigated we found: the stage of the shopping process, the goals related to the shopping process, preferences, and even the time of day or the product category (Cook, 2014; Goraya et al., 2020; Piotrowicz and Cuthbertson, 2014).

Swoboda and Winters (2021b) stress how it is important to investigate different industries and contexts, as they show that shoppers may display different touchpoint preferences: for example, fashion shoppers value touchpoints and services allowing online-to-offline interactions, such as click-and-collect and return services. We decided to focus on the effects involving both product and customer characteristics, by incorporating the following effects into our study.

4.3.1 – The product category effect: convenience vs. shopping goods

Studies on customer involvement point out that customers' decisions-making processes substantially differ based on the product category (e.g., Simonson, 1993; Kushwaha and Shankar, 2013). Typically, convenience goods are associated with lower price, complexity, perceived risk and importance, compared to shopping goods (Holton, 1958). Consumers will therefore be cognitively and emotionally involved in a different manner throughout their decision-making process (Santos and Gonçalves, 2022) by this category. From a Customer Journey perspective, when buying convenience goods, customers will favor the simplest and fastest option, with little motivation to indulge in extensive search; conversely, shopping goods will usually require customers to consider and evaluate alternatives, in terms of products and brands (Reinartz et al., 2019).

This study was conducted on the grocery and fashion sectors, as the products concerned with these industries respectively fall under the definition of “convenience” and “shopping” goods. Consistently with the Categorization Theory, we consider that customers' choices would be different in terms of the cognitive load affecting the decision process, regarding touchpoints and channels choices, as well as associations and evaluation processes.

4.3.2 – The loyalty effect: first-time vs. repeat customers

Literature identifies extensive differences among customers, especially first-time and repeat customers. The latter appear as more prone to make future purchases from the brand/retailer than first-time customers and will be persuaded more easily by the brand's marketing actions (Petrick, 2004; Woodside and Walser, 2007). Other differences in behaviors have been related to the attractiveness of specific channels' features, with a major focus on online environments (Tractinsky and Lowengart, 2007, about web-store aesthetics). Regarding loyalty and customer satisfaction, Brunner et al. (2008) point out that, as customers gain positive experiences over time, satisfaction is cumulated so they will be less likely to abandon the retailer in case of service failures; conversely, first-time customers having negative experiences might never return. Specifically, the authors stress how past experiences are assimilated and later used as a buffer to evaluate future ones. Similarly, Wolter et al. (2019) indicate that a new customer's initial opinion of the organization can act later as an amplifier in the event of a service failure.

When investigating customer behaviors of first-time and repeat customers, the Information Processing theory is often used to interpret differences in their choice processes.

The Information Processing theory states that individuals have limited information processing capacity, with direct consequences on their decision-making processes (Miller, 1956). As a consequence, during the search and purchase stages of their journeys, customers might focus on a subset of information, thus ignoring other relevant information. Information processing capacity is influenced both by the quality and quantity of information and by how the information is shared, urging retailers to identify effective ways to communicate with customers (Gao et al., 2012). Consistent with Categorization theory, we suggest that first-time customers approaching a retailer's touchpoints will interact with them in a different manner compared to repeat customers. Due to limited information processing capacity, they may easily focus on less information, thus missing various facets of the retailer's offer, with consequences on the perception of Channel Integration. Xu and Jackson (2019) demonstrate that Channel Integration can reduce customers' concerns about retailer uncertainties, across channels and touchpoints. As such, it is reasonable to hypothesize that consumers will adopt those touchpoints that allow them to perceive higher integration in their future visits to the retailer. This would be more efficient for them, since complex environments cause confusion and further limit their ability to process and perceive information (Schick et al., 1990). This would in turn enable them to focus on other information. We therefore compare first-time and repeat customers to understand how touchpoint exposure may have a different impact on Channel Integration perception over time.

4.3.3 – Control variables: demographics

Finally, we decided to include socio-demographic variables, as previous studies already reported effects influencing the choice of interaction sequences along the customer journey (Konus et al., 2008; Yu et al., 2011). Various studies show that age and gender may affect touchpoint preference, either overall (Ieva and Ziliani, 2018; Lemon and Verhoef, 2016) or with reference to specific sectors (Blázquez, 2014). As regards touchpoint reach, however, results from previous studies are mixed. For example, in Romaniuk et al (2013), a relationship was found between age and media touchpoint reach, whereas gender does not influence touchpoint reach. Other studies, such as Baxendale et al. (2015), find that touchpoint reach can be negatively correlated with age, in the cases of brand advertising and word-of-mouth. Age and gender were therefore included in this study, in order to identify whether significant differences exist when it comes to touchpoint exposure and Channel Integration perception. A third demographic control variable was added to include the effect of geographical location – namely, place of residence.

4.4 – Methodology

We applied multiple regression integrated with a Multiple Correspondence Analysis (MCA) for assessing the first effect; namely the impact of touchpoint exposure through frequency on Channel Integration. MCA is an extension of correspondence analysis to more than two variables at once (Greenacre and Blasius, 2006). This technique, applied to categorical variables, identifies a number of latent orthogonal dimensions that allow the researcher to obtain a lower number of variables, equal to the rank of the data matrix (Kaciak and Louviere, 1990). In the present study, the need emerged to control for customers' preference towards specific touchpoints – which we included in the model (Fig. 4.2) as a proxy of interaction quality. MCA has been used to reduce the existing dimensions of the “preference for touchpoints”, modeled as a series of categorical dummy variables (23 for the grocery sector and 28 for the fashion sector, given the differences between the two industries in terms of touchpoint adoption and diffusion). Dimensions emerging from the MCA were chosen, for both sectors, under a 70% variance explained criterion (Greenacre, 1993), resulting in 2 dimensions for the grocery sector and 4 for the fashion sector. Furthermore, the regression was performed by using clustered standard errors. Since touchpoint exposure is partially dependent on the retailer making touchpoints available to consumers, we controlled touchpoint variability through the Retailer variable.

The second effect, representing the relationship between Channel Integration and Patronage Intention, was measured through covariance-based Structural Equation Modeling (SEM) by means of the statistical software Lisrel 8.8 (Byrne, 2013) based on linear structural relations. The maximum likelihood (ML) method of estimation was adopted. Before running the model, preliminary Exploratory Factor (EFA) and Confirmatory Factor (CFA) analyses were conducted.

4.4.1 – Data collection

To test our proposed model, we collected data on two samples of Italian consumers, through a leading consumer panel market research company. Each of the samples was asked questions about one sector only, in order to focus the participants' attention on a well-defined experience. Research on the grocery sector was conducted on the first sample (Sample 1), whereas research on the fashion sector was conducted on the second sample (Sample 2). In order to ensure that the participants could offer reliable behavioral data, we asked them to refer to the retailer they had bought more frequently from in the past 6 months. To facilitate the task, consumers were provided with a list of all major Italian retailers operating in the grocery and fashion sectors, respectively. Due to the lower frequency of purchase in the fashion sector, for Sample 2 we also ensured that customers had purchased fashion items – for themselves and/or for their family members – in the last 6 months and excluded those who had not. The questionnaire has been provided in Appendix C, Tables VI-VII; please note that, having been handled by a professional panel service, it is an excerpt of a wider survey that also investigated other topics.

The samples were purposefully built to be representative of the Italian population. The selected panel members for Sample 1 and 2 were invited to respond to an online survey. Data were collected in September 2021. A total of 2,071 questionnaires were collected. After excluding unfinished questionnaires, 1,031 valid responses were obtained for the grocery sector, and 759 for the fashion sector. Table 4.2 summarizes the characteristics of both samples.

Tab. 4.2 – Sample demographics

Measure	Category	Sample 1 (Grocery) Frequency	Sample 1 (Grocery) Percentage	Sample 2 (Fashion) Frequency	Sample 2 (Fashion) Percentage
Gender	Male	400	38.8	265	34.9%
	Female	631	61.2%	494	65.1%
Age	20-29 years	32	3.1%	15	2.0%
	30-39 years	146	14.2%	130	17.1%
	40-49 years	229	22.2%	182	24.0%
	50-59 years	244	23.7%	202	26.6%
	60-69 years	195	18.9%	137	18.1%
	70-79 years	148	14.4%	70	9.2%
	80-89 years	37	3.6%	23	3.0%
Education	Middle-school degree	37	3.6%	31	4.1%
	High-school degree	159	15.4%	122	16.1%
	University degree	835	81.0%	606	79.8%
Income/Affluency	Low	204	19.8%	154	20.3%
	Below average	289	28.0%	219	28.9%
	Above average	307	29.8%	241	31.8%
	High	231	22.4%	145	19.1%

4.4.2 – Measurement

The effect of touchpoints was measured through frequency – i.e., how many times customers encountered the touchpoint – along the line of Baxendale et al. (2015). Customers were provided with a list of touchpoints and asked to indicate the frequency to which they encountered each of them (7 points self-anchored scale, from “never” to “often”). The touchpoint list was based on Wind and Hayes (2016) and Herhausen et al. (2019), as well as integrated with industry practice (Table 4.3).

