A MEASURE OF OMNICHANNEL CUSTOMER EXPERIENCE (OCX): KEY DIMENSIONS AND EFFECTS ON CUSTOMER METRICS

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DECLARATION OF ORIGINALITY

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ABSTRACT

A Measure of Omnichannel Customer Experience (OCX):

Key Dimensions and Effects on Customer Metrics

With the advancements in technology the emergence of online channels has led to proliferation of sales channels. With the enabling forces of integration and technology, multiple channels have evolved into fully integrated channels to satisfy the customers, who are powerful more than ever. Consequently, omnichannel has emerged as the solution provided by the retailers to satisfy the customer, who desires to create her own shopping experience. Omnichannel retail, the dominant retail strategy among 66 percent of global population after the coronavirus outbreak, has become the priority for retail businesses. This study implements two-step approach. First, conceptualizing omnichannel customer experience (OCX) and developing a reliable and valid scale to measure OCX. Second, evaluating the behavioral impact of the construct on key customer metrics (customer satisfaction, loyalty, and word-of-mouth). To this aim, after the specification of omnichannel customer experience domain, underlying dimensions, and corresponding items, a survey study (n = 403) was conducted. After the data was cleared from the unsuitable age group responses, the sample was randomly split into two groups, first half was utilized to identify the dimensions and the structure of OCX through exploratory factor analysis (EFA). Afterward, the model was validated as a one factor second-order model as the outcome of the second split through confirmatory factor analysis (CFA). In the second part, the structural model had shown the direct behavioral impact of OCX on customer satisfaction and word-of-mouth and indirect effect on loyalty and word-of-mouth through the mediating role of customer satisfaction.

ÖZET

Bütüncül Kanal Müşteri Deneyimi Ölçeği:

Temel Boyutları ve Müşteri Ölçüm Kriterlerine Etkileri

Teknolojideki gelişmelerle birlikte çevrimiçi kanalların ortaya çıkması, satış kanallarının artmasına neden oldu. Entegrasyon ve teknolojinin sağladığı güçle, çoklu kanallar, her zamankinden daha güçlü olan müşterileri tatmin edebilmek için tamamen entegre bir kanal sistemine evrildi. Sonuç olarak; perakendeciler tarafından, kendi alışveriş deneyimini yaratmak isteyen müşterileri memnun edebilmek için bütüncül kanal yönetimi ortaya çıkmıştır. Koronavirüs salgını sonrasında küresel nüfusun yüzde 66'sının baskın olarak kullandığı perakende stratejisi haline gelen bütüncül kanal yönetimi, perakendeciler için öncelik haline geldi. Çalışmamız iki aşamadan oluşmaktadır. Birincisi; bütüncül kanal müşteri deneyimini kavramsallaştırmak ve bu kavramın ölçümü için güvenilir ve geçerli bir araç geliştirmek. İkincisi; yapının temel müşteri ölçütleri (müşteri memnuniyeti, sadakat ve ağızdan ağıza iletişim) üzerindeki davranışsal etkisini değerlendirmek. Bu amaçla; kavramın ana boyutları ve bunlara karşılık gelen öğelerin belirlenmesinin ardından bir anket çalışması (n = 403) yapıldı. Örnek düzenlendikten sonra rastgele iki gruba ayrılmış, ilk grup açımlayıcı faktör analizi (EFA) yoluyla kavramın boyutları ve yapısını belirlemek için kullanılmıştır. İkinci grubun doğrulayıcı faktör analizi (CFA) sonucu olarak, kavram tek faktörlü ikinci dereceden bir model olarak doğrulanmıştır. Çalışmanın ikinci kısmında; yapısal modelleme, bütüncül kanal müşteri deneyiminin müşteri memnuniyeti ve ağızdan ağıza iletişim üzerindeki direkt etkisini ve müşteri memnuniyeti aracılığıyla sadakat ve ağızdan ağıza iletişim üzerinde gerçekleşen dolaylı etkisini göstermiştir.

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CHAPTER 1

INTRODUCTION

As value has transformed into the legitimate outcome of the experience process, value co-creation has been the prerequisite of satisfying today's new customers, given the impact of developments in technology and power shift. Consequently, omnichannel has emerged as the solution provided by the retailers to (somehow obliged to) satisfy the new customer desiring to create her own shopping experience (Stone, Hobbs, & Khaleeli, 2002; Piotrowicz & Cuthbertson, 2014). Omnichannel resembles "experience environment" coined by Prahalad and Ramaswamy (2003) promising a free-zone for customers to create their unique customer experiences, which will lead to a win-win situation for both parties.

We contend that the roots of integrated multiple channel management date back many years before the introduction of the notion of "omnichannel" in the field of retailing in 2011. Therefore, the present paper traces the roots of "channel integration" back to the 1990s, when channels alternative to brick-and-mortar were first recognized. For example, early academic studies on multiple channels date back to 1997, the days of the prevalence of online channels (e.g., Amazon, eBay, and Alibaba were founded in 1994, 1995, and 1999, respectively).

Since then, specifically during 2000s, the retail business has gradually transformed itself into the new order of multiple channels. Year 2020 has been flagged as a turning point for humanity due to the coronavirus outbreak. This planetary catastrophe has caused confinement of millions to their homes due to the harsh restrictions (i.e., lockdowns) placed by local governments. Correspondingly,

the confinement has accelerated the progress of omnichannel due to the rise of digital and use of online and offline simultaneously (e.g., click-and-collect or contactless delivery) (Nielsen, 2020, para.2).

Due to the uncertainty and diminishing household incomes, consumers have focused on purchasing essential goods (e.g., foods, groceries, and healthcare) and eliminate non-essential goods (e.g., apparel and clothing) (Westbrook & Angus, 2021). Retailers are obliged to serve consumers at home and faced challenges in terms of providing convenience and safety (Roggeveen & Sethuraman, 2020). Naturally, retailers who invested online before the outbreak have reaped the reward of this visionary mindset (Deloitte Monitor, 2020).

Nielsen (2020) on its report on omnichannel shopping argues that omnichannel has become the dominant retail strategy among 66 percent of global population (78 percent in Asia-Pacific and 75 percent in Africa-Middle East). Deloitte projects that consumers will seek a good omnichannel experience even after the coronavirus ends (Deloitte Monitor, 2020). McKinsey International recommends companies to invest in digital excellence to satisfy customer needs (Maechler, Emmanuelli, & Moritz, 2020), as customers are inclined to continue preferring digital even after its effects diminish (Diebner, Silliman, Ungerman, & Vancauwenberghe, 2020). Bourlier (2020) suggests an extension of channels within the omnichannel ecosystem and includes external alternatives as marketplaces or social media to utilize the potential of digital. For grocery, retailers search ways to resemble online to offline to rejuvenate impulse shopping (Roggeveen & Sethuraman, 2020).

The omnichannel concept has passed through the phase of conceptualization (Rigby, 2011; Brynjolfsson, Hu, & Rahman, 2013; Piotrowicz & Cuthbertson, 2014;

Bell, Gallino, & Moreno, 2014; Frazer & Stiehler, 2014; Verkoef, Kannan, & Inman, 2015; Beck & Rgyl, 2015) and real-life case studies (Hansen & Sia, 2015; Picot-Coupey, Hure, & Piveteau, 2016). The key objectives of these studies have been defining and distinguishing omnichannel from other retail management systems. In parallel, academics' conceptual frameworks illustrating the holistic nature of service experience, specifically in retail (Grewal, Levy, & Kumar, 2009; Verkoef et al., 2009; Lemon & Verkoef, 2016; and Grewal & Roggeveen, 2020) paved the way for the next stage of omnichannel concept development.

After the conceptual studies had set the foundation, omnichannel customer experience captured research interest from both academia and practitioners (Cook, 2014; Bhalla, 2014; Melero, Sese, & Verkoef, 2016; Mosquera, Olarte Pascual, & Juaneda Ayensa, 2017; Tyrväinen & Karjaluoto, 2019). The empirical studies on omnichannel consumer behavior were limited to two studies on factors influencing omnichannel consumers' behavior by Juaneda-Ayensa, Mosquera, and Sierra Murillo (2017) and Kazancoglu and Aydin (2018). The only empirical study on omnichannel customer experience is published by Shi, Wang, Chen, and Zhang (2020), who has conceptualized omnichannel customer experience, developed a scale as a first-order factor model, and studied the relationship between omnichannel shopping intention and omnichannel customer experience.

Our study aims to conceptualize omnichannel customer experience, develop a reliable and valid scale positioning omnichannel customer experience as a one factor second-order construct, and finally question its behavioral impact on key customer metrics.

In spite of existence of scales on customer experience (Bagdare & Jain, 2013; Maklan & Klaus, 2011; Kim, Cha, Knutson, & Beck, 2011) this will be the first

empirical study both developing a scale specifically on omnichannel customer experience and testing its relationship with key customer metrics. Furthermore, the timing of the study also helps academia to understand the impact of coronavirus pandemic on consumer behavior and findings will serve for the new era after COVID-19.

CHAPTER 2

LITERATURE REVIEW

2.1 New customer

The advancements in technology have led to significant enhancements in capabilities of both customers and companies. The number of alternative communication channels has considerably brought convenience, interactivity, connectivity, and transparency to customer-company relationships.

As the convergence of technologies (Prahalad, 2004; Payne, Storbacka, and Frow, 2008) minimizes the distance, customers can smoothly and painlessly start a conversation with the company. This dialogue can be multilateral (Prahalad, 2004) involving a single or a group of customers with full transparency, capable of bringing every conversation into the stage in front of millions of customers (Prahalad & Ramaswamy, 2000). Information once solely provided by the companies has transformed and expanded into new sources: voice of other customers, defined as "collective knowledge" by Prahalad and Ramaswamy (2000).

Customers expect transparency from the company and demand always the truth (Prahalad & Ramaswamy, 2004). Customers have become more knowledgeable and "prepared" as they possess more information about the product and market price (Cook, 2014) and expected more from the retailer.

The interactivity enables and empowers customers to discern more information about products or companies. However, interactivity is not reciprocal – rather – limited. Companies cannot reach that much information about customers with regards to privacy concerns and regulations.

These have dramatically shifted power from companies to customers (Prahalad & Ramaswamy, 2000; Vargo & Lusch, 2004). Nonetheless; the customers with adequate skills and capabilities, particularly technology adaptability skills, excel as the key actors of this evolution. This situation accentuates the leading role of young customers among others.

Service-dominant logic (hereafter, S-D) makes strong customer relationship central to the creation of value, with the foundational premise of "the customer is always the co-creator of value" (Vargo & Lusch, 2008, p.3). "What is co-created is the experience" (Prahalad, 2004, p.23), that is the sole purpose of consumption has become the provision of "personalized experiences" (Prahalad & Ramaswamy, 2003, p.15). Customers possess the will and power to shape their own experiences, either individually or with other customers – and therefore not accept companies' ready-made offerings (Prahalad & Ramaswamy, 2000). The value is determined by customer's unique evaluation of the experience (Bagdare & Jain, 2013). Vargo and Lusch (2008, p.9) support this notion with a foundational premise as "Value is always uniquely and phenomenologically determined by the beneficiary".

Increasing number of factors affecting customers' preferences liberalize customers, becloud their choices, and result in harder predetermination of customer experiences (Prahalad & Ramaswamy, 2003). Companies should seize the control of co-creation process, e.g., providing flexible opportunities for customers and deciding customers' level of involvement (Prahalad & Ramaswamy, 2000; Puccinelli et al., 2009) and turn customers' strengths into advantages (i.e., source of competence with their willingness to learn, knowledge and skills, etc.) (Prahalad & Ramaswamy, 2000). Prahalad and Ramaswamy (2003, p.15) propose creating "experience environments" incorporating a network of companies, customers, and channels

structured like a free co-creation zone. The fruits of this environment are customer experiences unique to each individual, even if the same offerings are involved (Prahalad & Ramaswamy, 2004). Omnichannel management is the environment the retailers constitute to generate the opportunity of win-win situation for the new customers and themselves.

2.2 Experience

Prahalad and Ramaswamy (2003) underscore the fact that in this new order, products and services are just means of production of experiences. “Value inheres in the consumption experience” (Holbrook, 2000, p.178). This is not a new phenomenon. Abbott in 1955 (as cited in Holbrook, 2000, p.179) suggest that products are means of performing services which in turn generate experiences: "What people really desire are not products but satisfying experiences […] People want products because they want the experience-bringing services which they hope the products will render."

Literature on experience is relatively nascent (Verkoef et al., 2009; Lemon & Verkoef, 2016) and has been initiated by Holbrook and Hirschman (1982) incorporating experience dimension (hedonic utilities) into the structure of consumption behavior through 3F’s (fantasies, feelings, and fun) and commenced “experiential marketing”. The contemporary articulation of the argument is introduced by Holbrook in 2000, as 3F’s morphed into 4E’s (experience, entertainment, exhibitionism, and evangelizing) indicating “experience” as a distinct concept.

Holbrook and Hirchmann (1982) include emotions into a pure information-processing consumption structure. This expansion broadens the context of value

from focusing solely on the action of consumption into the “experience of consumption” (Holbrook &Hirchmann, 1982; p.137) based on “emotions and contextual, symbolic, and nonutilitarian aspects of consumption” (Frow & Payne, 2007, p.91). The pervasive movement of experience possesses the brand as a whole, Prahalad (2004, p.23) states that “experience is the brand”. Gentile, Spiller, and Noci (2007, p.404) follow the value definition of Addis and Holbrook (2001) while searching for the experiential features of successful brands and suggest that “it is important to deliver an adequate balance between utilitarian and hedonic value” to generate positive experiences.