Tab. 4.3 – Touchpoints' lists adapted for the grocery and fashion sectors

Grocery sector Touchpoints	Fashion sector Touchpoints
Advertising on TV, radio, newspapers, billboards	Advertising on TV, radio, newspapers, billboards
Physical store	Physical store
Offline Word-of-Mouth	Offline Word-of-Mouth
Online Word-of-Mouth	Online Word-of-Mouth
Retailer's Facebook or other social media pages	Retailer's Facebook or other social media pages
Google searches or online advertising	Google searches or online advertising
Mobile App	Mobile App
Website	Website
Cashier and in-store staff	Cashier and in-store staff
Loyalty Program and special promotions	Loyalty Program and special promotions
Printed promotional flyer	Printed promotional flyer
Digital promotional flyer	Digital promotional flyer
Email / Newsletter	Email / Newsletter
Printed communications by post	Printed communications by post
Printed coupons of the brand / store	Printed coupons of the brand / store
Digital coupons of the brand / store	Digital coupons of the brand / store
Customer Service	Customer Service
Home delivery staff (for orders placed online)	Home delivery staff (for orders placed online)
Order picking in-store staff	Order picking in-store staff
Retailer's gift cards	Retailer's gift cards
Online games and sweepstakes	Online games and sweepstakes
Retailer's magazine	Clothing or shopping bags from this brand/shop worn by friends, relatives, acquaintances or strangers
Other	Sales of clothing from this brand/store via live streaming on social networks (e.g., Instagram) or ad hoc platform
	Video content published on other social media or websites than the retailer's
	Digital promotional billboards during sport events
	Bloggers and experts promoting the brand/retailer on social media
	Phone messages (SMS)
	Other

We also collected consumers' preference to interact with each specific touchpoint, as a dummy variable. The scale to measure Channel Integration was adapted from Zhang et al. (2018) and Goraya et al. (2020); Patronage Intention items were adapted from Kim et al. (2008). The reliability and validity of the questionnaire were verified at both item and construct levels, by calculating factor loadings and Cronbach's Alpha, respectively; in addition, composite reliability and average variance extracted (AVE) were assessed by conducting a factor analysis with the principal component method and Varimax rotation. Constructs and measurement items are provided in Table 4.4. The internal consistency and composite reliability values are above the required 0.70 threshold (Nunnally, 1978); at item level, the factor loadings of each item also show values above the recommended 0.70 threshold (Gerbing and Anderson, 1988). The average variance extracted (AVE) is greater than 0.50, thus ensuring the scale's convergent validity.

Tab. 4.4 – Construct reliability and validity measures

Grocery sector = Sample 1, n = 1.031				
Constructs and Items	Factor Loadings	Cronbach's Alpha	Composite reliability	Average Variance Extracted
<i>Channel Integration</i>		0.802	0.857	0.547
I can find consistent promotions and advertisements in the retailer's physical store, website and mobile app.	0.728			
I can find consistent assortment and prices in the retailer's physical store, website and mobile app.	0.714			
I can find product descriptions and check the retailer's inventory status at the physical store through its website or its mobile app.	0.796			
I can redeem the retailer's gift coupons, vouchers or loyalty points in its physical store, its website or its mobile app.	0.701			
I can return or exchange products purchased online in the retailer's physical store.	0.778			
<i>Patronage Intention</i>		0.891	0.927	0.810
I am likely to purchase the products(s) from this retailer	0.935			
I am likely to recommend this retailer to my friends	0.841			

Fashion sector = Sample 2, n = 759				
Constructs and Items	Factor Loadings	Cronbach's Alpha	Composite reliability	Average Variance Extracted
<i>Channel Integration</i>		0.856	0.891	0.621
I can find consistent promotions and advertisements in the retailer's physical store, website and mobile app.	0.804			
I can find consistent assortment and prices in the retailer's physical store, website and mobile app.	0.745			
I can find product descriptions and check of the retailer's inventory status at the physical store through its website or its mobile app.	0.856			
I can redeem the retailer's gift coupons, vouchers or loyalty points in its physical store, its website or its mobile app.	0.786			
I can return or exchange products purchased online in the retailer's physical store.	0.786			
<i>Patronage Intention</i>		0.899	0.931	0.818
I am likely to purchase the products(s) from this retailer	0.938			
I am likely to recommend this retailer to my friends	0.859			
I am likely to make another purchase from this retailer if I need the products that I buy	0.943			

Finally, to test for common method variance among the variables, we used the one-factor analysis following Harman's single-factor test. We subjected our measures to an un-rotated exploratory factor analysis (EFA). Results show that a single constrained factor accounted for only 29.9% of the variance in the grocery sector, and for only 34.6% of the variance in the fashion sector. Since both indexes are lower than the 50% threshold (MacKenzie and Podsakoff, 2012), we conclude that common method bias should not be considered an issue in our study.

4.5 – Results

The results are presented in two parts. Firstly (section 4.5.1), we focus on the multiple regression conducted at touchpoint level, to show and discuss which touchpoints are significantly related to Channel Integration perception, for the two sectors. In the second part (section 4.5.2), we focus on the structural equation modeling (SEM) analysis conducted on the relationship between Channel Integration and Patronage Intention towards the retailer, and we show that a positive effect of integration on the latter.

4.5.1 – Touchpoints exposure and Channel Integration

In response to RQ4, we find that exposure to certain touchpoint – in terms of frequency – has a positive or negative effect on Channel Integration perception. Moreover, the touchpoints that are significant for the perception of Channel Integration are different across industries, and of different numerosity. Table 4.5 reports the regression results conducted on Sample 1 and Sample 2.

Tab. 4.5 – Multiple regression results for grocery and fashion sectors: standardized beta coefficients

Grocery sector = Sample 1, n = 1,031			
Touchpoints	Regression Beta Coefficients	t-values	P > t
Mobile App	0.335	3.56	0.004
Loyalty Program	0.585	4.39	0.001
Email / Newsletter	0.345	2.35	0.039
CV: Location	-0.524	-2.66	0.022
Fashion sector = Sample 2, n = 759			
Touchpoints	Regression Beta Coefficients	t-values	P > t
Website	0.961	4.47	0.001
Loyalty Program	0.728	4.23	0.001
Email / Newsletter	0.483	2.35	0.039
Digital coupons of the brand/store	-0.384	-2.34	0.039
Order picking in-store staff	0.698	3.21	0.008

In the grocery sector, we identified three touchpoints that are positively significant: the retailer's mobile app (0.34), loyalty program (0.58), and communications via email or newsletter (0.34). In the fashion sector, five touchpoints are significant, four of which positively: the retailer's website (0.96), loyalty program (0.73), communications via email or newsletter (0.48), and in-store staff in charge of picking orders placed online by customers (0.70). The digital coupons of the brand/store are negatively related to Channel Integration perception (-0.38), suggesting that the monetary incentive customers receive might steer their attention towards considering the retailer's prices rather than its integration.

As regards purchase touchpoints, the more impacting ones for Channel Integration perception are the mobile app for grocery and the website for fashion. The near total absence of offline touchpoints, with the sole exception of the store order picking staff for the fashion sector, is striking, since the redesign of stores as Omnichannel hubs is a hot topic with retailers, as described in recent literature (Piotrowicz and Cuthbertson, 2014; Alexander and Blazquez Cano, 2020). As for the control variables, no variable is significant for Channel Integration in the fashion sector, whereas for the grocery sector the geographical location is negatively related (-0.52) to integration perception. This phenomenon might be related to grocery retailers being unevenly distributed throughout the country; therefore, respondents may be located in specific areas where the choice between retailers is limited and traditional, single-channel retailing is still common.

Differences in significant touchpoints were also identified within sectors when distinguishing between first-time and repeat customers. Tables 4.6 and 4.7 show results for the grocery and fashion sectors, respectively.

Tab. 4.6 – Multiple regression results for first-time and repeat customers in the grocery sector

Repeat customers, n = 813			
Touchpoints	Regression Beta Coefficients	t-values	P > t
Retailer's Facebook or other Social Media Pages	-0.340	-2.64	0.023
Mobile App	0.366	2.87	0.015
Loyalty Program	0.594	4.22	0.001
First-time customers, n = 218			
Touchpoints	Regression Beta Coefficients	t-values	P > t
Digital promotional flyers	0.623	2.60	0.025
Mobile App	0.859	2.25	0.046
Retailer's gift cards	-1.12	-4.42	0.001

In the grocery industry, the retailer's mobile app is the only touchpoint able to create a Channel Integration perception for both first-time (0.86) and repeat customers (0.36). Repeat customers also gain a higher perception of integration from the loyalty program (0.59). The Loyalty program is non-significant for first-time customers, who in all probability have not yet grasped all the advantages of membership, nor attained any reward, as this usually requires time and a series of interactions to accrue. Repeat customers have a negative perception of Channel Integration from the retailer's social media pages (-0.34); this could be linked to the fact that these pages tend to be used for very general communication to support brand building and corporate image. Retailers might reconsider their approach and test the creation of multiple social media pages, each dedicated to and managed by individual stores. This practice arose during the pandemic years, as local stores in some sectors started to offer click&collect or home delivery services and needed to communicate that to local audiences (Rapp et al., 2013). Finally, concerning first-time customers, we found that gift cards are negatively significant (-1.12) for the perception of Channel Integration. We suggest that customers might be "blinded" by the monetary incentive and focus on it, rather than feel, evaluate and interiorize other aspects of the retailer. The importance of price and value for first-time customers is also stressed by the significance of the digital promotional flyer, that, however is also positively related (0.62) to Channel Integration. Compared to gift cards, digital flyers are more information-rich and allow customers to receive consistent information on the in-store assortment and prices through a different, digital touchpoint.

Tab. 4.7 – Multiple regression results for first-time and repeat customers in the fashion sector

Repeat customers, n = 551			
Touchpoints	Regression Beta Coefficients	t-values	P > t
Clothing or shopping bags from this brand/shop worn by friends, relatives, acquaintances or strangers	0.609	2.85	0.016
Website	1.13	6.51	0.000
Digital promotional billboards during sport events	-0.916	-3.00	0.012
Loyalty Program	0.823	7.68	0.000
Order picking in-store staff	0.663	2.19	0.051
First-time customers, n = 208			
Touchpoints	Regression Beta Coefficients	t-values	P > t
Sales of clothing from this brand/store via live streaming on social networks (e.g., Instagram) or ad hoc platform	-0.918	-3.33	0.007
Website	1.06	2.49	0.030
Loyalty Program	1.36	3.76	0.003
Digital coupons of the brand/store	-0.664	-2.85	0.016
Order picking in-store staff	0.949	2.65	0.023

In the fashion sector, the mobile app is non-significant; the touchpoints that create a Channel Integration perception for both first-time and repeat customers are the website (1.06 and 1.13) the loyalty program (1.36 and 0.82), and in-store order picking staff (0.95 and 0.66). As for the loyalty program, these results further support its role as a fundamental touchpoint for retailers, allowing customers to explore and perceive the company advantages across channels. The presence of the website as an important touchpoint for both customer types suggests that fashion retailers have managed to make their websites attractive and rich in omnichannel services, and should encourage their customers to continue visit the online channel. Although the sector has lagged behind for many years on online channel adoption, due to the idea that fashion products needed to be touched and tried on for consumers to purchase them, in recent years major fashion brands have in fact invested in developing highly technological and interactive websites (Baker et al., 2018). For repeat customers, to see clothes or shopping bags from the retailer being worn by other customers is positively related to Channel Integration (0.61). In the fashion sector, the “social proof” phenomenon – i.e., involving friends and relatives or members of a social media community in one’s clothing purchases – is widespread, especially for the younger generations (Martensen et al., 2018). We therefore suggest that the encounter with branded products and merchandising

across different contexts and channels reinforces the perception of the retailer's brand as ubiquitous. Last but not least, for repeat customers, the encounter with digital billboards during sport events is negatively related (-0.92) to Channel Integration. These communication activities, not directly related with what the retailer can offer in terms of shopping experience and customer services, may be beneficial for reinforcing brand values or widening its reach among masses. However, they do not contribute to creating a Channel Integration perception, similarly to what we discussed above for social media pages used as traditional “broadcast” media. Similar considerations can be made for another negatively related touchpoint impacting on first-time customers’ perception: sales of clothing via live streaming on social networks or ad-hoc platforms (-0.92). During such activities, customers’ attention is diverted from the brand they are going to purchase in favor of the streamer-seller performing the live stream. First-time customers may encounter the brand because they are drawn to the streamer-seller’s personality, appeal and interactivity (Chandruangphen et al., 2022); however, they do not feel a consistent link between the live streaming they are experiencing and the retailer itself. The fact that live streaming commerce is non-significant for repeat customers – in line with the categorization theory – suggests that these customers have gone way beyond that, perceiving the streamer and the retailer as two separate identities. The final insight for first-time customers is the negative perception of integration related to digital coupons of the brand/store (-0.66), a result in line with what emerged from the grocery sector. Similarly to gift cards for grocery first-time customers, digital coupons also are a major monetary incentive that focus customers’ attention on the channel they are purchasing from (namely, online, as most retailers only allow online redemption for digital coupons). These findings suggest that the role of strictly “promotional” touchpoints (i.e., touchpoints whose focus is to deliver a monetary incentive-price promotion) such as print and digital coupons and gift cards “obscures” the retailer’s effort to be perceived as integrated. Research and testing could explore what happens when these promotional touchpoints are used to make a monetary incentive available in a different touchpoint, e.g., a digital coupon that can only be used in-store, or an in-store promotion that can be used for online purchases only.

4.5.2 – Channel Integration and Patronage Intention

In response to RQ5, we analyzed our structural model to assess whether Channel Integration has a positive effect on Patronage Intention. As for fit criteria, the model shows a good fit to the data for both the grocery and fashion sectors (Byrne, 1994; Fan et al., 1999). For grocery, the suggested fit criteria are $C \chi^2 = 322, 26, df = 19, p < 0.001$. Fit indices are also within optimal ranges: goodness-of-fit index (GFI) = 0.93, adjusted goodness-of-fit index (AGFI) = 0.86 and comparative fit index (CFI) = 0.94. For fashion, the suggested fit is $C \chi^2 = 132.22, df = 19, p < 0,001$ and the fit indices are, respectively, GFI = 0.96, AGFI = 0.92 and CFI = 0.98. As for discriminant validity measures, we computed Root Mean Square Residual (RMR) and Standardized Root Mean Square Residual (SRMR). RMR is 0.24 for grocery and 0.15 for fashion; usually, the standardized measure is preferred because it's easier to interpret. In both sectors, SRMR is below the 0.08 threshold: 0.061 for grocery and 0.043 for fashion.

The root mean square of approximation (RMSEA) is 0.12 for grocery (90% confidence interval: 0.10-0.13) and 0.089 for fashion (90% confidence interval: 0.075-0.10); both values are higher than the traditionally used 0.08 cut off for this badness-of-fit measure. However, it should be observed that researchers have suggested 0.10 as a better cut off for models (Kenny, Kaniskan and McCoach, 2014), on the basis that – depending on how the sample is built –RMSEA might be even greater than that. RMSEA is also very sensitive depending on the degrees of freedom and the number of variables (Kenny and McCoach, 2003). Specifically, RMSEA improves as the degrees of freedom are high with respect to the sample size and as more variables are added to the model. Shi et al. (2019) stress that “a higher p [number of variables] was associated with lower values of the population RMSEA regardless of the type of model misspecification”, which is consistent with this case. According to these sources, and in consideration of the optimal values of the other fit criteria, we consider the obtained RMSEA to be acceptable.

The estimation of the standardized path coefficient for Channel Integration on Patronage Intention is 0.34 for both sectors, with t-value 9.66 for grocery and 8.57 for fashion, which indicates a good robustness of the model. We therefore show that there is a positive effect of Channel Integration on Patronage Intention, regardless of the product type (convenience vs. shopping product). Path diagrams for CFA and SEM are presented in Appendix C.

4.6 – Discussion

Our study investigated the relationship between touchpoints and Channel Integration in Omnichannel settings. Empirical results provide causal evidence that touchpoints do play a role in the perception of Channel Integration. This is tied to touchpoint frequency – i.e., the measure of the encounter rate between customers and touchpoints – and touchpoint preference – i.e., a proxy of the quality of these encounters. Moreover, results show that different touchpoints generate Channel Integration perception in different sectors and, within the same sector, between different consumer targets. On one hand, this can be related to the touchpoints offered by retailers operating in that sector and to the quality of their interaction with customers. On the other hand, since we controlled for these variables in our model, we conclude that this is related to how each of these touchpoints are processed in consumers' minds. Our study also showed that consumer perceptions of Channel Integration were positively related to Patronage Intention, which is consistent with previous studies (e.g., Zhang et al., 2018).

Bèzes stresses the need for future research “to deepen the knowledge of the psychological mechanisms that activate and build Omnichannel Integration” (2021, p., 913). Following this call, we focus on Categorization Theory, and our study provides support for its use to explain cognitive processes in integrated Omnichannel settings. Due to their limited cognitive resources, customers are drawn to stimuli that allow them to simplify their choices. Rahman et al. (2022) stress that, for customers, it is very difficult to perceive and process a retailer's channel to its full extent. Bèzes (2021) suggests that perceived congruence – a dimension of Channel Integration – is subjective, cumulative and selective with respect to channel characteristics. In our model, touchpoints represent these stimuli, as they are a fundamental component of customer journeys that customers can freely choose and use to move around Omnichannel environments. Customers receive greater perception of Integration from those touchpoints that allow them to gather information about the company as a whole, including products and services offered on the various channels it manages. This is supported by the differences we identified between first-time and repeat customers, within sectors. For first-time customers, touchpoints offering greater perception of Integration may encourage them to return, allowing them to perceive a variety of alternative services and experiences the retailer can offer. Conversely, return customers have gained a broader understanding of the retailer – for example, by subscribing to its loyalty program –, thus making contact with new touchpoints. These processes occur on the basis of pre-existing mental categories and journeys they already processed.

Subsequent managerial implications are twofold. Firstly, the methodology pinpoints specific touchpoints that retailers can leverage to promote the perception of Channel Integration, even on different targets. Our approach can therefore be adopted by retailers as an empirical methodology to understand which of their touchpoints are more impactful on customers' Integration perception – which, as shown, in turn has a positive effect on Patronage Intention. Identifying them would allow retailers to allocate resources better, prioritizing investments in these touchpoints and promoting their usage among consumers. Secondly, specific marketing strategies involving these touchpoints should be created, as we show that different customers – we investigated first-time and return customers – may react differently to the same touchpoint within the same sector.

The study is not without limitations. Firstly, data was collected by means of a consumer panel survey. Although surveys have been used before for academic studies involving touchpoint exposure (e.g., Romaniuk et al., 2013; Ieva and Ziliani, 2018, Bolton et al., 2022), it might be difficult for consumers to recall their encounters with touchpoints. Secondly, the consumer sample is representative of the Italian population; to improve the generalization of our results, the framework might be tested in other countries, for example Mishra et al. (2021) call for studies comparing Omnichannel consumer behavior in developed and developing countries. Thirdly, in our study we measured touchpoint exposure and controlled for customers' touchpoint preference, but did not distinguish between touchpoints according to the existing categorizations. For example, Lemon and Verhoef (2016) distinguish them according to the pre-purchase, purchase or post-purchase stage of the customer journey and to the entity managing and controlling them (brand owned, partner owned, customer owned or social/external). While we only ensured that the encounter between the customer and the touchpoint occurred, future studies might verify when this occurred and whether the customer is conscious of its ownership and if this makes any difference on the perception of channel integration. Finally, our method only investigated the impact of one touchpoint at a time on Channel Integration. As pointed out by Tueanrat et al. (2021), “there is no definite procedure to collect touchpoint data and map a journey (p. 342)”; nevertheless, it would be interesting to understand whether combinations of touchpoints – as occurs in real customer journeys – have an impact on Channel Integration. In this sense, this limitation also represents an opportunity for developing future studies in this area of key importance to Omnichannel. Other future research directions will be discussed in the next chapter, which presents conclusions from the three studies presented in this thesis.

5. CONCLUSIONS

The aim of this thesis was to develop a greater understanding of the Omnichannel phenomenon in retailing, since, despite the major academic interest in the topic, a comprehensive definition and framework is still lacking. Through our three studies, we were able to provide a theoretical framework of Omnichannel, unveiling its foundations, to identify gaps and areas for future research, and to advance research on Channel Integration, which emerges as the core element of Omnichannel itself.