Pine and Gilmore (1998) describe "experience" as the fourth form of distinct economic offerings (after commodity, goods, and services) that arose by the virtue of commoditization of previous forms and position experience as the future of the economy. However, Holbrook (2000, p.180) critics Pine and Gilmore (1998) and argues that “every consumption event provides some form of experience(s)”. Furthermore, he opposes Pine and Gilmore's positioning of "customization" as a converter of goods to services and experiences and argues that customization is not a prerequisite of generating an experience. Likeminded Schmitt (1999, p.58) positions experience at the heart of marketing practices, replaces functional benefits of the products with experiential ones and describes consumption as a “holistic experience”.

Pine and Gilmore (1998) identify four realms of customer experience (entertainment, educational, esthetic, and escapist) based on two dimensions: customer participation (active vs passive) and level of connection (absorption vs immersion). At the intersection of the optimum level of these two dimensions, a sweet spot of rich customer experience exists. However, Caru and Cova (2003)

present an opposing argument in their typology of customer experience based on different means of provision and different levels of intensity of the experience: extraordinary versus ordinary and consumer versus consumption experience. They argue that each experience cannot be limited to "consumption experience that can occur with or without a market relation" and oppose the idea that every experience should be extraordinary to be defined (Caru & Cova, 2003; p.276).

Forlizzi and Ford (2000) propose a customer experience model illustrating four stages of customer experience: sub-consciousness, cognition, narrative, and storytelling, and the customer may shift between them. Berry, Carbone, and Haeckel (2002) suggest that customer experience is composed of two kinds of experience clues: (1) functional clues, related to the key functioning of product or service, and (2) emotional clues concerning emotions, five senses, and the environment surrounding the offer. The authors argue that these clues should work synergistically to create value. Poulsson and Kale (2004) agree on the existence of both functional and hedonic benefits, yet argue that functionality will dominate the commercial market in foreseeable future. The authors further propose novelty, surprise, learning, and engagement as the four distinguishing characteristics of successful customer experience and advise that "intensity of the experience" owes its success to the unity of these concepts (Poulsson & Kale, 2004, p.272).

Poulsson and Kale (2004, p.271) distinguish experience from product and service, relate to co-creation process, and define it simply as "the result of the interaction between customer and experience provider, and the act of co-creation between the two". Customers bring personal characteristics, where the provider brings tools and processes to surface these feelings during the encounter (Poulsson & Kale, 2004).

Gentile et al. (2007, p.397) identify the experience as an evolution - the latest in the customer-company relationship and define customer experience as a concept "originating from a set of interactions between a customer and a product, a company, or part of its organization, which provoke a reaction". Voss, Roth, and Chase (2008, p.247) relate customer experience to operations strategy, design and introduce the concept of "services as destinations" to categorize experiences within a company on two dimensions: the depth of use and the degree of integration. Furthermore; Brakus, Schmitt, and Zarantonello (2009) classify the experience concept within consumer and marketing research as product experience (occurs when consumers interact with products), shopping and service experience (occur when a consumer interacts with a store's physical environment, its personnel, and its policies and practices), and consumption experience (occurs when consumers consume and use products, and include hedonic dimensions as feelings, fantasies, and fun).

Helkkula, Kelleher, and Pihlström (2012, p.61) bring a new perspective to the discussions: temporal nature of value in experience, by suggesting that "service customers' experiences of value may iteratively flow back and forth between current, future, and past experiences within a hermeneutic spiral of sense-making". Value is dependent on customer's considerations of the past and the future (Helkkula et al., 2012). This may be per the changing nature of customers being affected by past experiences or repeated interactions (Lemon & Verkoef, 2016).

2.2.1 Factors affecting customer experience

Over the past several decades, academics discuss several factors affecting customer experience in a great variety of headings. We encapsulate the research in specific factors namely customer factors (Sheth & Parvatiyar, 1995; Jones, 1999), retailer

factors (Jones, 1999), social factors (Sheth & Parvatiyar, 1995) and macro factors (Grewal et al., 2009).

Customer factors relate to personal characteristics unique to customer, beyond the control of the retailer, as previous experiences (Forlizzi & Ford, 2000; Verkoef et al., 2009), goals (Payne et al., 2008; Puccinelli et al., 2009; Verkoef et al., 2009), memory, involvement, attitudes, affect, and consumer attributions and choices (Puccinelli et al., 2009), customer experience across channels (Verkoef et al., 2009), perceived risk (Sheth & Parvatiyar, 1995), financial resources (Jones, 1999), and technology readiness (Verkoef et al., 2009).

Retailer factors are the tools used by the retailer to attract the attention of customers as the type of store and channel (Verkoef et al., 2009), location (Grewal et al., 2009; Verkoef et al., 2009), atmosphere (Jones, 1999; Puccinelli et al., 2009; Verkoef et al., 2009) sales personnel (Jones, 1999; Puccinelli et al., 2009; Verkoef et al., 2009), use of technology in store (Verkoef et al., 2009; Grewal & Roggeveen, 2020), assortment (Jones, 1999; Verkoef et al., 2009; Grewal et al., 2009), retail brand (Verkoef et al., 2009), pricing (Jones, 1999; Verkoef et al., 2009; Grewal et al., 2009) and supply chain (Grewal et al., 2009). These factors fully controlled by retailers are utilized to attract the attention of customers and initiate engagement. Specifically, the advancements in technology enable the use of technology-based service delivery systems during the encounter and directly influence customer experience (Verkoef et al., 2009; Grewal & Roggeveen, 2020). Naturally, the severity of the impact adheres to customer's technological adaptability and readiness (Verkoef et al., 2009). Similarly, the use of mobile has been an alternative way of integrating technology into a customer-retailer interaction and affecting customer experience (Lemon & Verkoef, 2016).

Social factors influencing the customer experience are specified as family, friends, or other customers during or after shopping via word-of-mouth communication (Sheth & Parvatiyar, 1995; Verkoef et al., 2009), religion, government, employers, and marketers (Sheth & Parvatiyar, 1995). Sales employees interacting with customers during the encounter can also be included as members of the social environment and influencers of customer's overall experience (Verkoef et al., 2009).

Macro factors relate to macroeconomy (Grewal et al., 2009; Verkoef et al., 2009; Lemon & Verkoef, 2016), culture (Forlizzi & Ford, 2000; Verkoef et al., 2009; Grewal & Roggeveen, 2020), politics (Grewal & Roggeveen, 2020), and financial uncertainty (Grewal et al., 2009). These factors affect not only customers but also the retailers (Grewal et al., 2009) and the total customer experience is dynamic (Lemon & Verkoef, 2016). Discussions on political influence also cover people the customer socializes with or the ones they follow on social media and topics s/he discusses with others (Grewal & Roggeveen, 2020).

The latest developments after the spread of COVID-19 have proved the expression of Lemon and Verkoef in 2016 (p.79): "extreme crises can have a strong, negative, and enduring effect on the customer experience". Similarly, the seasons (regular or holiday) and competitive environment can be enumerated as other macro factors influencing customer experience (Verkoef et al., 2009) Additionally, the direct impact of "advanced technologies and their platforms" should not be ignored (Grewal & Roggeveen, 2020, p.4).

2.3 Omnichannel

While transforming the customers, technology has simultaneously presented retailers alternative ways to reach their target audience and earn more (i.e., new channels on top of traditional brick-and-mortar). The increasing number of channels paved new grounds for scientific exploration in a new direction: multiple channel use. Neslin et al. (2006, p.96) define multichannel management as "the design, deployment, and evaluation of channels to enhance customer value through effective customer acquisition, retention, and development".

The majority of studies in the literature use different concepts as umbrella terms referring to different degrees of channel integration. Cao and Li (2015, p.3) define channel integration 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 customers." So, there are levels of integration and academics agree that the multiple channel management is directly related to the degree of integration.

Beck and Rygl (2015) clarify the distinctive features of channel interaction methods to overcome confusion with taxonomy as multi-, cross-, omnichannel retail based on the initiator of the channel interaction (customer or retailer) and number and characteristics of channels covered. The degree of "integration" from retailers' point of view and "interaction" from customers' standpoint may determine the form of the retailing as multi-, cross-, omnichannel (Mosquera et al., 2017).

Müeller-Lankenau, Klein, and Wehmeyer (2004) state that full integration may not be ideal for all companies depending on a company's situation and propose four layers of integration based on the depth of integration and strength of channel domination, ranging from offline-dominated to integration strategy. Berman and

Thelen (2004) agree with Müeller-Lankenau et al. (2004) and attribute it to the lack of financial resources or potential synergies. Neslin et al. (2006) also address the discussion on the level of integration and state that cross-channel integration may vary from complete separation to full integration and suggest deciding on the level of channel synergies as a future challenge for the companies (i.e., whether channels should be independent or integrated).

In multichannel; integration of price, promotion, marketing, supply chain, and customer experience is limited across channels (Piotrowicz & Cuthbertson, 2014). The focus of multichannel is on distribution centers (Mirsch, Lehrer, & Jung, 2016). Each channel is managed separately within the same entity and the risk of competition among channels may arise due to this silo mentality (Piotrowicz & Cuthbertson, 2014; Beck & Rygl, 2015; Verkoef et al., 2015; Mirsch et al., 2016). In cross-channel, the integration across channels is limited and does not include all possible channels. This stage is indicated as a hybrid model in the transition-phase to full integration (Mirsch et al., 2016).

Omnichannel is leveraged as the "evolved" version of multi-channel. The channels in multi-channel are not connected, however, omnichannel provides flexibility to customers to move across channels within a single buying process (Piotrowicz & Cuthbertson, 2014). All channels are fully integrated and act as one. The focus is solely on customer. Rigby (2011, p.65) has become the first to name the full integration as "omnichannel" and defined the concept as "an integrated sales experience that melds the advantages of physical stores with the information-rich experience of online shopping". However, the resemblance with "the cyber-enhanced retailing" approach coined by Otto and Chung in 2000 (p.1) "melting the advantage of e-commerce with the advantages of traditional retailing" or click-and-mortar

concept (Steinfield, 2002; Grewal, Iyer, & Levy, 2004) draws attention. Furthermore, the integrated multichannel strategy, first introduced by Müeller-Lankenau et al. (2004) as a form of a multichannel strategy, is so similar to today's omnichannel strategy (i.e., involving strong integration of offline and online channels, highly interlinked channels, seeing the customers as individuals, and being supported by technology). Actually, the literature welcomes the omnichannel concept with the taxonomy of Müeller-Lankenau et al. (2004).

Consequently, omnichannel is not a new phenomenon. However, it is far more than the integration of channels, but more "the experience that derives from the integrated combination of them" (Lazaris & Vrechopoulos, 2014; p.1). Therefore, the definition of omnichannel management by Verkoef et al. (2015, p.176) putting customer experience at the heart of this ecosystem will be elaborated in this study: "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 are optimized".

2.3.1 Enablers of omnichannel retail

Grewal et al. (2004) identify enablers of Internet retailing as accelerating forces to distinguish it from brick-and-mortar and facilitate its emergence and development. Similarly, in this study we identify "technology" and "integration" as key enablers of omnichannel retail (see Figure 1).

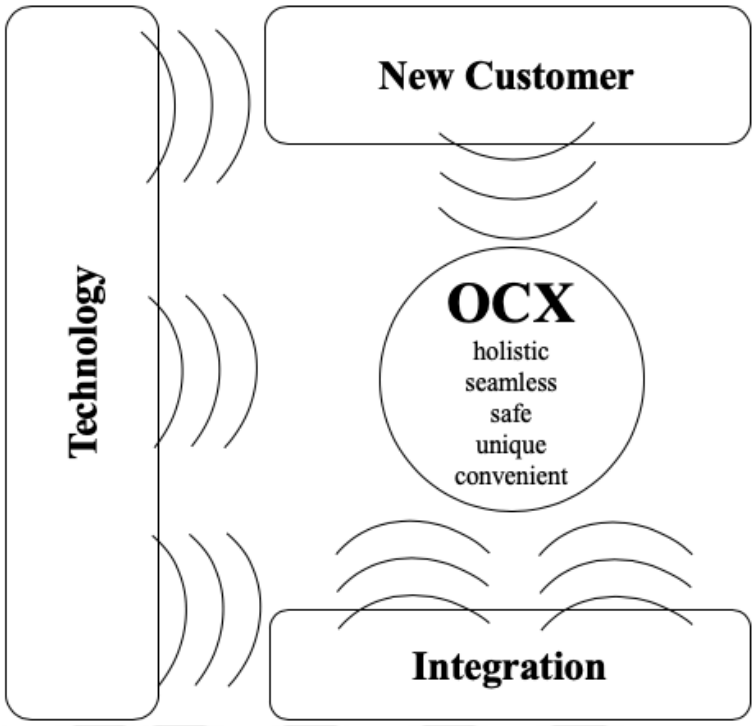

Figure 1 Enablers of omnichannel customer experience (OCX)

2.3.1.1 Technological developments

Technological development is the key enabler of omnichannel in realizing its distinctive features to satisfy customers' needs (Stone et al., 2002; Mosquera et al., 2017; Brynjolffson, Hu, & Rahman, 2013; Hansen & Sia, 2015; Piotrowicz & Cuthbertson, 2014; Verkoef et al., 2015). The freedom provided by mobile devices fuels the transformation towards omnichannel retail (Piotrowicz & Cuthbertson, 2014) as the use of location-based applications and augmented reality technologies on mobile devices (Brynjolffson et al., 2013). Technological developments force companies to evolve their strategies into omnichannel practices (Ansari, Mela, & Neslin, 2008; Piotrowicz & Cuthbertson, 2014; Hansen & Sia, 2015; Verkoef et al., 2015; Mosquera et al., 2017). Social media as another form of technological advancements ensures transparency between retailers and customers, which

empowers customers more and fastens the transformation to omnichannel (Piotrowicz & Cuthbertson, 2014).