Table 5.1 summarizes the steps and methodologies adopted in the three studies, offering an overview of the overall research design:

Tab. 5.1 – Research design overview

Study 1: Systematic literature review	<ul style="list-style-type: none"> • Selection and identification of papers; • Bibliometric descriptive analyses; • Co-citation analysis; • Content analysis on identified research clusters.
Study 2: Discussion with field experts	<ul style="list-style-type: none"> • Experts' selection process; • Questionnaire design; • Data collection; • Data coding and qualitative analysis of results.
Study 3: Multiple regression and Structural Equation Model	<ul style="list-style-type: none"> • Multiple regression with Clustered Standard Errors and Multiple Correspondence Analysis (MCA) • Preliminary Exploratory Factor Analysis (EFA) • Confirmatory Factor Analysis (CFA) • Structural Equation Model (SEM)

By adopting a holistic approach to Omnichannel, Study 1 investigated contributions in literature focusing on this phenomenon and – by means of bibliometric techniques – traced back Omnichannel to four research clusters on which its theoretical foundations are based. Our results show that Omnichannel is rooted in the areas of Consumer Behavior, Strategic Management, Channel Management Issues and Channel Integration. The latter emerges as a necessary requirement for achieving seamlessness in Omnichannel; furthermore, it connects and reconciles both the consumer and company perspectives. Study 1 also showed that, so far, theoretical developments specific to the Omnichannel domain are still in their infancy, as the theories used are usually existing ones adapted to the specific phenomenon under study. Therefore, a first avenue for future research would be the development of specific theories and frameworks for this new domain.

Following the identification and discussion of the past and present of Omnichannel, we then turned our gaze towards its future. We therefore involved international experts in discussing our state-of-the-art on Omnichannel as well as gaps, challenges and opportunities for future research in this domain, based on their academic and managerial experience. Insights from the interviews resulted in a research agenda identifying five main areas of interest for academics and practitioners: Omnichannel Journeys, the evolvement of Omnichannel Customer Experience, Omnichannel transition issues, the human factor in Omnichannel, and augmented and intelligent Omnichannel environments. Discussions and research questions were extensively developed for each of these areas for future research.

We decided to focus on the core cluster of Channel Integration, which emerged from Study 1, and on the emerging area of Omnichannel Journeys from Study 2, in order to develop Study 3. From a consumer perspective, Channel Integration was studied to understand whether its perception has impacts on consumer behavior. In addition, authors are trying to understand how brands and companies may maintain their consistency despite operating in the extremely fragmented Omnichannel environment, which involves multiple channels and touchpoints at once. Most studies rely on the Channel Integration Quality framework, either by adopting or updating Sousa and Voss's (2006) model, which is concerned with services and information integration. Nevertheless, recent contributions are seeking to model and investigate other aspects pertinent to Omnichannel in assessing Channel Integration, which are consistent with customer experiences and journeys in real life.

In Study 3, we were the first to adopt the Categorization Theory to suggest that consumer evaluation processes leading to Channel Integration perception can be based on touchpoints rather than channels. This is in line with the disruption brought about by Omnichannel, reducing boundaries between distribution and communication channels and introducing touchpoints as the main encounters with brands along the Customer Journey. Moreover, we showed that not all touchpoints are equal: only specific touchpoints are able to create a Channel Integration perception, and those may vary depending on the context investigated. On one hand, we show differences in the grocery and fashion sectors, and, consequently, between convenience and shopping product categories. On the other hand, we also found differences occurring in different consumer segments, namely, first-time and repeat customers. Our discussion of each significant touchpoint and its effects offers theoretical and actionable insights for retailers. Finally, we also showed a positive effect of Channel Integration on Patronage Intention, thus assessing integration contribution to loyalty, a long-term goal of companies.

Further research efforts can meaningfully extend our understanding of the above topics. First of all, currently, we are working to investigate whether the distinction between first-time and repeat customers also impacts the relationship between Channel Integration and Patronage Intention. Drawing from the Categorization Theory, we suggest it would be interesting to understand whether Channel Integration perception is more (or less) relevant for first-time or repeat customers. A higher value for repeat customers might suggest that customers update their evaluations and their categories after visiting the retailer multiple times. Therefore, we are working on the datasets to perform a multigroup analysis, and the first results we have obtained in the fashion sector are promising.

Secondly, the framework might be extended to more industries and targets than those we included in our study. Mishra et al. (2021) strongly encouraged comparative studies that would show how consumer usage of Omnichannel retailing may differ across industries. Similarly, Tuanreat et al. (2021) called for comparative studies accounting for different types of shoppers. We therefore consider our study a step in that direction, to be further developed in the future.

A final consideration may be extended to all the three studies presented in this thesis. By investigating the impact of touchpoints on Channel Integration, we suggest that future frameworks, models and scales should take into account the possibility of measuring more dimensions and factors than those provided in the Channel Integration Quality framework. In fact, it is not yet known how Omnichannel consumers choose their journeys each time. Relying on the Categorization Theory to interpret our results, we provide a possible explanation for their touchpoint choices, which – in the future – will need to be further tested and extended. Results from Study 1 and Study 2 also stress how the complexity of Omnichannel might require scholars to go beyond the boundaries of their research areas and streams, to promote interdisciplinary studies on the topic. The conclusion we may draw from all this is that future scholars will need to develop new theories and models to address the disruptive phenomenon that is Omnichannel.

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APPENDICES

APPENDIX A – STUDY 1: TABLES AND VISUALIZATIONS

Tab. I – Most-cited papers by local and global citation impact

N°	AUTHOR, SOURCE, YEAR	TITLE	LOCAL CITATIONS	GLOBAL CITATION COUNT
1	VERHOEF et al., 2015, Journal of Retailing	From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing	147	376
2	BRYNJOLFSSON et al., 2013, MIT Sloan Management Review	Competing in the age of omnichannel retailing	107	195
3	BECK and RYGL, 2015, Journal of Retail and Consumer Services	Categorization of multiple channel retailing in Multi-, Cross-, and Omni-Channel Retailing for retailers and retailing	63	98
4	BELL et al., 2014, MIT Sloan Management Review	How to win in an omnichannel world	61	88
5	RIGBY, 2011, Harvard Business Review	The future of shopping	53	134
6	HERHAUSEN et al., 2015, Journal of Retailing	Integrating bricks with clicks: retailer-level and channel-level outcomes of online–offline channel integration	50	129
7	GAO and SU, 2017b, Management Science	Omnichannel retail operations with buy-online-and-pick-up-in-store	49	68
8	HUBNER et al., 2016b, International Journal of Physical Distribution and Logistics Management	Retail logistics in the transition from multi-channel to omni-channel	38	72
9	HUBNER et al., 2016c, International Journal of Retail and Distribution Management	Last mile fulfilment and distribution in omni-channel grocery retailing: a strategic planning framework	31	72

10	AILAWADI and FARRIS, 2017, Journal of Retailing	Managing multi-and omni-channel distribution: metrics and research directions	30	63
11	JUANEDA-AYENSA et al., 2016, Frontiers in Psychology	Omnichannel customer behavior: key drivers of technology acceptance and use and their effects on purchase intention	27	44
12	ISHFAQ et al., 2016, International Journal of Physical Distribution and Logistics Management	Realignment of the physical distribution process in omni-channel fulfillment	25	54
13	BELL et al., 2018, Management Science	Offline showrooms in omnichannel retail: Demand and operational benefits	25	33
14	PICOT-COUCPEY et al., 2016, International Journal of Retail and Distribution Management	Channel design to enrich customers' shopping experiences: synchronizing clicks with bricks in an omni-channel perspective-the Direct Optic case	24	35
15	SAGHIRI et al., 2017, Journal of Business Research	Toward a three-dimensional framework for omni-channel	24	40

Tab. II – Number of publications and H-index of the top 12 authors

Nº	AUTHOR	Nº PUBLICATIONS	H-INDEX
1	GALLINO, Santiago	6	21
2	HUBNER, Alexander	5	16
3	HUSEYINOGLU, I. O.Y.	5	8
4	MORENO, Antonio	5	18
5	LI, Gang	4	19
6	MACHARIS, Cathy	4	41
7	NORRMAN, Andreas	4	20
8	RAI, Heleen Buldeo	4	8
9	TAYI, Giri Kumar	4	23
10	VERHOEF, Peter C	4	69
11	VERLINDE, Sara	4	9
12	WOLLENBURG, Johannes	4	5

Tab. III – Details of the 50 papers emerging from the cluster analysis

AUTHOR(S)	YEAR	TITLE	SOURCE
Cluster 1: Consumer Behavior			
Ansari, A., Mela, C. F., and Neslin, S. A.	2008	Customer channel migration	Journal of Marketing Research
Avery, J., Steenburgh, T. J., Deighton, J., and Caravella, M.	2012	Adding bricks to clicks: Predicting the patterns of cross-channel elasticities over time	Journal of Marketing
Babin, B. J., Darden, W. R., and Griffin, M.	1994	Work and/or fun: measuring hedonic and utilitarian shopping value	Journal of Consumer Research
Baxendale, S., Macdonald, E. K., and Wilson, H. N.	2015	The impact of different touchpoints on brand consideration	Journal of Retailing
Gensler, S., Verhoef, P. C., and Böhm, M.	2012	Understanding consumers' multichannel choices across the different stages of the buying process	Marketing Letters
Grewal, D., Roggeveen, A., Nordfalt, J.	2017	The future of retailing	Journal of Retailing
Konuş, U., Verhoef, P. C., and Neslin, S. A.	2008	Multichannel shopper segments and their covariates	Journal of Retailing
Kumar, V., and Venkatesan, R.	2005	Who are the multichannel shoppers and how do they perform?: Correlates of multichannel shopping behavior	Journal of Interactive Marketing
Lemon, K. N., and Verhoef, P. C.	2016	Understanding customer experience throughout the customer journey	Journal of Marketing
Melis, K., Campo, K., Breugelmans, E., and Lamey, L.	2015	The impact of the multi-channel retail mix on online store choice: does online experience matter?	Journal of Retailing
Neslin, S. A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M. L., Thomas, J. S., and Verhoef, P. C.	2006	Challenges and opportunities in multichannel customer management	Journal of Service Research
Neslin, S. A., and Shankar, V.	2009	Key issues in multichannel customer management: current knowledge and future directions	Journal of Interactive Marketing

Pauwels, K., and Neslin, S. A.	2015	Building with bricks and mortar: The revenue impact of opening physical stores in a multichannel environment	Journal of Retailing
Venkatesan, R., Kumar, V., and Ravishanker, N.	2007	Multichannel shopping: causes and consequences	Journal of Marketing
Verhoef, P. C., Neslin, S. A., and Vroomen, B.	2007	Multichannel customer management: Understanding the research-shopper phenomenon	International Journal of Research in Marketing
Verhoef, P. C., Kannan, P. K., and Inman, J. J.	2015	From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing	Journal of Retailing
Wallace, D. W., Giese, J. L., and Johnson, J. L.	2004	Customer retailer loyalty in the context of multiple channel strategies	Journal of Retailing
Wang, R. J. H., Malthouse, E. C., and Krishnamurthi, L.	2015	On the go: How mobile shopping affects customer purchase behavior	Journal of Retailing
<i>Cluster 2: Strategic Management</i>			
Bell, D. R., Gallino, S., and Moreno, A.	2014	How to win in an omnichannel world	MIT Sloan Management Review
Bell, D. R., Gallino, S., and Moreno, A.	2018	Offline Showrooms in Omni-Channel Retail: Demand and Operational Benefits	Management Science
Brynjolfsson, E., Hu, Y. J., and Rahman, M. S.	2013	Competing in the age of omnichannel retailing	MIT Sloan Management Review
Gallino, S., and Moreno, A.	2014	Integration of online and offline channels in retail: The impact of sharing reliable inventory availability information	Management Science
Gao, F., and Su, X.	2017a	Online and offline information for omnichannel retailing	Manufacturing and Service Operations Management
Gao, F., and Su, X.	2017b	Omnichannel retail operations with buy-online-and-pick-up-in-store	Management Science
Ofek, E., Katona, Z., and Sarvary, M.	2011	“Bricks and clicks”: The impact of product returns on the strategies of multichannel retailers	Marketing Science

Rapp, A., Baker, T. L., Bachrach, D. G., Ogilvie, J., and Beitelspacher, L. S.	2015	Perceived customer showrooming behavior and the effect on retail salesperson self-efficacy and performance	Journal of Retailing
Rigby, D.	2011	The future of shopping	Harvard Business Review

Cluster 3: Channel Management Issues

Agatz, N. A., Fleischmann, M., and Van Nunen, J. A.	2008	E-fulfillment and multi-channel distribution—A review	European Journal on Operational Research
Ailawadi, K. L., and Farris, P. W.	2017	Managing multi-and omni-channel distribution: metrics and research directions	Journal of Retailing
Beck, N., and Rygl, D.	2015	Categorization of multiple channel retailing in Multi-, Cross-, and Omni-Channel Retailing for retailers and retailing	Journal of Retailing and Consumer Services
Bernon, M., Cullen, J., and Gorst, J.	2016	Online retail returns management: Integration within an omni-channel distribution context	Journal of Physical Distribution and Logistics Management
Cao, LL.	2014	Business model transformation in moving to a cross-channel retail strategy: A case study.	International Journal of Electronic Commerce
Hübner, A., Holzzapfel, A., and Kuhn, H.	2015	Operations management in multi-channel retailing: an exploratory study	Operations Management Research
Hübner, A. H., Kuhn, H., Wollenburg, J., Towers, N., and Kotzab, H.	2016	Last mile fulfilment and distribution in omni-channel grocery retailing: a strategic planning framework	International Journal of Retail and Distribution Management
Hübner, A., Holzzapfel, A., and Kuhn, H.	2016	Distribution systems in omni-channel retailing	Business Research
Ishfaq, R., Defee, C. C., Gibson, B. J., and Raja, U.	2016	Realignment of the physical distribution process in omni-channel fulfillment	International Journal of Physical Distribution and Logistics Management
Lewis, J., Whysall, P., and Foster, C.	2014	Drivers and technology-related obstacles in moving to multichannel retailing	International Journal of Electronic Commerce
Melacini, M., Perotti, S., Rasini, M., and Tappia, E.	2018	E-fulfilment and distribution in omni-channel retailing: a systematic literature review	International Journal of Physical Distribution and Logistics Management

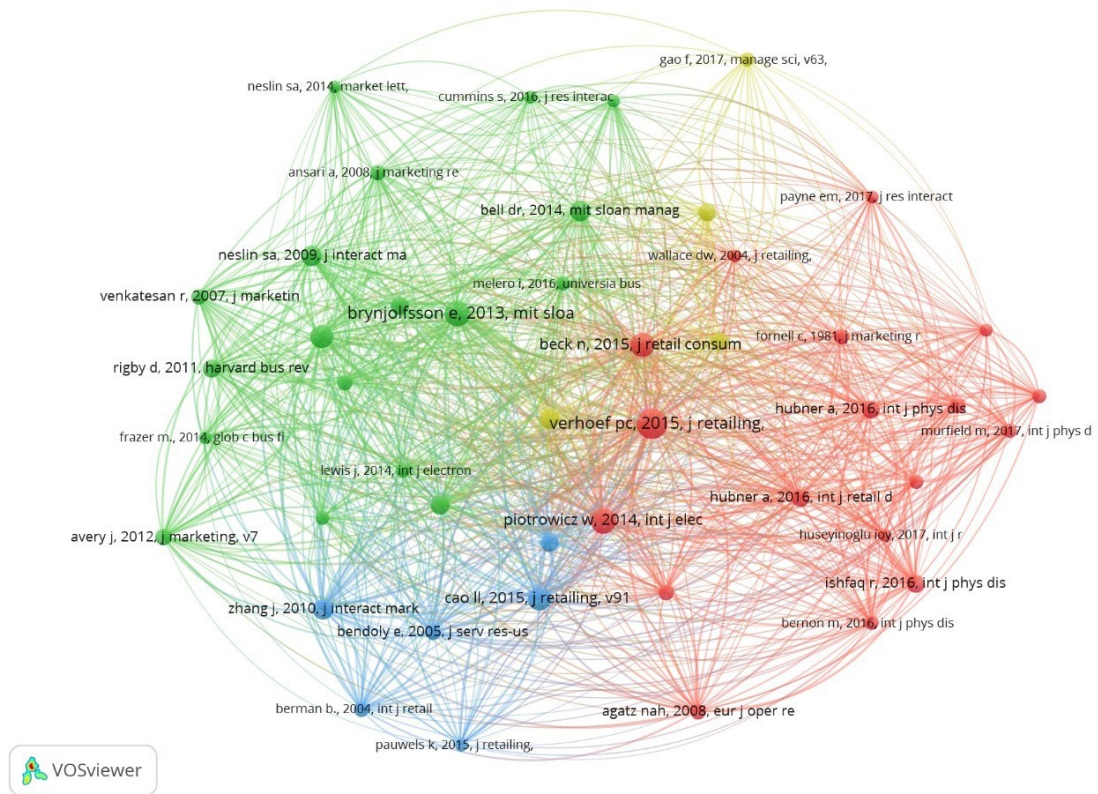
Murfield, M., Boone, C. A., Rutner, P., and Thomas, R.	2017	Investigating logistics service quality in omni-channel retailing	International Journal of Physical Distribution and Logistics Management
Picot-Coupey, K., Huré, E., Piveteau, L., Towers, N., and Kotzab, H.	2016	Channel design to enrich customers' shopping experiences: synchronizing clicks with bricks in an omni-channel perspective-the Direct Optic case	International Journal of Retail and Distribution Management
Piotrowicz, W., and Cuthbertson, R.	2014	Introduction to the special issue information technology in retail: Toward omnichannel retailing.	International Journal of Electronic Commerce

Cluster 4: Channel Integration

Bendoly, E., Blocher, J. D., Bretthauer, K. M., Krishnan, S., and Venkataramanan, M. A.	2005	Online/in-store integration and customer retention	Journal of Service Research
Cao, LL., and Li, L.	2015	The impact of cross-channel integration on retailers' sales growth	Journal of Retailing
Fornell, C.	1981	A comparative analysis of two structural equation models: LISREL and PLS applied to market data.	/
Herhausen, D., Binder, J., Schoegel, M., and Herrmann, A.	2015	Integrating bricks with clicks: retailer-level and channel-level outcomes of online-offline channel integration	Journal of Retailing
Juaneda-Ayensa, E., Mosquera, A., and Sierra Murillo, Y.	2016	Omnichannel customer behavior: key drivers of technology acceptance and use and their effects on purchase intention	Frontiers in Psychology
Oh, L. B., Teo, H. H., and Sambamurthy, V.	2012	The effects of retail channel integration through the use of information technologies on firm performance	Journal of Operations Management
Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., and Podsakoff, N. P.	2003	Common method biases in behavioral research: a critical review of the literature and recommended remedies.	Journal of Applied Psychology
Saghiri, S., Wilding, R., Mena, C., and Bourlakis, M.	2017	Toward a three-dimensional framework for omni-channel	Journal of Business Research