Positioning the unavailability of Internet access as a barrier to the development of multichannel (Zhang et al., 2010) confirms the enabling effect of technology. Furthermore, Mosquera et al. (2017) recommend retailers to prioritize effective technology investment in the age of omnichannel.

Utilization of in-store technology also facilitates the convergence of online with traditional brick-and-mortar, accordingly, omnichannel (Otto & Chung, 2000; Alba et al., 1997; Goersch, 2002; Berman & Thelen, 2004; Wallace, Giese, & Johnson, 2004; Verkoef et al., 2015). Meuter, Ostrom, Roundtree, and Bitner (2000, p.50) define Self-Service Technologies (SSTs) as "technological interfaces that enable customers to produce a service independent of direct service employee involvement". Key SSTs generating value in the context of omnichannel are kiosks creating cross-channel synergy (Wallace et al., 2004; Berman & Thelen, 2004; Zhang et al., 2010; Shankar, Inman, Mantrala, Kelley, & Rizley, 2011; Bhalla, 2014; Cook, 2014; Mosquera et al., 2017; Neslin et al., 2006) or customer service (Falk, Schepers, Hammerschmidt, & Bauer, 2007), free wi-fi network to communicate with customers (Verkoef et al., 2015; Brynjolffson et al., 2013; Lazaris & Vrechopoulos, 2014; Cao & Li, 2015; Saghiri, Wilding, Mena, & Bourlakis, 2017), tablets to provide sales personnel the customer information (Rigby, 2011; Verkoef et al., 2015) or interactivity with customers (Brynjolffson et al., 2013; Hansen & Sia, 2015; Bhalla, 2014), and virtual and augmented reality (Grewal, Roggeveen, & Nordfalt, 2017).

In a focus group study conducted by Tyrvainen and Karjaluoto (2019), the customers find technology use in stores valuable for product comparisons, product

information, customer service, personalized message and content or pinpointing the location of the products in-store. Nonetheless, customers expect SSTs as a good implemented (full working, interactive, and well-integrated to store layout) solution provider and complementary to instore personnel as technology used may not fit into the capabilities of all customers visiting the store (Piotrowicz & Cuthbertson, 2014). Furthermore, sales personnel should be well-prepared and equipped with new technology to meet the high expectations of the "prepared" customer (Cook, 2014). Otto and Chung (2000) discuss the implementation of SSTs to converge online and offline, and Meuter et al. (2000) explain factors creating customer satisfaction as satisfying the immediate need of the customer, relative advantage, accomplishing its mission, and dissatisfaction as technology failure, poor design, customer-driven failure, and process failure.

Furthermore, retailers have the opportunity to develop new cross-channel services to fulfill the needs of new demanding customers as "click and collect", "order in store, deliver home", "order online, return to store" (Piotrowicz & Cuthbertson, 2014). Gallino and Moreno (2014) study "buy-online, pick-up-in-store (BOPS)" and encounter a decrease in online sales coupled with an increase in-store sales and traffic.

During COVID-19 crisis, we have once again witnessed the transforming power of technology and evidenced its enabling role in delivering safe and convenient customer experiences (Sheth, 2020; Westbrook & Angus, 2021). COVID-19 and safety concerns have exploded the use of digital channels (Sheth, 2020; Sneader & Sternfels, 2020; Evans, 2020). KPMG in its COVID-19 Pulse Survey (2020) points out the "rise of digital" as one of the key trends that impacted consumers' preferences. Consumers mostly prefer online for improved delivery and

checkout options (Evans, 2020). Deloitte enumerates social networking, live streaming and similar forms of online marketing as other forms of digital channels on top of e-commerce (Deloitte Monitor, 2020). Additionally, QR (Quick Response) codes may be used for in-store technology to enable social distancing (Westbrook & Angus, 2021).

According to KPMG COVID-19 Pulse Survey (2020), 33 percent of offline customers migrated to online. Correspondingly, 27 percent of global consumers have to shop online for the first time - added on top of 9 percent regular online shoppers before COVID-19 (Nielsen 2020). Thirty-seven percent of population in the US have considered shifting to online shopping after COVID-19 (Kim, 2020).

As consumers familiarize with the comfort of digital channels, they are inclined to continue utilizing these advantages after the pandemic (Sheth, 2020; KPMG, 2020). According to Euromonitor (Evans, 2020), 81 percent of goods globally sold through offline channels will diminish to 76 percent in 2025. In China, there has been a 55 percent increase in consumers intending to permanently shift to online grocery shopping and an increase of three to six percentage points in overall e-commerce penetration in the aftermath of COVID-19 (Diebner et al., 2020).

2.3.1.2 Integration

Integration is the key enabler of omnichannel retailing. The unique combination of potential integration areas determines the level of integration. Different forms of integration enabling omnichannel are scattered towards marketing communications and branding (Goersch, 2002; Steinfield, 2002; Stone et al., 2002; Zhang et al., 2010), promotions (Goersch, 2002; Berman & Thelen, 2004; Zhang et al., 2010; Shankar et al., 2011; Cook, 2014; Saghiri et al., 2017), pricing (Goersch, 2002;

Zhang et al., 2010; Shankar et al., 2011; Cook, 2014; Saghiri et al., 2017; Tyrvainen & Karjaluoto, 2019), product availability and information (Goersch 2002; Berman & Thelen, 2004; Bendoly, Blocher, Bretthauer, Krishnan, & Venkataramanan, 2005; Kumar & Venkatesan, 2005; Zhang et al., 2010; Cook, 2014; Melis, Campo, Breugelmans, & Lamey, 2015; Saghiri et al., 2017; Tyrvainen & Karjaluoto, 2019), customer service (Goersch, 2002; Steinfield, 2002; Zhang et al., 2010; Piotrowicz & Cuthbertson, 2014; Saghiri et al., 2017), information management (Goersch, 2002; Stone et al., 2002; Berman & Thelen, 2004; Kumar & Venkatesan, 2005; Zhang et al., 2010; Shankar et al., 2011; Brynjolfsson et al., 2013; Cook, 2014; Mosquera et al., 2017), customer experience (Goersch 2002; Stone et al., 2002; Shankar et al., 2011; Piotrowicz & Cuthbertson, 2014; Tyrvainen & Karjaluoto, 2019), and atmosphere (Shankar et al., 2011; Tyrvainen & Karjaluoto, 2019).

2.3.1.2.1 Data integration

Among these integration forms; data integration is of utmost importance as the prerequisite for creating a “single view” of the customer. Stone et al. (2002) warn the retailers against the risk of being unable to satisfy the needs of customers and consequently losing them to competitors unless they integrate services and promotions across channels. Neslin et al. (2006) specify “data integration” and “coordination of channels” as key priorities for the retailers to focus on. Verhagen and van Dolen (2009) recommend integrating offline and online databases to support the seamless integration of online and offline operations. Tyrvainen and Karjaluoto (2019) show that channels should not include “contradictory information”. However, data unification brings value only when the company is competent to analyze this data properly (Brynjolffson et al., 2013).

Goersch (2002) points out customer data as the key enabler of creating "personalization" of the customers. Accordingly, Kumar and Venkatesan (2005) recommend suppliers, who plan to manage multiple channels including online, to integrate product and customer information across channels. The use of new technologies would support personalizing offerings for "superior customer experience" (Mosquera et al., 2017). Furthermore, Mosquera et al. (2017) identify "data integration" as a necessity to understand customers thoroughly. On the other hand, Zhang et al. (2010) indicate data integration as a key challenge for multichannel. Providing personalized offerings needs a thorough comprehension of customers by integrating every bit of information through each transaction. Nonetheless, privacy concerns come into question with regards to data collection (Piotrowicz & Cuthbertson, 2014; Melero, et al., 2016).

2.3.1.2.2 Marketing mix integration

The integration of marketing mix covers synchronization of pricing, promotions, and product availability across channels. Pricing behavior in the online branch of traditional retailers (multi-channel) is compared to pure Internet player first by Tang and Xing in 2001. Neslin et al. (2006, p.106) question whether "the firms charge the same price in each channel" and Neslin and Shankar (2009, p.79) question the coordination of the marketing mix across channels in a multichannel context ("how to manage differences/similarities in prices and products). Shankar et al. (2011) address the integration of pricing, promotions, after-sales services, information, and experience across channels as a way of satisfying the needs of customers empowered by technology.

To guarantee consistency in omnichannel, companies should provide the same assortment, product information, price, promotions, and data across channels (Cook, 2014). Verkoef et al. (2015) point out the right level of retail mix integration across channels for further research on omnichannel. Tyrvainen and Karjaluoto (2019) provide evidence that customers expect the channels to be integrated concerning pricing, atmosphere, assortment, and experience.

2.3.1.2.3 Supply chain integration

Integrating logistics is pertinent to a retailer's ability to offer in-store product pick-up and return as well as informational services, such as online information on store inventories (Goersch, 2002). Piotrowicz and Cuthbertson (2014) point out supply chain redesign as a prerequisite for successful omnichannel retail operations. Specifically, new service offerings (e.g. click-and-collect) emerged after the developments in supply chain redesign.

Nüesch, Alt, and Puschmann (2015) make a classification based on the maturity of the customer interaction and build a conceptual hybrid customer interaction framework based on omnichannel management with three dimensions: (1) strategy (channel convergence), (2) organization (process convergence), and (3) systems (technology convergence).

2.3.2 The effects of multiple channel management

Academic research on the effects of multiple channel management scattered towards the impact on channel ecosystem, shopping behavior, and overall company performance.

2.3.2.1 Effects on channel ecosystem: complementary vs substitute

The academia has widely discussed what happens when channels work together. On the positive side, channels complement each other with their strongest capabilities. In this approach, the channels are partially integrated and retailers take the advantage of each channel to satisfy different customer profiles (Avery, Steenburgh, Deighton, & Caravella, 2012; Wallace et al., 2004; Steinfield, Mahler, & Bauer, 1999; Otto & Chung, 2000; Seinfield, 2002; Stone et al., 2002; Berman & Thelen, 2004; Grewal et al., 2004; Müeller-Lankenau et al., 2004; Neslin & Shankar, 2009; Herhausen, Binder, Schoegel, & Herrmann, 2015; Dholakia, Zhao, & Dholakia, 2005).

Steinfield et al. (1999, p.56) point out the synergy between online and traditional brick-and-mortar and suggest local stores to "offer the appropriate complementary services on their website". Steinfield (2002) in his study on competitive advantages of "click-and-mortar" underscores the necessity of "seamless integration", positioning each channel as complementary to the rest. Grewal et al. (2004) recommend online retailers to partner with brick-and-mortars (become click-and-mortar) to complement each other. Berman and Thelen (2004) underscore that channels complement each other due to the unique strengths and weaknesses of each channel to reach different target groups.

The focus was not providing every service in every channel, but rather on channel diversification benefiting from diverse strengths/weaknesses of channels. Accordingly, Neslin and Shankar (2009, p.75) support the idea of providing "the 'menu' of potential channels" for the customer to select the most satisfying one. Zhang et al. (2010) discuss the level of coordination across channels and compare "harmonization", that is providing a bucket of different forms of channels with "homogenization", the full integration across channels. Kollman, Kuckertz, and

Kayser (2012, p.192) propose some kind of separation of powers presenting "unique offer to meet customer requirements" emphasizing conspicuous channel characteristics to satisfy specific customers' specific needs.

Beneath these conceptual studies, empirical research supports the complementary feature of multichannel. For instance, Avery et al. (2012) suggest that the addition of offline cannibalizes online in the short-term, whereas complements in the long-term. Based on the empirical study conducted by Dholakia et al. (2005), there is no substitution effect due to the addition of an online channel to the existing (catalog) retailer, as the outcome of the study shows that retailers do not lose their past investments due to the customers' past experiences with the brand. Furthermore, empirical data shows that offline channel becomes an advantage to attain new customers for the online channel. Additionally, Herhausen et al. (2015) study the impact of providing information about the offline channel on the online channel and conclude that online complements brick-and-mortar.

At the other extreme of the continuum we see the negative impact of multichannel management; the substitute approach. Ward (2001) welcomes the introduction of online channel and shows that online is a stronger substitute for catalog channel when compared to its effect for brick-and-mortar. However, Dholakia et al. (2005) provide evidence that there is no substitution effect between online and catalog channels. Afterwards, Ansari et al. (2008) empirically support the findings of Ward (2001) that customers prefer online over catalog.

As the capabilities of online channel developed, channel-switching behavior has emerged as the extension of the substitute approach. Brynjolfsson, Hu, and Rahman (2009) state that online is preferred for niche products. Schröder and Zaharia (2008) imply that consumers use mostly the same channel both for

information gathering and purchasing and not fond of channel-switching in the same purchasing process.

Ansari et al. (2008) develop a model to illustrate how consumers migrate between channels in the multichannel environment and argue that migrating from offline to the online channel, specifically Internet, leads to a drop in sales in the long-run and low loyalty levels for online channel. Avery et al. (2012, p.106) indicate the type of channel being added, current channel mix, customer segments, and "passage of time" as the key influencers of channel migration. Kollman et al. (2012) incorporate multichannel customer taxonomy on customers' tendency to switch channels. Gallino and Moreno (2014) showcase channel migration from online to offline in the implementation of Buy-Online-Pick-up-in-Store (BOPS) as a new service offering. Melis et al. (2015) also underline the channel-switching propensity of long-term grocery customers of the online channel to the other retailers' online channels.