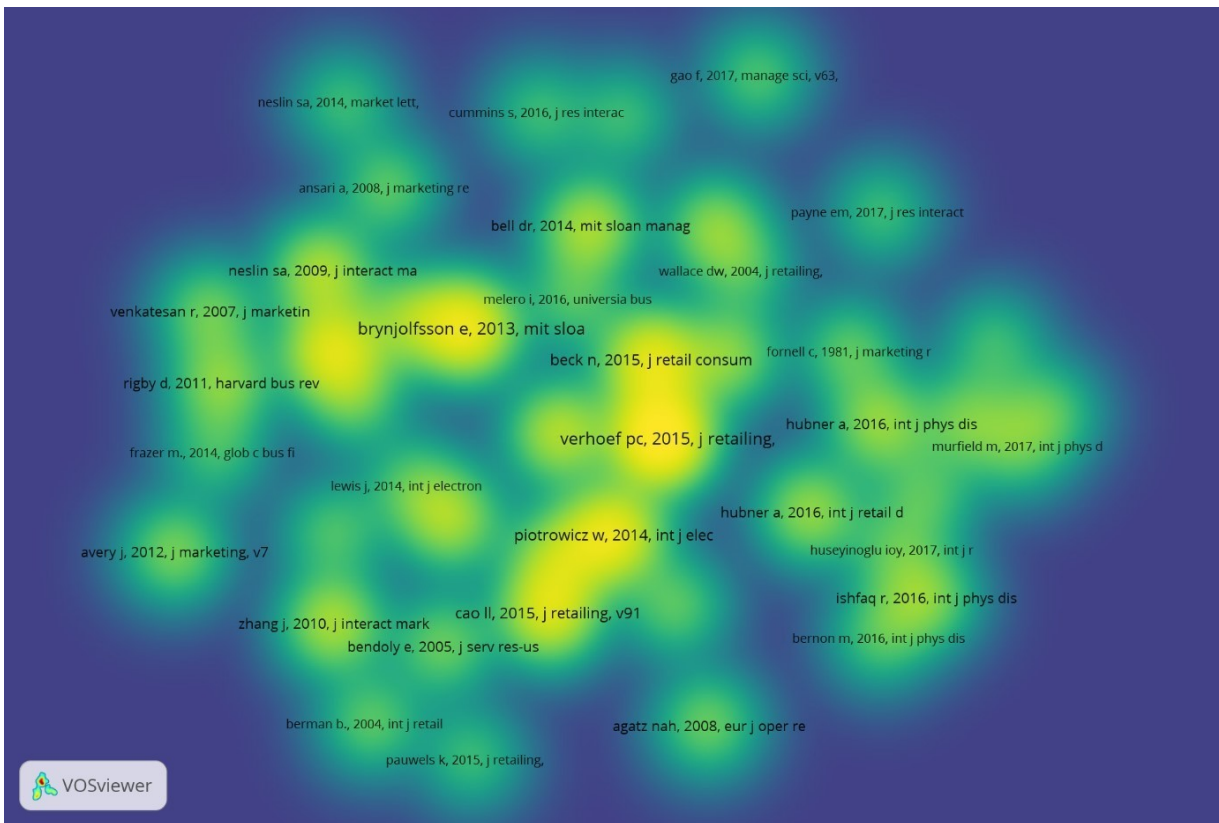
Zhang, J., Farris, P. W., Irvin, J. W., Kushwaha, T., Steenburgh, T. J., and Weitz, B. A. 2010 Crafting integrated multichannel retailing strategies Journal of Interactive Marketing

Fig. I – Network representation³ of the 4 clusters resulting from the co-citation analysis



³ Network visualization can be applied to citation and co-citation analyses to represent emerging clusters. The nodes in the network are research texts, or papers, whereas the ties connecting them are citations. The node size (which, in the present case, is the number of times that paper has been cited by another pair of papers) is a proxy of the paper's importance within the network. An important characteristic that we can notice from the network visualization is the position of the four clusters, which are all very close to one another – not uncommon when the field under investigation is relatively new or small. In networks, less similar papers tend to be located in different parts of the network, and the ties allows the researcher to appreciate whether papers from different clusters do cite one another (Borgatti et al., 2018).

Fig. II – Density representation⁴ of the 4 clusters resulting from the co-citation analysis



⁴ Density visualization is an indicator of a research field's connectedness. It is computed as the number of citations between papers as a proportion of all papers in the database; as such it is used as a proxy to identify which papers have been cited by one another in a network. Papers with a higher density are also those with higher citations internal to the database (also called "local citations") and can therefore be considered as more influential. The information about clusters formed is lost in the density visualization; depending on the bibliometric technique used, it can be more or less relevant. Since the present study used co-citation analysis as an objective method to identify relevant research streams and papers in a delimited field (Omnichannel), it is to be considered as merely descriptive of papers' importance (Borgatti et al., 2018).

APPENDIX B – STUDY 2: EXPERTS’ PROFILES AND ONLINE SURVEY

Tab. IV – Summary of experts’ profiles authors

N°	ACADEMIC TITLE	UNIVERSITY	COUNTRY	H-INDEX	CONSULTING EXPERIENCE
1	Associate Professor	Universidad de Almería	Spain	30	N
2	Full Professor	University of Valencia	Spain	23	Y
3	Full Professor	University of Edinburgh	UK	46	Y
4	Professor and Senior Lecturer	Université de Fribourg	Switzerland	36	Y
5	Associate Professor	University of Vienna	Austria	7	Y
6	Associate Professor	Kingston University London	UK	23	N
7	Full Professor	Cumbria University London	UK	22	Y
8	Associate Professor	Deakin University	Australia	16	Y
9	Senior Lecturer	Technological University Dublin	Ireland	4	Y
10	Associate Professor	Vrije Universiteit Brussel	Belgium	20	Y
11	Senior Lecturer	Waikato Business School	Australia	17	Y
12	Associate Professor	Kingston Business School	UK	15	N

13	Full Professor	Hochschule Macromedia, Stuttgart	Germany	2	Y
14	Full Professor	IGR IAE Rennes	France	13	Y
15	Associate Professor	La Rochelle Business School	France	8	Y
16	Associate Professor	Oxford Institute for Retail Management	UK	26	Y
17	Full Professor	Massey University	New Zealand	16	Y
18	Lecturer	Binghamton University	US	5	N

Page 1 – INTRODUCTION

Thanks for taking the time to support our **project on Omnichannel Research**

What is this about?

With this project we try to answer **two simple questions**: How has Omnichannel **research evolved** over time and what crucial **gaps exist** in the Omnichannel literature?

What we kindly ask you to do?

Provide us with your **expert knowledge** and ...

- (1) **Read** carefully through the key finding of our extensive, systematic literature review.
- (2) Give us **feedback** on the findings by answering six sets of questions.
- (3) Finally, provide us with some details **about yourself**.

What is in it for you?

- (1) We will be **reporting back** the key results of this research after the project is finished.
- (2) Obviously we are prepared to **take part** in similar research of yourself.

Thanks for your kind support, we very much appreciate it.

Page 2 – OMNICHANNEL RESEARCH AT A GLANCE

OUR FINDINGS: Having analysed the **314 most cited papers**, we **found four clusters** of published Omnichannel research. They focus on:

- (1) Consumer Behaviour;
- (2) Strategic Management;
- (3) Channel Management Issues;
- (4) Channel Integration.

Here a **brief description** of each area:

Area 1: In the **Consumer Behavior** cluster, papers aim to analyse consumer behaviours across channels, from their early days to their establishment, therefore marking the evolution from multichannel to omnichannel. This research stresses the need to measure the size and impact of such multichannel behaviours for managerial goals.

Area 2: Papers in the **Strategic Management** cluster propose strategies and solutions to compete effectively. This research considers channels as a combination of information and product fulfilment and focus on the impact of channel management choices on competitive advantage.

Area 3: Research related to **Channel Management** issues can be divided into two streams. The first is focused on analysing specific operational challenges (i.e. return management, inventory planning, last mile distribution) related to the adoption of a new channel. The other stream aims at supporting companies in (re)designing their business model by identifying key drivers and issues for channel adoption.

Area 4: **Channel Integration** papers depict Omnichannel as a two-sided phenomenon requiring companies to work simultaneously on integrating front-end “perceptions” and back-end execution of operations.

Page 3: FUTURE FOCUS

Please think of the four areas described above. Tell us why you think which of the four should receive more attention by researchers to understand the phenomenon of Omnichannel distribution better.

Question 1: → Please tick those areas that should be prioritised in terms of research (multiple responses possible!).

- Consumer Behaviour;
- Strategic Management
- Channel Management Issues
- Channel Integration

→ Please tell us why you think this/these area/s deserve/s (comparably) more attention by researchers:

TEXTBOX

Page 4: THEORETICAL UNDERPINNINGS OF OMNICHANNEL RESEARCH

OUR FINDINGS: We found that in the Omnichannel domain theoretical underpinnings (or theories) are scarcely used. This is less so with respect to research within the areas of Consumer Behavior and Strategic Management.

Question 2: → *What are the main reasons why so little theory has been used in the context of Omnichannel research?*

TEXTBOX

→ *Depending on the research cluster of course, **what theories** would you see particularly **useful** to help **understand and investigate the phenomena** related to Omnichannel? Briefly explain your answer.*

TEXTBOX: **Most useful** theory:

TEXTBOX: *Brief justification why this theory is useful:*

TEXTBOX: **2nd most useful** theory:

TEXTBOX: *Brief justification why this theory is useful:*

TEXTBOX: **3rd most useful** theory:

TEXTBOX: *Brief justification why this theory is useful:*

TEXTBOX: **Other useful** theories:

TEXTBOX: *Brief justification why these theories are useful:*

Page 5: OMNICHANNEL THEORY

OUR FINDINGS: Based on our literature analysis, we are not aware of any theory that has/have been specifically developed for the domain of Omnichannel.

Question 3: → *Do you think that theories need to be developed for Omnichannel research – irrespective for which of the four clusters described above?*

- ⊕ Yes, there needs to be a generic theory in the domain of Omnichannel;
- ⊕ Yes, but the theories should be developed within the four clusters
- ⊕ No, there is no need for Omnichannel theory/theories.

TEXTBOX: *Please briefly justify your answer.*

Page 6: METHODOLOGIES IN OMNICHANNEL RESEARCH

OUR FINDINGS: Across the 314 papers, 82% feature one or more empirical study/ies. Of those:

- 67% apply **quantitative** methodologies (mostly surveys and math models).
- 33% apply **qualitative** methodologies (mostly case studies and interviews).