Zhang et al. (2010) promote channel-switching and consider each channel enforcing the other. Bhalla (2014) argues that every organization needs a channel migration plan, where the online channels are key to the successful customer experience at the core. Additionally, channel migration may turn into an advantage e.g., increasing long-term profitability, if the channels are well-integrated (Schramm-Klein, Wagner, Steinmann, & Morschett, 2011). We argue that in the ideal world of omnichannel, the channels working in a fully integrated manner will complement each other and benefit both the company and customers.

2.3.2.2 Effects on shopping behavior

The proliferation of distribution channels, the uncontrollable nature of customer experience and customers' tendency to switch channels have spurred a new shopping behavior as showrooming. Rapp, Baker, Bachrach, Ogilvie, and Beitelspacher (2015, p.360) define showrooming as "a practice whereby consumers visit a brick-and-mortar retail store to evaluate products/services firsthand and use mobile technology while in-store to compare products for potential purchase via any number of channels". Actually, the origins of showrooming arise from the notion of "free-riding" concept (van Baal & Dach, 2005, p.75) that is switching retailers within a single transaction causing a financial burden for the switched retailer who cannot convert the interest of consumer into monetary values. Another concept, the research-shopper phenomenon, which is defined as "the tendency of customers to use one channel for search and another for purchase" by Verkoef, Neslin, and Vroomen (2007, p.129) also relates to the channel switching behavior of consumers. The main difference is that the switching behavior can happen between either retailers or channels. Moreover, the key driver of research shopping is cross-channel synergy (Verkoef et al., 2007, p.130).

Bell et al. (2014) discuss the aim of traditional retailers to end showrooming in case of a competitor chosen by the customer. Rapp et al. (2015) elaborate the relationship between showrooming and salesperson efficacy and underline sales persons' cross-selling and coping strategies against showrooming behavior. Mehra, Kumar, and Raju (2018) provide evidence that showrooming deteriorates brick-and-mortar retailers' profits. Kang (2018, p.145) searches whether "omnichannel consumers' psychographic characteristics are antecedents to showrooming and webrooming and conclude that omnichannel consumers' information attainment and

social interaction positively affect both showrooming and webrooming, whereas price comparison and assortment are influential on showrooming and webrooming, respectively. Furthermore, Mosquera et al. (2017, p.177) discuss "reverse showrooming", where retailers direct customers to search online via mobile applications or kiosks located in stores.

2.3.2.3 Effects on company performance metrics

As the consequences of transforming into a multichannel system are of utmost importance for the performance of the company, empirical studies are conducted to deduce the impact of new channels on overall company performance. Schramm-Klein et al. (2011) empirically accentuate the importance of each channel's performance due to its effect on the overall image of the retailer. Kumar and Venkatesan (2005) provide evidence through an empirical study that multichannel management generates higher revenues. Cao and Li (2015) support this notion showing that firms with a higher level of cross channel integration cause higher sales growth. Correspondingly, Venkatesan, Kumar, and Ravishanker (2007) prove the positive relationship between multiple channel use & customer profitability.

Another research area within multichannel retail has been the impact of changes in the retail context on consumers. Academics aim to understand distinctive characteristics and types of multichannel customers. Burke in 2002 conducted a detailed survey on multichannel consumer preferences with a special focus on the role of technology to clarify what consumers want in multichannel experience. Kumar and Venkatesan (2005) study customer and supplier characteristics specific to multichannel purchasing behavior in the context of the B2B market. Kazancoglu and

Aydin (2018) also employ a qualitative approach to elaborate factors affecting customers' purchase intentions through omnichannel retail.

Studies sought to understand the motives behind multiple channel use, determine the similarities and identify multichannel customer taxonomy. For example, Konus, Verkoef, and Neslin (2008) segment customers based on their attitudes towards multi-channel as multichannel enthusiasts, uninvolved shoppers, and store-focused consumers. Kollman et al. (2012) utilize three dimensions as first information, channel switching propensity, and channel type. Both base their studies on first two stages of purchasing: information search and purchase. Furthermore, Cook (2014, p.263) utilizes distinctive characteristics of omnichannel customers namely "mobile, highly connected, and embracing technology in their daily life" to classify as omni integrated, young mobile, and social worker. Barwitz and Maas (2018) focus on the type of value (utilitarian, hedonic, cost/sacrifice minimizing, and relational) to segment omnichannel customers.

CHAPTER 3

DEVELOPING THE RESEARCH MODEL AND THE HYPOTHESES

3.1 Omnichannel customer experience (OCX)

Due to the lack of studies on omnichannel customer experience, we benefit from extensive review of literature on customer experience and omnichannel separately and then create a brand-new definition for the construct to base our research model on. Customer experience has been identified through a variety of distinctive characteristics. In the beginning, academics tend to assign inflated attributes infusing customer experience with strong emotions as memorable (Pine & Gilmore, 1998), extraordinary (Arnould & Price, 1993; Pine & Gilmore, 1998), or surprising (Poulsson & Kale, 2004). Caru and Cova (2003) oppose this perspective in their customer experience typology based on means of provision and intensity of the experience, embrace interactions on a continuum with defined extremes as ordinary to extraordinary experiences and imply that memorability is not a prerequisite of being referred as an experience. Poulsson and Kale (2004) exemplify this with ordinary grocery shopping in need of time and convenience, instead of memorability. Brakus et al. (2009, p.54) state that "a brand experience does not need to be surprising; it can be both expected or unexpected." Jones (1999, p.137) advises against the risk of "sensory overload" that may exist if the retailers seek to please customers with too much entertainment during ordinary shopping.

Schmitt (1999) pioneered in presenting experience as a multidimensional construct, composed of sensory (SENSE, experiences through five senses), affective (FEEL, addressing customer's emotions), cognitive (THINK, related to mental

processes), physical experiences, behaviors, and lifestyles (ACT), and social identity experiences (RELATE, aspires to self-improvement). Schmitt (1999) suggests that superior experience is the combination of these five dimensions, which are thereafter recognized by the academia and still find place in respected publications.

Gentile et al. (2007) keep sensorial, emotional, and cognitive perspectives, combine self and social perspectives into lifestyle dimension and add pragmatic (relates to functional benefits) dimension into the composition. Experience is the synthesis of customer's feelings, cognitions, and behavior, interacting with each other for Payne et al. (2008). Brakus et al. (2009) also construct a brand experience scale with Schmitt's (1999) dimensions, (sensory, affective, intellectual, and behavioral) in illustrating the direct and indirect effects of brand experience on customer satisfaction and loyalty. Verkoef et al. (2009, p.32) suggest "customer's cognitive, affective, emotional, social and physical responses to the retailer" and Grewal and Roggeveen (2020) agree on customer's cognitive, emotional, and behavioral response as well.

Beside the abovementioned dimensions, there have been measurement scales specifically developed to utilize dimensions to properly define the experience and its effects. Kim et al. (2011) develop Consumer Experience Index (CEI) with seven dimensions as environment, benefits, convenience, accessibility, utility, incentive, and trust. Maklan and Klaus (2011, p.779) develop "a measure for Customer Experience Quality (EXQ) to identify the dimensions and their attributes, that explain its most important marketing outcomes: loyalty, word-of-mouth recommendation, and satisfaction". The dimensions are product experience, outcome focus, moments-of-truth (i.e. service recovery and peace of mind, "related to the emotional aspects of service perceived expertise of the service provider") (Maklan &

Klaus, 2011, p.781). Klaus and Maklan extend their study in 2013 and compare the impact of customer experience quality on loyalty and word-of-mouth with the impact on customer satisfaction. The authors conclude that customer experience is an "alternative, and possibly even better, validated predictor of consumer behavior." (Klaus & Maklan, 2013, p. 239). Bagdare and Jain (2013) develop a retailer customer experience scale with four dimensions as leisure (relaxing, refreshing, delightful), joy (satisfying, pleasurable, engaging), distinctive (wonderful, unique, memorable), and mood (good, happy, exciting) with a focus on brick-and-mortar channel.

Studies in extant literature illustrating omnichannel retail as frameworks are scarce. Saghiri et al. (2017) bring a multi-dimensional view to omnichannel systems in three dimensions as channel stage (pre-purchase, payment, delivery, and return), channel type, and channel agent. The authors position "integration" and "visibility" as key enablers of the whole system, where integration represents retailers' perspective covering actions to guarantee omnichannel systems and visibility represents consumers' expectations from omnichannel system (Saghiri et al., 2017).

Shi et al. (2020) have been the first conceptualizing omnichannel customer experience based on five dimensions, namely connectivity, integration, consistency, flexibility, and personalization. Shi et al. (2020) aim to understand the effect of omnichannel experience on perceived compatibility and perceived risk. However, the dimensions, particularly "integration" and "consistency" are intertwined. Furthermore, the authors have not rated the effects of omnichannel customer experience on customer metrics like customer satisfaction, loyalty, and word-of-mouth.

In the light of the foregoing background, we define omnichannel customer experience as "a multidimensional construct incorporating customer's subjective, holistic and dynamic interpretation of all direct and indirect interactions with the supplier throughout the non-sequential flow of buying process".

This research is constituted on two main parts: in the first part we focus on building a measure of omnichannel customer experience on five dimensions and conduct the analyses to test its validity and reliability. In the second part, the relationship between omnichannel customer experience and key customer metrics (customer satisfaction, loyalty, and word-of-mouth) will be evaluated by seven hypotheses.

3.2 Dimensions of omnichannel customer experience

Based on extensive review on omnichannel and customer experience literature, five distinct dimensions are identified for omnichannel customer experience: seamless (executional dimension), holistic (perceptional dimension), convenient (physical dimension), unique (personal dimension), and safe (emotional dimension).

3.2.1 Seamless

We define seamless experience as the "customer's ability to move across all available channels without disruption or obstacle throughout any stage of the customer journey". Channels and the elements of marketing mix are fully integrated to ensure consistency throughout the purchasing process.

Seamless experience represents the executional dimension of omnichannel customer experience, due to the active involvement of customer and retailer. Seamless experience is the consequence of synchronization of price, promotion,

product information, data, and supply chain operations across channels (Stone et al., 2002; Goersch, 2002; Berman & Thelen, 2004; and Cook, 2014) and flexibility of the ecosystem.

Customers do not perceive channels, rather the retailer as a "single entity" in case of full integration (Berman & Thelen, 2004), which is omnichannel management. Therefore, the concern of effective omnichannel management is "the interaction between the customer and the brand" and "customers experience the brand, not the channels" (Bhalla, 2014; Piotrowicz & Cuthbertson, 2014). Consequently, customer experience leads to customer loyalty to the brand as a whole, not to its channel (Tyrvainen & Karjaluoto, 2019). Additionally, Cook (2014) underlines the fact that "consumers think about value, not channels".

Verhagen and van Dolen (2009) examine the channel interaction through an empirical study from a different perspective and address the effect of physical store operations on online purchasing (offline on online) and support the notion that channels are already linked on the minds of the customers. Gallino and Moreno (2014) show that customers perceive online and offline channels as one, a single company by their empirical study on BPOS service offering. Burke (2002) claims through an empirical study that customers' online and offline experience are interactive and customers' online experience affects "their behavior and expectations offline". Tyrvainen and Karjaluoto (2019) find in their focus groups that customers are affected by the performance of both online and offline channels. Quality failure in a channel will directly affect the whole image of the brand.

Customers of the new era expect (Zhang et al., 2010; Shankar et al., 2011; Fulgoni, 2014; Piotrowicz & Cuthbertson, 2014; Melero et al., 2016), and accordingly retailers aim to ensure, seamless experience (Goersch, 2002; Wallace et

al., 2004; Bendoly et al., 2005; Rigby, 2011; Bhalla, 2014; Frazer & Stiehler, 2014; Verkoef et al., 2015; Melero et al.2016). In the absence of consistency across channels, customers may be confused (Goersch, 2002) or unsatisfied (Stone et al., 2002).

Academics' diverse perspectives on consistency in experience relate to customer involvement (Gentile et al., 2007), multiple channel management (Frow & Payne, 2007), and brand communications (Frow & Payne, 2007). Omnichannel has been the medium of delivering seamless customer experience across channels (Goersch, 2002; Piotrowicz & Cuthbertson, 2014; Frazer & Stiehler, 2014; Juenada-Ayensa et al., 2016) by the empowerment of new technologies (Shankar et al., 2011; Beck & Rygl, 2015; Cao & Li, 2015). However, delivering a seamless customer experience is challenging (Hansen & Sia, 2015) due to current silo organization structures (Picot-Coupey et al., 2016), complexity (Ostrom, Parasuraman, Bowen, Patricio, & Voss, 2015), or the absence of channel integration (Cao & Li, 2015).

3.2.2 Holistic

Holistic experience is the perceptional dimension of omnichannel customer experience and relates to how customers perceive time (past, present, and future; pre-purchase, purchase, and post-purchase stages; and day or night).

Customer experience is holistic, because customer experience cannot be limited to a single interaction (Frow & Payne, 2007; Klaus & Maklan, 2013), single component of experience (Gentile et al., 2007), specific time period (Frow & Payne, 2007; Verkoef et al., 2009; Helkkula et al., 2012; Klaus & Maklan, 2013), product (Addis & Holbrook, 2001), or touchpoint (Rawson, Duncan, & Jones, 2013; Lemon

& Verkoef, 2016) - rather it extracts the essence of all and convert into a single interpretation - that is satisfaction.

Addis and Holbrook (2001) underscore that product usage is only a part of a holistic experience, that relates to the customer's interactions with the internal and the external world. Gentile et al. (2007, p.398) point out customer's perception of experience as "a complex but unitary feeling, each component being hardly distinguishable from the others" despite its multidimensional structure. Brakus et al. (2009), Maklan & Klaus (2011), Kim et al. (2011) and Bagdare & Jain (2013) develop measurement scales to utilize the dimensions of the holistic structure of experience to understand the whole concept. Similarly, academics have developed conceptual (Grewal et al., 2009; Payne et al., 2008; Verkoef et al., 2009; Lemon & Verkoef, 2016; Greval & Roggeveen, 2020) and empirical frameworks (Lemke, Clark, & Wilson, 2011) to illustrate the holistic nature of the construct.

Experience is the product of past and present, all melt in the same pot to create a brand new one. Customer's previous experiences affect current experiences (Anderson, Fornell, & Lehmann, 1994; Puccinelli et al., 2009). Anderson et al. (1994) empirically show the strong positive relationship between satisfaction in the past and satisfaction in the present and the future. Satisfaction is the blend of all encounters in the past and the present (Frow & Payne, 2007) and all stages of the buying process (Verkoef et al., 2009; Klaus & Maklan, 2013; Lemon & Verkoef, 2016). Consistent with this view in the model of Payne et al. (2008); the customer learns from past encounters with the supplier, which has an impact on future encounters with the same supplier. This learning process is valid not only for customers but also for suppliers (Payne et al., 2008).

Verkoef et al. (2009) include past customer experiences in their conceptual framework as an antecedent to customer experience and its dynamic nature shows the loop illustrating the present replacing the past in the future. Helkkula et al. (2012, p.61) extend this perspective by suggesting that experiences may "iteratively flow back and forth between current, future, and past experiences" and illustrating this flow as a "hermeneutic spiral". This spiral can also be identified as the illustration of the holistic nature of experience, which employs a new meaning for value in experience – temporariness, because previous experiences may possess different interpretations throughout time and change their meaning or value (Helkkula et al., 2012).

Customers do not perceive any stage of customer journey. The customer journey of the new customer is less linear (Mosquera et al., 2017) as different channels are utilized at once for different purposes with "no chronological order", as is in customer experience. Although customer experience continues during the entire customer journey, including pre-purchase, purchase, and post-purchase phases (Homburg, Jozic, & Kuehnl, 2015; Puccinelli et al., 2009; Andajani, 2015; Lemon & Verkoef, 2016) and circular flow of experiences – past experiences affecting the present and the future or present experience becoming the past – is discussed in academia (Verkoef et al., 2009), buying stages are positioned sequentially (Neslin et al., 2006; Puccineli et al., 2009). Yet, the nonsequential flow of customer experience throughout the customer journey has been expressed lately on a conceptual model by Lemon and Verkoef (2016). Grewal and Roggeveen (2020) bring a new perspective to the predominant linear customer journey by suggesting a looping version of customer journey adapting Helkkula et al. (2012)'s aforementioned proposition. Non-linearities may exist as "customers may jump from the pre-purchase to the post-

purchase stage […] and the different stages can provide input to each other" (Grewal & Roggeveen, 2020, p.4).

The experience cannot be limited to purchasing process, but can also exist whenever the customer comes across an indirect contact (Brakus et al., 2009). They process the experience holistically, including both direct and indirect moments of contacts (i.e., touchpoints) (Meyer & Schwager, 2007; Verkoef et al., 2009; Brakus et al., 2009; Lemke et al., 2011; Schmitt & Zarantonello, 2013). Direct encounters usually take place during the consumption process initiated by the customer; whereas during indirect encounters the information regarding the product or service (e.g., through advertising, word-of-mouth, or reviews) is often provided by third-party resources (Meyer & Schwager, 2007). Customers do not need to enter into an actual purchase journey to have an experience with the product (Maklan & Klaus, 2011).

The omnichannel customer experience is not limited to a single interaction, but a bundle of direct and indirect experiences scattered through time and purchasing stages. Correspondingly, customers can initiate the interaction with the retailer whenever they want i.e., day or night, week day or weekend.

3.2.3 Unique

Unique experience relates to the personal dimension of omnichannel customer experience, as customer experience is the consequence of subjective responses of customer – that is personal and unique (Gentile et al., 2007; Kim et al., 2011; Lemke et al., 2011; Andajani, 2015). Although products and services are external to the customer, the experience is highly personal, because it "exists only in the mind of an individual who has been engaged on an emotional, physical, intellectual, or even

spiritual level" (Pine & Gilmore, 1998, p.99). Forlizzi and Ford (2000, p.420) define experience as "a subjective interpretation of a certain moment".

The relationship between the customer and the supplier is unique, as is her experience with the supplier. A person does not resemble any other person by individual's unique state of mind (Pine & Gilmore, 1998), different cultural backgrounds, emotions and feelings, values (Forlizzi & Ford, 2000), goals (Verkoef et al., 2009; Puccinelli et al., 2009), personal needs (Addis & Holbrook, 2001),and prior experiences (Anderson et al., 1994; Forlizzi & Ford, 2000; Verkoef et al., 2009; Puccinelli et al., 2009; Helkkula et al., 2012). Forlizzi and Ford (2000) also add chance as a factor triggering a distinctive moment during the encounter that may engender meaningful interpretations by the customer.

Prahalad and Ramaswamy (2003, p.15) underscore the uncontrollable nature of an experience by indicating "heterogeneity of individuals" as the sole dominant factor sealing the fate of the whole experience process, precluding any efforts to control. For example, the same product or same retail atmosphere may arouse different feelings in customers with different goals (Puccinelli et al., 2009). Actually; the customer is not the sole and absolute ruler – rather lacking control over subconscious feelings or decisions (Payne et al., 2008; Voss et al., 2008). Moreover, Helkkula et al. (2012) claim that customers may imagine the experience in their minds without any interaction with the outside and being noticed.

Omnichannel ecosystem enhances this uniqueness due to its customer-centric approach (Rangaswamy & Van Bruggen, 2005). Schoenbachler and Gordon (2002) claim that synergy is possible only through customer-centricity, not channel focus. Müeller-Lankenau et al. (2004) present both channel and customer-centric approaches in their taxonomy: In offline dominated strategy with the lowest level of

integration, customers are anonymous, whereas the integrated multichannel strategy sees customers as individuals. Neslin et al. (2006, p.95) point out "understanding consumer behavior" as one of the major challenges faced by multichannel management efforts. Rigby (2011) emphasizes customers' ambition to demand every advantage each channel promises at once, that is full channel integration of online and offline. Melero et al. (2016, p.19) suggest "delivering personalized customer experience" as an action to be taken to improve omnichannel customer experience.

Furthermore, delivering tailor-made solutions to satisfy the needs of new customers has become an obligation for retailers in the era of co-creation. Personalization is a distinctive feature of omnichannel customer management (Melero et al., 2016) offering a "unique" customer experience (Juaneda-Ayensa et al., 2016). Mosquera et al. (2017) recommend offering personalized offerings to customers with the use of data gathered by the technology and integration – the key enablers of the omnichannel approach. Tryvainen and Karjaluoto (2019) find supporting evidence in their focus group that consumers seek personalized messages and content in communication.

3.2.4 Convenient

Convenience represents the physical dimension of omnichannel customer experience according to the significance of "effort" for experience based on the definition of convenience by Berry, Seiders, and Grewal (2002, p.1) as "consumer's time and effort perceptions related to buying or using a service". Thus, decreasing the amount of time and effort is essential in creating value for customers (Colwell, Aung, Kanetkar, & Holden, 2008). Convenience derives from five dimensions related to the time spent and effort made by the customer to (1) choose (decision convenience), (2)

initiate the interaction (access convenience), (3) finalize the transaction (transaction convenience), (4) utilize the core benefits of the service (benefit convenience), and (5) reach supplier after the purchase (post-benefit convenience) (Berry et al., 2002, p.6).

Seiders, Voss, Godfrey, and Grewal (2007) land these concepts on the ground by real-life examples. For example, availability and quality of information enable decision convenience and easy access to the store or any available channel is essential for access convenience. Waiting time to finalize payments in queues predestines for transaction convenience and service recovery efforts for post-purchase convenience.

Colwell et al. (2008) employ quantitative research to test the effects of the abovementioned convenience dimensions on customer satisfaction and provide evidence for a strong positive correlation. However; the relation of each dimension with satisfaction differs (Seiders et al., 2007; Colwell et al., 2008) as decision and benefit are essential for overall satisfaction, neither transaction nor post-purchase convenience relates to repurchase intention, showing that customers perceive these dimensions as failure preventer (Seiders et al., 2007).

Jones in 1999 (p.137) states that "The freedom shoppers feel when they have no time pressures, no budget constraints, no salesperson pressure, and no task to complete may lead to their overall sense of freedom which is associated with leisure experiences". Offering the freedom customer desires has been the distinctive feature of omnichannel (Cook, 2014; Juaneda-Ayensa et al., 2016) by the strong network composed of channels complementing each other.

Although consumers have evolved due to the latest technological developments, seeking freedom through convenience is not a new phenomenon.

Conspicuously, the priorities have not changed for customers in the last two decades and COVID-19 has amplified consumers' need for convenience. The statement of Grewal et al. (2004, p.712) is still valid: "the history of retailing is an endless search for convenience".

In times of COVID-19 with the limitations brought to consumers' lives with the lockdowns or restrictions, digital channels have become key for providing convenience for customers. Home has become the new base of consumer life and coronavirus has accelerated the pace of some technologies and services to bring convenience by bridging the gap. For instance, already existing home delivery had morphed into a necessity (Diebner et al., 2020). Euromonitor indicates consumers' need for convenience as one of the key consumer trends in 2021 (Westbrook & Angus, 2021). KPMG positions "convenience" among six drivers, which will shape consumer preferences in the future (KPMG Future of Retail 2021, p.9).

Looking through the lens of omnichannel management, information about any product or retailer is at the tip of customers' fingers through online channel. Although a large number of online shopping options may create confusion, omnichannel enables customers to instantly reach the portfolio of their usual retailer whenever a need emerges, leading to less time and effort to shop (decision convenience). Additionally, mobile technologies empower customers to initiate shopping without extra time and effort (access convenience). With the dawn of online or cash on delivery payment methods, time and effort to finalize a transaction is easier without waiting in a queue (transaction convenience). Thus, the advantages of traditional brick-and-mortar are now at your fingertips. Furthermore, consumers benefit from omnichannel through acquiring goods from their usual retailer without leaving their home and facing any person – eliminating the risk of being

contaminated (benefit convenience). We can conclude that customers prioritize convenience in decision-making and core benefits of the service provided to be satisfied (Colwell et al., 2008).

3.2.5 Safe

Due to the terrifying effects of COVID-19 and mounting uncertainties; search for safety has become an anchor point for customer expectations and accordingly their experiences. According to the McKinsey Insights' survey on Turkish consumer sentiment during the coronavirus crisis (2020); 57 percent of Turkish population are concerned for safety of self and family (58 percent in Europe).

Euromonitor projects consumers' obsession for safety as one of the top consumer trends in 2021 (Westbrook & Angus, 2021, p.1). Contactless shopping in retail via online shopping or technology use in store eliminates touch, towards an inclination stemming from consumers' fear of catching coronavirus from contaminated surfaces (Westbrook & Angus, 2021, p.27). KPMG states that 82 percent of consumers are more likely to use digital wallets or cards in the future (KPMG, Customer experience in the new reality report, p.7) Both major experiences as drive-through shopping experience initiated after the outbreak and minor changes as simple plexiglass guards at the cashiers have been different field executions eliminating "touch" to enable both safety and convenience (Diebner et al., 2020). Correspondingly, McKinsey & Company recommends companies to invest in contactless interactions with consumers to satisfy consumers' safety needs (Maechler et al., 2020). Roggeveen and Sethuraman (2020) estimate consumers' evaluations of retail experiences to shift the focus from entertainment towards cleanliness and free space for social distancing. Additionally, Sneader and Sternfels (2020) indicate

customer experiences focused on health and safety as primary source of revenue for the companies.

The concept of safety surrounds customer experience from every angle namely safe shopping, safe food, safe deliveries, self-socializing, safe travel, safe work, safe healthcare, and safe mobility (Maechler et al., 2020). Researchers agree that safety concern and habit of contact-free encounters may remain even after the recovery from COVID-19 (Emmanuelli et al., 2020).

3.3 Relationship between OCX and key customer metrics

3.3.1 Customer satisfaction

Good experiences directly connect to satisfaction. Anderson et al. (1994, p.54) define customer satisfaction as "an overall evaluation based on the total purchase and consumption experience with a good or service over time". Anderson et al. (1994) state that good experience yields customer satisfaction. Frow and Payne (2007) define customer satisfaction as the amalgamation of previous and present experiences with the product. Lemon and Verkoef (2016) support this notion by pointing out customer satisfaction as a component of customer experience and an effective instrument for its measurement. Furthermore, customer satisfaction correlates to multiple channel use (Montoya-Weiss, Voss, & Grewal, 2003; Wallace et al., 2004). Montoya-Weiss et al. (2003) suggest that customers' overall satisfaction is directly linked to the quality of both offline & online channels. We believe that the effect of customer experience resembles in the context of omnichannel retail. Thus, our first hypothesis is:

H1 Omnichannel customer experience is positively related to customer satisfaction.

3.3.2 Loyalty

Oliver (1999, p.34) defines loyalty as "a deeply held commitment to rebuy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior".

Academics connect customer satisfaction directly to loyalty. For example, Fornell (1992, p.8) defines loyalty as the behavioral objective of customer satisfaction and outcome of customer satisfaction, switching barriers, and complaint handling. Furthermore; Rust and Zahorik (1993) empirically provide evidence on how customer satisfaction is connected to loyalty, retention, market share, and profitability through a mathematical framework.