Question 4: → *Taking in account the four different Omnichannel research areas, what are other methodologies suitable to explore Omnichannel phenomena?*

TEXTBOX: **Most useful** (other) methodology:

TEXTBOX: *Brief justification why this methodology is useful:*

TEXTBOX: **2nd most useful** (other) methodology:

TEXTBOX: *Brief justification why this methodology is useful:*

TEXTBOX: **3rd most useful** (other) methodology:

TEXTBOX: *Brief justification why this methodology is useful:*

TEXTBOX: **Other useful** (other) methodologies:

TEXTBOX: *Brief justification why these methodologies are useful:*

Page 6: INDUSTRY FOCUS

OUR FINDINGS: Most Omnichannel related research (53% of the papers) has a focus on the retail industry. Within that, mostly on the big retail sectors like apparel, food, consumer electronics and banking.

Question 5: → Which other sectors or industries do you think should be investigated in more detail in terms of Omnichannel?

TEXTBOX: Most important other important industry/sector:
TEXTBOX: Brief justification why this industry/sector
TEXTBOX: 2nd most important other important industry/sector:
TEXTBOX: Brief justification why this industry/sector
TEXTBOX: 3rd most important other important industry/sector:
TEXTBOX: Brief justification why this industry/sector
TEXTBOX: Other very important industry/sector:

Page 7: FUTURE RESEARCH FOCI

Question 6: → Please think of future research in the Omnichannel domain. What are the most important phenomena/themes/research questions that – from your point of view - need to be researched in the future? And why?

TEXTBOX: Most important phenomenon/theme/research question for future research:
TEXTBOX: Brief justification why this phenomenon/theme/research
TEXTBOX: 2nd most important phenomenon/theme/research question for future research:
TEXTBOX: Brief justification why this phenomenon/theme/research
TEXTBOX: 3rd most important phenomenon/theme/research question for future research:
TEXTBOX: Brief justification why this phenomenon/theme/research
TEXTBOX: Other very important phenomenon/theme/research question for future research:
TEXTBOX: Brief justification why this phenomenon/theme/research

Page 8: KEY ISSUES RELATED TO OMNICHANNEL PRACTICE

Question 7: → Based on your experience with companies across the supply chain, what Omnichannel issues “keep managers awake at night”? So what is most pressing that needs solving from a practitioner’s point of view?

TEXTBOX: Most important pressing issue in Omnichannel practice:
TEXTBOX: Brief justification why this issue:
TEXTBOX: 2nd most important pressing issue in Omnichannel practice:
TEXTBOX: Brief justification why this issue:
TEXTBOX: 3rd most important pressing issue in Omnichannel practice:
TEXTBOX: Brief justification why this issue:
TEXTBOX: Other very important pressing issue in Omnichannel practice:
TEXTBOX: Brief justification why this issue:

Page 9: ABOUT YOURSELF

Answers to the following questions are important for us to characterise our interviewees on an aggregated level. This information will be treated confidentially and not be passed on to any other person outside our research group.

- For how long have you focused on the Omnichannel phenomenon (explicitly) in your research activities?
____ years

- How many (academic) research papers have you published on Omnichannel?
____ research papers

- Where have you published your research else apart from academic journals?

TEXTBOX: Please briefly explain how many publications and where:

- What are your preferred methodologies?

TEXTBOX: Please briefly explain

- For how long have you done consulting work within the retail or other industries?

____ years

TEXTBOX: Please briefly explain

- Have you consulted specifically on Multi-, Cross- or Omni-channel projects?

Yes

No

TEXTBOX: Please briefly explain

- Other relevant experts:

Could you suggest other colleagues / experts we could contact for this survey who, in your opinion, can provide interesting perspectives on Omnichannel?

TEXTBOX: Please provide the experts' names and affiliation:

Page 10: EXTRO

Many thanks for your time and your valuable information! This is very much appreciated. All the best!

In the case of questions, please contact us: _____

If you are interested in the results please leave your email details here and we will come back to you as soon as the project is finished:

TEXTBOX: Email

APPENDIX C – STUDY 3: QUESTIONNAIRE AND PATH DIAGRAMS

Tab. VI – Panel survey on grocery consumers: full questionnaire

Page 1: HABITS

A1. Given the following retailers, please indicate where did you purchase the majority of your grocery shopping in the last six months:

DROPDOWN LIST INCLUDING 39 OPTIONS:

- Major grocery retailers operating, online or offline, nationwide;
- Minor grocery retailers operating locally;
- Other (open-answer)

A2. Prior to this period, did you already purchase the majority of your grocery shopping from this retailer?

YES or NO, single-answer question

Page 2: TOUCHPOINTS

A3. How often did you use any of the following touchpoints to get in touch with this retailer over the past six months?

1-7 POINTS SCALE, “Never” to “Always”

Advertising on TV, radio, newspapers, billboards
Physical store
Offline Word-of-Mouth
Online Word-of-Mouth
Retailer’s Facebook or other social media pages
Google searches or online advertising
Mobile App
Website
Cashier and in-store staff
Loyalty Program and special promotions
Printed promotional flyer
Digital promotional flyer
Email / Newsletter
Printed communications by post
Printed coupons of the brand / store
Digital coupons of the brand / store
Customer Service
Home delivery staff (for orders placed online)
Order picking in-store staff
Retailer’s gift cards
Online games and sweepstakes
Retailer’s magazine
Other

A4. Which of the following touchpoints do you prefer to get in touch with this store?

YES or NO answer, for each of the following options:

Advertising on TV, radio, newspapers, billboards
Physical store
Offline Word-of-Mouth
Online Word-of-Mouth
Retailer's Facebook or other social media pages
Google searches or online advertising
Mobile App
Website
Cashier and in-store staff
Loyalty Program and special promotions
Printed promotional flyer
Digital promotional flyer
Email / Newsletter
Printed communications by post
Printed coupons of the brand / store
Digital coupons of the brand / store
Customer Service
Home delivery staff (for orders placed online)
Order picking in-store staff
Retailer's gift cards
Online games and sweepstakes
Retailer's magazine
Other

Page 3: CHANNEL INTEGRATION

A5. Please indicate how much you agree with each of the following statements, thinking about this retailer?

1-7 POINTS SCALE, "Completely disagree" to "Completely agree"

I can find consistent promotions and advertisements in the retailer's physical store, website and mobile app.
I can find consistent assortment and prices in the retailer's physical store, website and mobile app.
I can find product descriptions and check the retailer's inventory status at the physical store through its website or its mobile app.
I can redeem the retailer's gift coupons, vouchers or loyalty points in its physical store, its website or its mobile app.
I can return or exchange products purchased online in the retailer's physical store.

Page 4: PATRONAGE INTENTION

A6. Please indicate how much you agree with each of the following statements, thinking about this retailer?

1-7 POINTS SCALE, "Completely disagree" to "Completely agree"

I am likely to purchase the products(s) from this retailer.
I am likely to recommend this retailer to my friends.
I am likely to make another purchase from this retailer if I need the products that I buy.

Tab. VII – Panel survey on fashion consumers: full questionnaire

Page 1: HABITS

B1. In the last 6 months, have you bought clothing/accessories for yourself or for other members of the family?

Yes, I have purchased clothing/ accessories for myself.
Yes, I have purchased clothing/ accessories for other members of my family.
Yes, I have purchased clothing/ accessories for myself and for other members of my family.
No, I have not purchased clothing/accessories.

B2. Given the following retailers, please indicate where did you purchase the majority of your fashion shopping in the last six months:

<p>DROPDOWN LIST INCLUDING 52 OPTIONS:</p> <ul style="list-style-type: none"> - Major fashion retailers operating, online or offline, nationwide; - Minor fashion retailers operating locally; - Clothing outlets - Second-hand fashion retailers - Independent shops (not belonging to a clothing chain) - Local markets selling clothing - Other (open-answer)

B3. Prior to this period, did you already purchase the majority of your fashion shopping from this retailer?

YES or NO, single-answer question

Page 2: TOUCHPOINTS

B4. How often did you use any of the following touchpoints to get in touch with this retailer over the past six months?

1-7 POINTS SCALE, “Never” to “Always”

Advertising on TV, radio, newspapers, billboards
Physical store
Offline Word-of-Mouth
Online Word-of-Mouth
Retailer’s Facebook or other social media pages
Google searches or online advertising
Mobile App
Website
Cashier and in-store staff
Loyalty Program and special promotions
Printed promotional flyer
Digital promotional flyer
Email / Newsletter
Printed communications by post
Printed coupons of the brand / store
Digital coupons of the brand / store
Customer Service

Home delivery staff (for orders placed online)
Order picking in-store staff
Retailer's gift cards
Online games and sweepstakes
Clothing or shopping bags from this brand/shop worn by friends, relatives, acquaintances or strangers
Sales of clothing from this brand/store via live streaming on social networks (e.g., Instagram) or ad hoc platform
Video content published on other social media or websites than the retailer's
Digital promotional billboards during sport events
Bloggers and experts promoting the brand/retailer on social media
Phone messages (SMS)
Other

B5. Which of the following touchpoints do you prefer to get in touch with this store?

YES or NO answer, for each of the following options:

Advertising on TV, radio, newspapers, billboards
Physical store
Offline Word-of-Mouth
Online Word-of-Mouth
Retailer's Facebook or other social media pages
Google searches or online advertising
Mobile App
Website
Cashier and in-store staff
Loyalty Program and special promotions
Printed promotional flyer
Digital promotional flyer
Email / Newsletter
Printed communications by post
Printed coupons of the brand / store
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Clothing or shopping bags from this brand/shop worn by friends, relatives, acquaintances or strangers
Sales of clothing from this brand/store via live streaming on social networks (e.g., Instagram) or ad hoc platform
Video content published on other social media or websites than the retailer's
Digital promotional billboards during sport events
Bloggers and experts promoting the brand/retailer on social media
Phone messages (SMS)
Other

Page 3: CHANNEL INTEGRATION

B6. Please indicate how much you agree with each of the following statements, thinking about this retailer?