Anderson and Sullivan (1993) empirically show that satisfaction is one of the key determinants of loyalty as well as Fornell in 1992. However, Fornell (1992, p.7) underscores the fact that this relationship is one-way, stating that "Loyal customers are not necessarily satisfied customers, but satisfied customers tend to be loyal customers". Shankar, Smith, and Rangaswamy (2003) empirically demonstrate that the relationship between satisfaction and loyalty is reciprocal, each strengthening the other. Hence, our second hypothesis is:

H2 Customer satisfaction is positively related to loyalty.

Even the relationship between experience and loyalty may be stronger than the connection between satisfaction and loyalty, as Maklan and Klaus (2011) show that customer experience quality and loyalty are more strongly connected compared to the dyad of customer satisfaction and loyalty. Furthermore, various dimensions of

customer loyalty are affected by different aspects of customer experience (Keiningham, Cooil, Aksoy, Andreassen, & Weiner, 2007).

Customer experience can enhance loyalty by creating emotional bonds between the customer and the company (Gentile et al., 2007) and be indicated as the objective of customer experience management (Frow & Payne, 2007). Many companies utilize customer loyalty to assess their customers' experiences e.g., via the Net Promoter Score measure developed by Reichheld in 2003 (p.5) addressing the question of "How likely is it that you would recommend [company X] to a friend or colleague". Furthermore, some studies stress integration across channels as a prerequisite for loyalty (Bendoly et al., 2005; Schramm-Klein et al., 2011; Cao & Li, 2015). Therefore, our third hypothesis is:

H3 Omnichannel customer experience is positively related to loyalty.

3.3.3 Word-of-mouth

Hennig-Thurau, Gwinner, and Gremler (2002, p.231-232) define word-of-mouth as "all informal communications between a customer and others concerning evaluations of goods or services" and indicate as a reliable source in decisions particularly for high-risk products or services. The authors empirically show the strong influence of customer satisfaction on positive word-of-mouth. Thus, our fourth hypothesis is:

H4 Customer satisfaction is positively related to word-of-mouth.

Conversely, customer experience can be a better predictor of word-of-mouth than customer satisfaction (Klaus & Maklan, 2013). Babin, Lee, Kim, and Griffin (2005)

study the hedonic and utilitarian value received from a service experience and confirm the view that service experience positively correlates with both customer satisfaction and word-of-mouth. Good experience leads to word-of-mouth (Voss & Zomerdijk, 2007). Hence, we posit the following hypothesis:

H5 Omnichannel customer experience is positively related to positive word-of-mouth.

3.3.4 Customer satisfaction as a mediator

Some studies position customer satisfaction as a mediator between various concepts and loyalty. Hennig-Thurau et al. (2002) demonstrate the strong influence of satisfaction on loyalty through their research on customer satisfaction's mediating role between relational benefits and marketing outcomes of loyalty. For another instance, Shankar et al. (2003) indicate that experience leads to satisfaction, which enforces loyalty. Correspondingly, Caruana (2002) empirically shows that customer satisfaction mediates between service quality and service loyalty. Brakus et al. (2009) show the influence of brand experience on customer satisfaction and loyalty both directly and indirectly through dimensions of brand personality. In our research, we also consider the mediating role of customer satisfaction between omnichannel customer experience and loyalty. Thus, our sixth hypothesis is:

H6 Customer satisfaction acts as a mediator between omnichannel customer experience and loyalty.

Customer satisfaction has been indicated as a key predictor of word-of-mouth (Maru File, Cermak, & Prince, 1994). Correspondingly, Hennig-Thurau et al. (2002) empirically demonstrate that customer satisfaction strongly influences word-of-mouth and acts as a mediator between relational benefits and relationship marketing outcomes. Consequently, we also consider the mediating role of customer satisfaction between omnichannel customer experience and word-of-mouth. Hence, our seventh hypothesis is:

H7 Customer satisfaction acts as a mediator between omnichannel customer experience and word-of-mouth.

List of hypotheses is presented in Table 1, below.

Table 1. List of Hypotheses

HYPOTHESES	
H1	Omnichannel customer experience is positively related to customer satisfaction.
H2	Customer satisfaction is positively related to loyalty.
H3	Omnichannel customer experience is positively related to loyalty.
H4	Customer satisfaction is positively related to word-of-mouth.
H5	Omnichannel customer experience is positively related to positive word-of-mouth.
H6	Customer satisfaction acts as a mediator between omnichannel customer experience and loyalty.
H7	Customer satisfaction acts as a mediator between omnichannel customer experience and word-of-mouth.

3.4 Research model

The present paper seeks to understand the direction of the connection between customer satisfaction, loyalty, and word-of-mouth after incorporating an omnichannel customer experience scale, consisting of five dimensions: seamless,

holistic, unique, convenient, and safe. The proposed research model is presented in Figure 2.

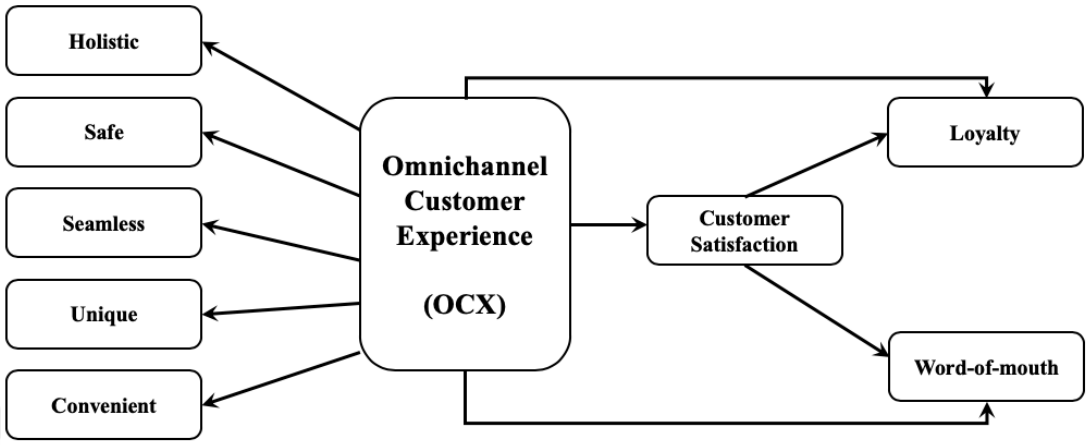

Figure 2 Proposed research model

CHAPTER 4

TESTING AND VALIDATION OF THE MODEL

4.1 Research design and methodology

4.1.1 Methodology

The research is composed of two parts: First part aims to design a research methodology to develop a scale measuring omnichannel customer experience (OCX). The second part is for testing the relationship between the scale developed and the key customer metrics as customer satisfaction, loyalty, and word-of-mouth.

In the first study, we employed the steps suggested by Churchill (1979) for scale development: specification of the domain of the construct by extensive literature review, item generation, purification of the measure by factor analysis, reliability and validity assessment.

For specification of the domain and item development; 268 articles from peer-reviewed academic journals consisting of 97 academic articles on customer experience (1980 - 2020) and 171 articles on channel management (1984 – 2020) were reviewed. Moreover, 12 reports published by globally known and respected market research companies about the impact of COVID-19 pandemic on consumer behavior were included due to the novel nature and lack of academic research on this rapid change.

Distinguishing characteristics of customer experience and omnichannel retail were specified and five key dimensions of omnichannel customer experience were identified unifying the common characteristics. Afterwards, 73 statements (items) were generated corresponding to an average of 15 items per each dimension. The

items were reviewed with a panel consisting of seven professionals from consumer goods industry and three professionals from retail to understand whether each statement captures respective dimension's definition, that is face validity. The number of items was reduced to 26 by deletion of 47 items, which did not represent the dimension they were assigned to.

The final list was pretested by a panel of four academics and seven graduate students to identify understandability and clarity of the statements through an online survey. The feedbacks led to some rephrased sentences and minor changes in wording. The definition of omnichannel retail was included in the questionnaire to overcome any potential confusion among the respondents, an extra question to specify retail segment the respondent thinks of while completing the survey and an item to identify the "unique" dimension of OCX were also included. The final item list assured the face validity.

Data was collected (n = 403) and split into two random groups for scale purification and validation analyses after the removal of seven responses (n=396) due to the misfit to the target audience criteria. The first sample (n = 198) was utilized for identification of scale by exploratory factor analysis (EFA). The second half was used for scale evaluation through confirmatory factor analysis (CFA), which aims to refine the scale items and confirm scale's unidimensionality, composite reliability (CR), convergent validity, and discriminant validity.

As the second part of the study, the relationship between OCX construct, confirmed in the first study, and key customer metrics (customer satisfaction, loyalty, and word-of-mouth) was assessed by structural equation modeling (SEM).

4.1.2 Sampling, data collection and sample characteristics

Data for this study was collected from convenience sample of 403 university students from Istanbul, who participated in the research voluntarily via an online questionnaire between April 20 – May 11, 2021. University students were selected as the target audience according to their higher rates for acceptance of innovative marketing technology compared to adults (Hur, Lee & Choo, 2017). After the exclusion of 7 respondents out of 18-34 age limit, the sample (n = 396) was composed of 62 percent 18-24 and 38 percent 25-34 ages. Furthermore, gender of the sample was distributed towards 50 percent female, 45 percent male, 1 percent non-binary, and 4 percent not preferred to answer. The majority of the respondents (64 percent) had monthly household income of 2500 – 10,000 TL. The details of the sample characteristics are included below (see Table 2).

Table 2. Sample Characteristics

		TOTAL (n = 396)	**%**	**EFA** (n = 198)	**%**	**CFA** (n = 198)	**%**
Gender	Female	199	50,3	97	49,0	102	51,5
	Male	178	44,9	91	46,0	87	43,9
	Non-binary	4	1,0	2	1,0	2	1,0
	None	15	3,8	8	4,0	7	3,5
Age	18-24	245	61,9	120	60,6	125	63,1
	25-34	151	38,1	78	39,4	73	36,9
Educaton	Undergraduate	243	61,4	127	64,1	127	64,1
	Masters	147	37,1	69	34,8	69	34,8
	Doctorate/ PhD	6	1,5	2	1,0	2	1,0
Income	< 2500 TL	32	8,1	13	6,6	19	9,6
	2500-4999TL	120	30,3	57	28,8	63	31,8
	5000-9999TL	134	33,8	68	34,3	66	33,3
	10000-20000 TL	63	15,9	32	16,2	31	15,7
	>20000 TL	47	11,9	28	14,1	19	9,6
Retail Segment	Grocery	152	38,4	75	37,9	77	38,9
	Personal Care	38	9,6	16	8,1	22	11,1
	Apparel	179	45,2	90	45,5	89	44,9
	Consumer Electronics	27	6,8	17	8,6	10	5,1

4.1.3 Questionnaire design

The items to define each dimension of the omnichannel customer experience construct were determined from scratch as abovementioned in the Methodology section. Moreover, to be able to test the hypotheses in the second part of the study, the questionnaire also included measures of customer satisfaction adapted from Dagger, Sweeney, and Johnson (2007), loyalty adapted from Yoo and Donthu (2001), and word-of-mouth adapted from Maxham and Netemeyer (2002) (see Table 3).

All items were in English and administered on Likert scale anchored by "strongly disagree" (1) and "strongly agree" (7). The adapted measures are presented below in Table 3. The questionnaire is presented in Appendix A.

Table 3. The Adapted Scale Items

Construct	Item	Statement	Source	Title of the Article
Customer Satisfaction	Sat1	My feelings towards omnichannel retailer X are very positive.	Dagger, Sweeney, & Johnson (2007)	"A Hierarchical Model of Health Service Quality Scale Development and Investigation of an Integrated Model"
	Sat2	I feel good about omnichannel retailer X.		
	Sat3	Overall I am satisfied with the omnichannel retailer X and the service provided.		
	Sat4	I feel satisfied that the omnichannel retailer X provides me the best that can be achieved.		
	Sat5	The extent to which the omnichannel retailer X has produced the best possible outcome is satisfying.		
Loyalty	Loy1	I consider myself to be loyal to the omnichannel retailer X.	Yoo & Donthu (2001)	"Developing and validating a multidimensional consumer-based brand equity scale"
	Loy2	Omnichannel retailer X would be my first choice.		
	Loy3	I will not choose any other retailer if the omnichannel retailer X continues to provide the same service.		
Word-of-mouth	WOM 1	I am likely to say good things about the omnichannel retailer X.	Maxham & Netemeyer (2002)	"A Longitudinal Study of Complaining Customers' Evaluations of Multiple Service Failures and Recovery Efforts"
	WOM 2	I would recommend the omnichannel retailer X to my friends and relatives.		
	WOM 3	If my friends were looking for a new company of this type, I would tell them to try this omnichannel retailer X.		

4.2 Data analysis and results

4.2.1 Missing values and outliers

The data did not include any missing value due to the rule applied in online survey, restricting the respondents from missing any answer while answering the questions.

After the exclusion of seven responses, the remainder of the data (n = 396) was analyzed for univariate and multivariate outliers.

For univariate outlier analysis, first the data was converted into standard scores (z-scores) and then examined according to the threshold value of 4 as suggested by Hair et al. (2010). The minimum and maximum z scores for each variable were examined and detailed review was handled for the observations falling at the outer ranges. Consequently, six responses were detected as univariate outliers.

For multivariate outliers, Mahalanobis distance (D^2) divided by the number of variables (df), was calculated and examined according to the threshold value of 3 (Hair et al., 2010). The two observations were determined as multivariate outliers. After the thorough examination of each case, no extreme situation that would affect the results was detected. Furthermore, no significant difference between R square values for exclusion and inclusion of the outliers to the data set was found. Consequently, the outliers were kept based on the suggestion of Hair et al. (2010) that the outliers should be kept unless they have serious effect on the outcome.

4.2.2 Multicollinearity

The multicollinearity of the data was examined to see if there was correlation between different independent variables. To this aim, the tolerance and variation inflation factors (VIF) were examined. Due to the high number of variables, one selected per each pillar was selected as dependent variable and the rest was allocated as independent variables. Since none of the variables exceeded the threshold value of 5 (Kline, 1998) we conclude that there was no problem with regards to multicollinearity. The details of the multicollinearity analysis are included in Appendix B.

4.2.3 Scale development through exploratory factor analysis (EFA)

The first split of data set size (n = 198) was sufficient to conduct an EFA based on the recommendations by Guadagnoli and Velicer (1988), who set the minimum acceptable sample size for EFA as 150 observations.

All calculations for EFA was made on the platform of IBM SPSS Statistics Software Version 25. Before initiating EFA, the data was assessed for Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO value was 0.788, which is greater than threshold of 0.60 suggested by Tabachnick and Fidell (2001), and Bartlett's test was significant for all items.

EFA was first run with the extraction method of Principal Component Analysis without rotation to examine the number of factors by latent root criterion (eigenvalues greater than 1; Kaiser, 1960), percentage of variance criterion, and scree test criterion (Cattell, 1966) showing eight factors with eigenvalues greater 1 and covering 68 percent of total variance. As the factor loadings were scattered without an exact convergence, second round was conducted with Varimax rotation to provide an easier interpretation of the data. The threshold for factor loading display was restricted to 0.40 based on the suggestion of Hair et al. (2010) as our sample size was approximately 200 (n = 198).

As a priori criterion, the number of factors was limited to five in line with the findings of our abovementioned literature review. The variables Conv4, Conv5, Conv6, Unique6, Seamless5 and Seamless6 were eliminated due to high cross-loadings and low communalities, leading to five factor scale with KMO 0.793 (>0.60) with 62 percent total variance explained.

All dependent variables loaded under a single factor except Seamless4 and Holistic4, however these variables were not omitted due to their high loadings,

communalities and complementary nature of each to the respective factor. The final run of EFA revealed five factors consisting of 21 items as (1) unique (five items), (2) seamless (four items), (3) holistic (four items), (4) convenient (four items), and (5) safe (four items). The final factor loadings are represented below (see Table 4).

The scale demonstrated reliability as the Cronbach's alpha for the total scale and five factors were all above the threshold of 0.65 (Nunnally & Bernstein, 1994). The factor loadings, Cronbach's alpha values, KMO, and Total Variance Explained (%) as the outcome of EFA are presented in detail in Appendix C.

Table 4. Exploratory Factor Analysis - Factor Loadings

Items	Unique	Safe	Convenient	Holistic	Seamless
Unique3	**.807**	.002	-.069	.235	.170
Unique4	**.803**	.256	-.054	-.013	.053
Unique2	**.800**	-.138	.001	.140	.186
Unique5	**.756**	.162	.122	-.165	.019
Unique1	**.644**	.021	.222	.261	-.039
Safe1	.059	**.802**	.222	-.050	-.024
Safe4	.023	**.788**	.221	.176	.068
Safe3	.023	**.743**	.210	.212	.062
Safe2	.197	**.693**	.261	.144	.156
Conv2	.108	.162	**.747**	.243	.032
Conv1	.080	.258	**.711**	.195	.070
Conv7	-.064	.260	**.663**	-.007	.088
Conv3	.086	.207	**.622**	.256	.132
Holistic3	.271	.013	.144	**.705**	-.043
Holistic4	.026	.113	.409	**.619**	.000
Holistic2	.143	.381	.163	**.579**	-.018
Holistic1	-.034	.175	.340	**.555**	.379
Seamless3	.070	-.003	.198	-.073	**.778**
Seamless2	.144	.054	.026	.037	**.706**
Seamless4	.505	.040	.090	.024	**.609**
Seamless1	-.176	.350	-.095	.457	**.554**
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					

4.2.4 Scale evaluation through confirmatory factor analysis (CFA)

The second half of the sample group (n = 198) was utilized for confirmatory factor analysis (CFA) with maximum likelihood to confirm the OCX scale and test its unidimensionality, internal consistency, convergent validity and discriminant validity. The sample size was in line with the recommendations of Anderson and Gerbing (1988) suggesting a minimum of 150 observations to conduct SEM through CFA. AMOS 25.0 program, an added IBM SPSS software module, was used for the analysis.

Three measurement models were tested through CFA: (1) five first-order factor model as the outcome of EFA, (2) five first-order factor model revised with the outcome of first run of CFA, and (3) one factor second-order model with five sub-dimensions. First, five first-order factor model with 21 items as the outcome of EFA was tested. The x^2 of the first model was 372.50 with 179 degrees of freedom, $p < .001$. The outcome of model fit indices was x^2/df = 2.081; RMSEA = 0.074; CFI = 0.88; TLI = 0.86; IFI = 0.88. (Thresholds for model fit indices are: x2/df < 3 by Hu & Bentler, 1999; RMSEA < 0.08 by Browne & Cudeck,1993; CFI > 0.90 and IFI > 0.90 by Hu & Bentler, 1999)

For the second model, model modification procedures (Hair et al., 2010) as removal items with low factor loadings less than 0.50, significant cross-loadings or large residuals were executed. Correspondingly, Seamless1 (0.340) and Unique1 (0.430) were omitted due to their low factor loadings. Furthermore, a covariance between e12 and e13 shown as a modification index was included in the model. The new version of the model with five-factor 19-item structure had a good fit with x^2 of 254.994 with 141 degrees of freedom, $p < .001$. All fit indices enunciated a good model fit (x^2/df = 1.808; RMSEA = 0.064; CFI = 0.92; TLI = 0.91; IFI = 0.93).

Finally, we conducted another run for the third model where we positioned omnichannel customer experience and its five dimensions as a second-order and first-order constructs, respectively. After including additional covariance between error terms e22 - e23 and e22 - e24 under the OCX second-order factor as shown in modification indices, the model had $x^2 = 255.304$ with 144 degrees of freedom, $p < 0.001$ with model fit indices as $x^2/\text{df} = 1.773$, RMSEA = 0.063, CFI = 0.93, TLI = 0.91, and IFI = 0.93 all indicating good model fit and indicating unidimensionality. Consequently, model comparison suggested that there was not a statistically significant difference between Model Two and Model Three, $\Delta x^2(3) = 0.31$, $p > .05$, yet both demonstrating good model fit with approximate indices. Based on our theoretical background, we selected Model Three for further reliability and validity analyses. Model comparison table is presented in Appendix D. The Model Three is illustrated below (see Figure 3). The factor loadings of CFA run of Model Three are included in Appendix E.

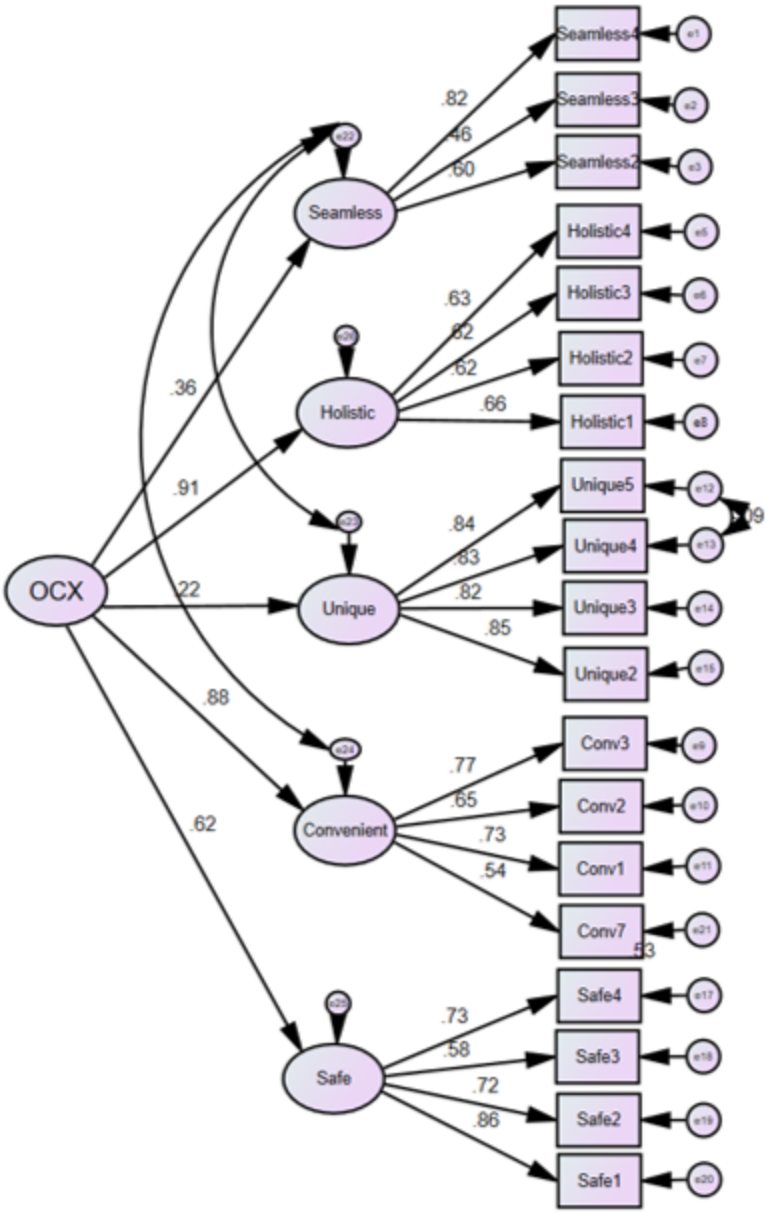

Figure 3 Omnichannel customer experience scale after CFA

4.2.5 Reliability and validity analyses of OCX scale

We determined the reliability of the final version of the scale (Model Three) by examining Cronbach's alpha and composite reliability of each construct. Cronbach's alpha values, which range from 0.67 to 0.85, were greater than the threshold (> 0.65; Nunnally & Bernstein, 1994). The Composite Reliability (CR) for all the factors, between 0.67 to 0.90, was greater than 0.70 (Carmines & Zeller, 1998). Furthermore,

CR measure also depicted internal consistency of scale items (Netemeyer, Bearden, & Sharma, 2003).

Both convergent validity and discriminant validity are the prerequisites of construct validity. Convergent validity was assessed by the examination of AVE (> 0.50), and CR per latent variable (> 0.60) Fornell & Larcker, 1981). Fornell and Larcker (1981) underscored that the convergent validity of the construct should be accepted when CR is higher than 0.60, even if AVE scores are lower than 0.50.

The AVE and CR values of the constructs were OCX (0.43; 0.76), Unique (0.69; 0.90), Safe (0.53; 0.81), Convenient (0.46; 0.77), Seamless (0.41; 0.67) and Holistic (0.40; 0.73). Consequently, we concluded that the measurement model demonstrated convergent validity. The convergent validity analysis of Model Three is presented in Appendix F.

For discriminant validity, we followed the suggestion of Mackenzie, Podsakoff, and Podsakoff (2011) that for the validation of the second-order constructs, the discriminant validity of first order constructs (reflective indicators of second-order construct) should be evaluated. To this aim, AVE values of each construct were compared to the squared correlation coefficients of each construct obtained from the revised five first-order factor model. The model demonstrated an acceptable level of discriminant validity, except Convenient whose AVE score was less than squared correlation coefficient of Holistic. The discriminant validity analysis of Model Three is presented in Appendix G.

4.2.6 Structural model and hypotheses testing

The scales of customer satisfaction, loyalty, and word-of-mouth constructs with OCX construct were assessed in a CFA before running SEM. The measurement

model had a $x^2 = 748.505$ with 384 degrees of freedom, $p < 0.001$. When the thresholds for each model fit were examined: $x^2/df = 1.949$ shows very good fit, RMSEA = 0.069 (< 0.08), CFI = 0.88, IFI = 0.89 values very close to 0.90 indicated an adequate fit (higher values are more desirable; Hu & Bentler, 1999).

Cronbach's alpha values (customer satisfaction, loyalty, and word-of-mouth included) ranging from 0.67 to 0.87 exceeded the threshold (>0.65; Nunnally & Bernstein, 1994) demonstrating internal consistency.

AVE and CR values were evaluated for convergent validity according to the recommendations of Fornell and Larcker (1981), confirming the convergent validity even if the AVE scores lower than 0.50 but CR higher than 0.60. When the AVE and corresponding CR scores of each construct were as OCX (0.45; 0.78), Unique (0.69; 0.90), Safe (0.53; 0.82), Convenient (0.43; 0.75), Seamless (0.41; 0.66), Holistic (0.38; 0.71), WOM (0.70; 0.87), Loyalty (0.67; 0.86), and CustSat (0.58; 0.87), the convergent validity of the measurement model was confirmed. The convergent validity analysis of the measurement model is presented in Appendix H.

Furthermore, discriminant validity of the measurement model was examined by comparing the AVEs of each construct and squared correlation coefficients (see Appendix I). The measurement model demonstrated discriminant validity except OCX, lower than CustSat and WOM.

After the validation of the measurement model by CFA, the structural model was tested. To this aim, a two-step SEM process was followed based on the guidelines of Hair et al. 2010. First, the model fit was evaluated then the hypotheses regarding the relationship between omnichannel customer experience and customer satisfaction, loyalty, and word-of-mouth were tested. The structural model had a $x^2 =$

767.115 with 385 degrees of freedom, $p < .001$, with model fit indices as x^2/df = 1.993, RMSEA = 0.071, CFI = 0.88, IFI = 0.88 indicating an adequate model fit.