1-7 POINTS SCALE, "Completely disagree" to "Completely agree"

I can find consistent promotions and advertisements in the retailer's physical store, website and mobile app.
I can find consistent assortment and prices in the retailer's physical store, website and mobile app.
I can find product descriptions and check the retailer's inventory status at the physical store through its website or its mobile app.
I can redeem the retailer's gift coupons, vouchers or loyalty points in its physical store, its website or its mobile app.
I can return or exchange products purchased online in the retailer's physical store.

Page 4: PATRONAGE INTENTION

B7. Please indicate how much you agree with each of the following statements, thinking about this retailer?

1-7 POINTS SCALE, "Completely disagree" to "Completely agree"

I am likely to purchase the products(s) from this retailer.
I am likely to recommend this retailer to my friends.
I am likely to make another purchase from this retailer if I need the products that I buy.

Fig. III – CFA results: Lisrel path diagram – grocery sector

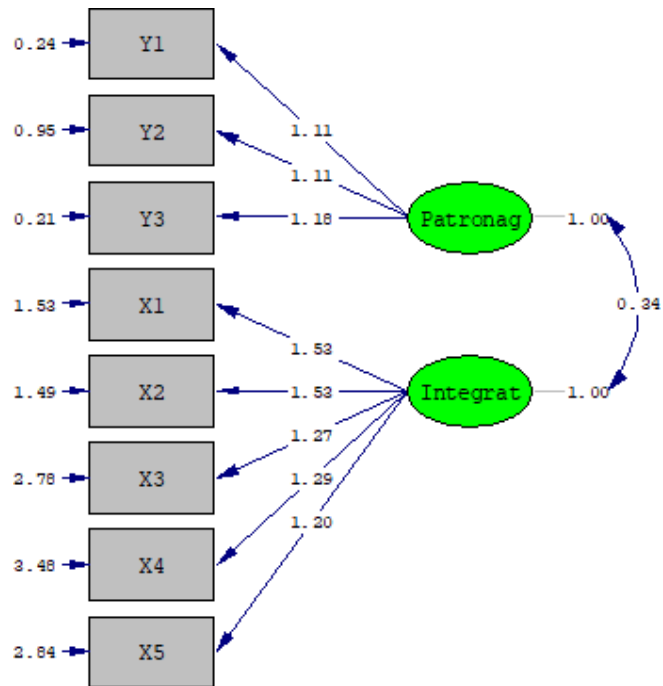


Fig. IV – SEM results: Lisrel path diagram – grocery sector

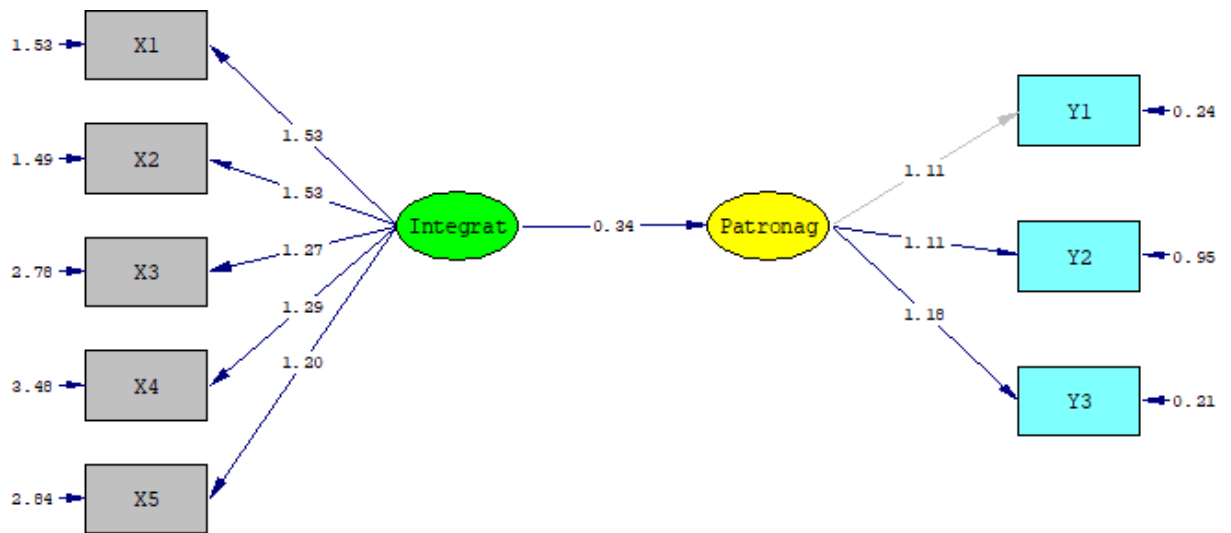


Fig. V – CFA results: Lisrel path diagram – fashion sector

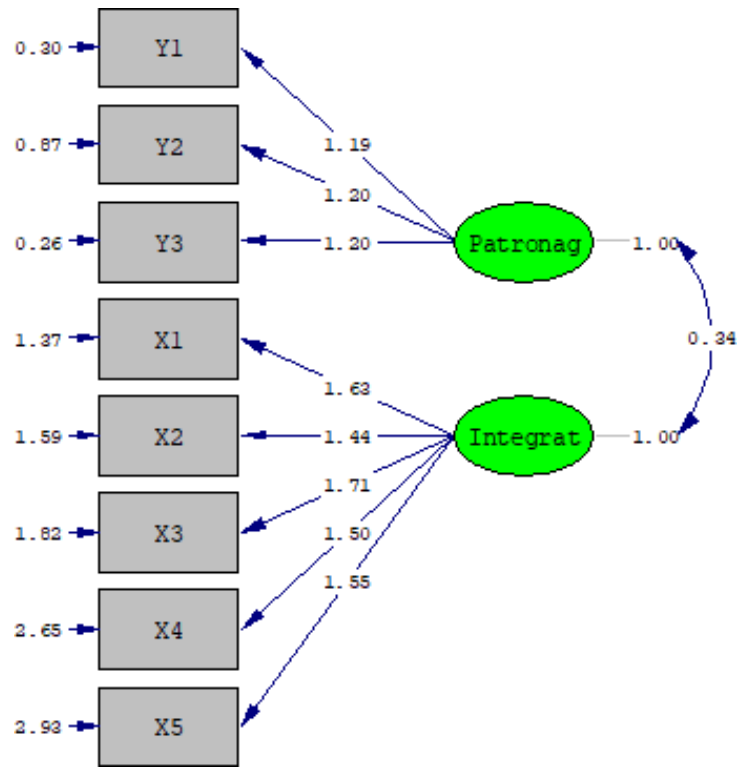
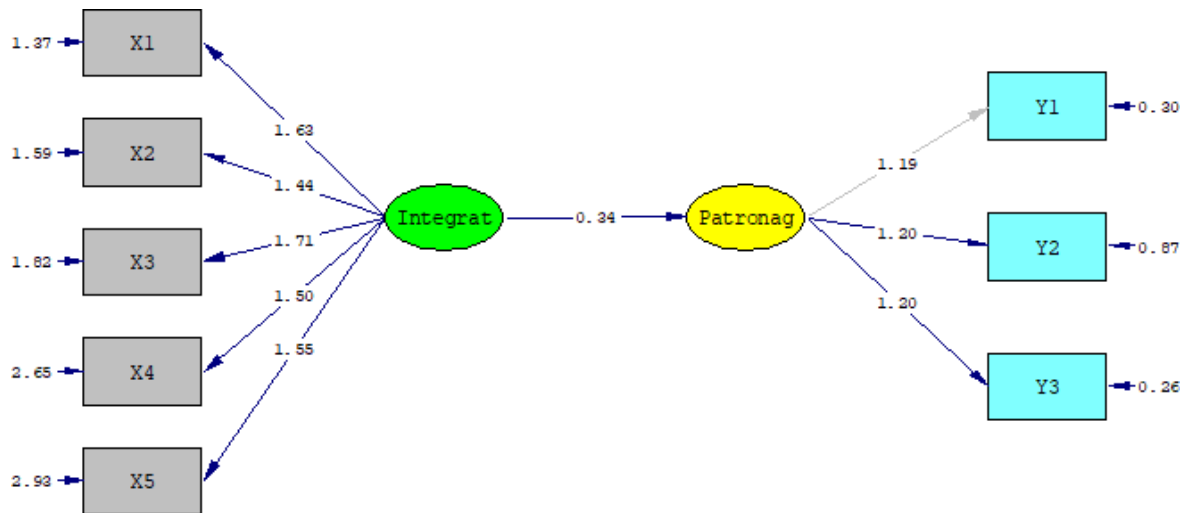


Fig. VI – SEM results: Lisrel path diagram – fashion sector



Il tuo indirizzo e-mail
slvgdi1@unife.it

Oggetto:
Dichiarazione di conformità della tesi di Dottorato

Io sottoscritto Dott. (Cognome e Nome)
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Provincia:
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Il giorno:
07/12/1991

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Economia e Management dell'Innovazione e della Sostenibilità (EMIS)

Ciclo di Dottorato
35

Titolo della tesi:
THE OMNICHANNEL PHENOMENON: UNVEILING THE ROLE OF CHANNEL INTEGRATION FOR CONSUMERS AND RETAILERS

Titolo della tesi (traduzione):
Il fenomeno Omnichannel: il ruolo della Channel Integration per i consumatori e per i retailers

Tutore: Prof. (Cognome e Nome)
Ziliani Cristina

Settore Scientifico Disciplinare (S.S.D.)
SECS-P/08

Parole chiave della tesi (max 10):
Omnichannel; retailing; Channel Integration; Literature review; Survey; Structural Equation Model

Consapevole, dichiara

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Visto: Il Tutore Si approva Firma del Tutore Roberto L. Lauer