The outcome of SEM analysis showed that customer experience has a significant effect on customer satisfaction (0.687, $p < .001$) supporting H1, that is omnichannel customer experience is positively related to customer satisfaction. The positive relationship between customer satisfaction and loyalty was also confirmed (0.459, $p < .001$), accepting H2 (Customer satisfaction is positively related to loyalty). However, model did not support the positive effect of omnichannel customer experience (0.227, $p > .05$) on loyalty, as p-value was .053, showing that this relationship is non-significant. Therefore, H3 (omnichannel customer experience is positively related to loyalty) was not supported.

When the relationships with word-of-mouth were examined, the analysis showed significant relationship between customer satisfaction and word-of-mouth (0.317, $p < .05$) supporting H4 (Customer satisfaction is positively related to word-of-mouth). Furthermore, the analysis showed significant positive relationship between omnichannel customer experience and word-of-mouth (0.497, $p < .001$) supporting H5 (Omnichannel customer experience is positively related to positive word-of-mouth). The path coefficients and structural model are presented below in Table 5 and Figure 4, respectively.

Table 5. Path Coefficients and *p*-values of Hypothesized Relationships

		Path Coefficients	*p*-values
H1	OCX >> Customer Satisfaction	0.687	.000
H2	Customer Satisfaction >> Loyalty	0.459	.000
H3	OCX >> Loyalty	0.227	.053
H4	Customer Satisfaction >> Word-of-mouth	0.317	.002
H5	OCX >> Word-of-mouth	0.497	.000

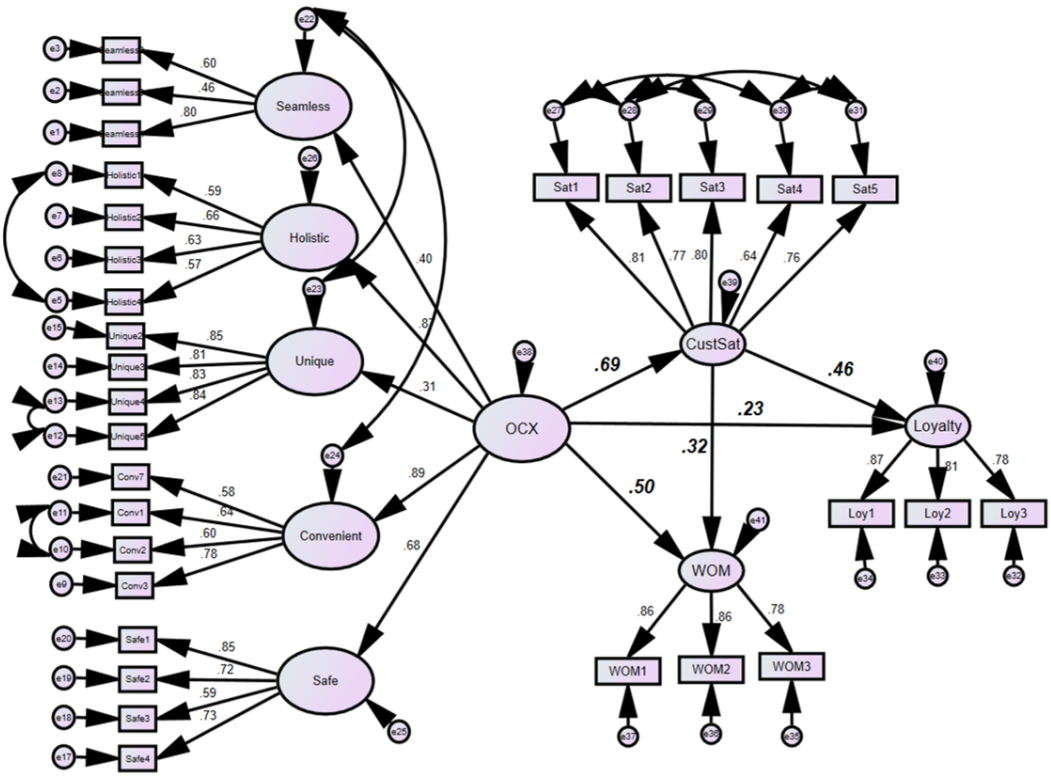

Figure 4 Structural model

For H6, we questioned the mediator effect of customer satisfaction between OCX and loyalty (i.e., OCX → CustSat → Loyalty). To this aim, two structural equation models were compared. The first model was our original model including both the direct path between OCX and loyalty and the indirect path with customer satisfaction in the middle of OCX and loyalty. The second model represented complete mediation between OCX and loyalty, where we removed direct path between OCX and loyalty. Complete mediation and partial mediation happen when mediating construct fully and partially explain the relationship between two constructs, respectively (Hair et al., 2010). This analysis resembles with studies examining mediation (Al-Hawari & Ward, 2006). As the outcome of the chi-square difference test was non-significant (x^2 difference = 3.22; df = 1; $p > 0.05$), additional criteria were examined: overall model fit measured by CFI; percentage of the

significant proposed paths; "ability to explain the variance in the outcomes of interest, as measured by squared multiple correlations of the focal and outcome variable" (R^2); and parsimony measured by parsimonious normed fit index (PNFI) (Morgan & Hunt, 1994, p.30; Al-Hawari & Ward, 2006, p.138) (see Table 6).

Table 6. SEM Results for Mediator Effect Comparison I

	Original Model	Complete Mediation Model	Comments
OCX >> Customer Satisfaction	0.687; $p < .001$	0.693; $p < .001$	
Customer Satisfaction >> Loyalty	0.459; $p < .001$	0.638; $p < .001$	
OCX >> Loyalty	0.227; $p > .05$	not applicable	
Customer Satisfaction >> WOM	0.317; $p < .05$	0.377; $p < .001$	
OCX >> WOM	0.497; $p < .001$	0.432; $p < .001$	
x2	767.115	770.333	Difference = 3.218
df	385	386	Difference = 1
x2 difference test significance	x2 = 3.218 and df = 1		$p > 0.05$; not significant
x2/df	1.993	1.996	slightly higher
CFI	0.88	0.88	same
PNFI	0.694	0.695	slightly higher
R2 (Customer Satisfaction)	0.471	0.480	higher
R2 (Loyalty)	0.405	0.407	slightly higher
% of proposed significant paths	80%	80%	Same
Note: Complete mediation model represents the removal of direct path between OCX and Loyalty			

CFI, PNFI and percentage of significant paths values of both models were the same or close, however x^2/df and R^2 values of both customer satisfaction (0.480 vs 0.471) and loyalty (0.407 vs 0.405) were better in complete mediation model.

Furthermore, when we examined the direct and indirect effects in complete mediation model, we saw 0.442 indirect effect between OCX and loyalty. When we included the direct relation, the indirect effect still existed (0.315) and even higher than the direct effect between OCX and loyalty (0.227). This information validated the mediating role of customer satisfaction between OCX and loyalty. However, as in our original model we kept the direct path between OCX and loyalty. Hence, we conclude that customer satisfaction partially mediates the relationship between omnichannel customer experience and loyalty and H6 is supported. The details of this comparison are presented below (see Table 7).

Table 7. Mediator Effect of Customer Satisfaction (OCX >> Loyalty)

OCX --> Loyalty	Original Model	Complete Mediation Model
	With direct path	Without direct path
Standardized total effects	0,542	0,442
Standardized direct effects	0,227	0,000
Standardized indirect effects	0,315	0,442
Note: Table adapted from Hair et al. 2010		

For H7, we questioned the mediator effect of customer satisfaction between OCX and WOM (i.e., OCX → CustSat → WOM). To this aim, first the correlations between constructs in CFA were examined. Correlation between OCX and WOM (0.691) showed a very strong direct unmediated relationship, correlation between OCX and CustSat (0.679) showed the relationship with the mediator of the first

construct, and correlation between CustSat and WOM (0.636) supported the strong positive relationship with the mediator to the second constructs.

Table 8. SEM Results for Mediator Effect Comparison II

	Original Model	Complete Mediation Model	Comments
OCX >> Customer Satisfaction	0.687; $p < .001$	0.739; $p < .001$	
Customer Satisfaction >> WOM	0.317; $p < .05$	0.714; $p < .001$	
OCX >> WOM	0.497; $p < .001$	not applicable	
Customer Satisfaction >> Loyalty	0.459; $p < .001$	0.619; $p < .001$	
OCX >> Loyalty	0.227; $p > .05$	0.039; $p > .05$	
x2	767.115	785.053	Difference = 17.938
df	385	386	Difference = 1
x2 difference test significance	x2 = 17.938 and df = 1		$p < .001$; significant
x2/df	1.993	2.034	higher
CFI	0.878	0.872	lower
PNFI	0.694	0.692	lower
R2 (Customer Satisfaction)	0.471	0.546	higher
R2 (WOM)	0.565	0.510	lower
% of proposed significant paths	80%	60%	lower
Note: Complete mediation model represents the removal of direct path between OCX and word-of-mouth.			

Second, we looked at what will happen if the direct relationship between OCX and WOM did not exist, again in a complete mediation model (see Table 8). As

the chi-square difference test resulted in a significant difference, we directly conclude that complete mediation model has better fit than the original model.

Furthermore, when the indirect and direct effects in the original model and complete mediation model were compared, we saw indirect effect between OCX and WOM (0.528) in complete mediation model. In the original model (when the direct path is included), the indirect effect still existed (0.218). Even if it was not higher than the direct effect between OCX and WOM (0.497), we can still conclude that customer satisfaction partially mediates the relationship between omnichannel customer experience and WOM, supporting H7. The details of this comparison are presented below (see Table 9).

Table 9. Mediator Effect of Customer Satisfaction (OCX >> WOM)

OCX --> WOM	Original Model	Complete Mediation Model
	With direct path	Without direct path
Std. total effects	0.715	0.528
Std. direct effects	0.497	0.000
Std. indirect effects	0.218	0.528
Note: Table adapted from Hair et al. 2010		

Hypotheses and their status are presented in Table 10 below.

Table 10. Hypotheses Status

HYPOTHESES		**Status**
H1	Omnichannel customer experience is positively related to customer satisfaction.	Supported
H2	Customer satisfaction is positively related to loyalty.	Supported
H3	Omnichannel customer experience is positively related to loyalty.	Not supported
H4	Customer satisfaction is positively related to word-of-mouth.	Supported
H5	Omnichannel customer experience is positively related to positive word-of-mouth.	Supported
H6	Customer satisfaction acts as a mediator between omnichannel customer experience and loyalty.	Supported
H7	Customer satisfaction acts as a mediator between omnichannel customer experience and word-of-mouth.	Supported

CHAPTER 5

DISCUSSION OF RESULTS AND CONCLUSION

5.1 General discussion

Experience has been investigated from various dimensions in academia since 1982. Correspondingly, multiple channel management has been a discussion topic since the emergence of online sales channels. However, the discussion over omnichannel customer experience is nascent and the impact of COVID-19 on consumer behavior has lately elevated the importance of academic research on this topic.

First, the present study contributes to the literature on consumer behavior in retail by defining omnichannel customer experience and developing a unique, reliable and valid scale to measure customers' omnichannel experience. To this aim, scale development process (Churchill, 1979) had been employed including the steps of scale generation, purification, and evaluation. Omnichannel customer experience and its five dimensions were specified. The research questionnaire was composed of items developed from scratch after a thorough literature review and panels with practitioners and measures of key customer metrics from the literature. The survey was conducted online with the participation of 403 university students. To conduct both analyses, the sample is randomly split into two separate groups for EFA and CFA, respectively.

Through EFA, the OCX scale was purified to five dimensions (seamless, holistic, unique, convenient, and safe) represented by 21-items with 62 percent total variance explained. The total variance explained percentages show the ranking of factors in the order of Safety, Unique, Convenience, Holistic, and Seamless. Three

alternative models were analyzed through CFA and confirmed that the one factor second-order model with five subdimensions 19-items was the best fit for OCX with good model fit. The model has demonstrated both convergent and discriminant validity.

The position of Convenience (physical dimension) was not surprising reminding the abovementioned statement of Grewal et al. (2004, p.712): the history of retailing is an endless search for convenience. Both time and effort had been crucial components of convenience for customers. In the world of omnichannel retail; the technicalities like waiting in the queue, providing sufficient information before shopping, or easily reaching the retailer after the purchase were eliminated.

Second, as the outcome of our research, we see the crystal-clear impact of COVID-19 pandemic on consumer preferences. High factor loadings (both in EFA and CFA results) of Safety (emotional dimension), where we emphasize the role of OCX in customers' tendency to protect themselves from the devastative impact of the pandemic, and Unique (personal dimension), where we put emphasis on personalization, were the reflection of this global catastrophe on consumers.

Third, the present study confirms the behavioral impact of OCX on key customer metrics (customer satisfaction, loyalty, and word-of-mouth). The measurement model and structural model were examined through CFA and SEM, respectively. The outcome showed an adequate model fit, demonstrating both convergent and discriminant validity. The structural model confirmed the adequate model fit and demonstrated statistically significant positive relationship of OCX with customer satisfaction (0.687) and word-of-mouth (0.497). With direct-indirect effect analysis, we also show that relationship between OCX and loyalty was mediated by customer satisfaction, validating Hennig-Thurau et al. (2002). Additionally, our

study also showed the mediating role of customer satisfaction between omnichannel customer experience and word-of-mouth.

Our research, which shows the importance of customer experience in the new era of omnichannel retail management, validates the notion of Prahalad (2004, p.23) as “experience is the brand”.

5.2 Limitations and further research

Utilizing convenience sampling possesses the risk of different outcomes if the survey had covered subjects from different ages or affected by different socioeconomic factors. It is recommended to conduct this survey for different age groups, geographic regions, or countries. Furthermore, the online administration of the questionnaire had minimized the number of responses and disabled the opportunity to calculate the response rate as it was impossible to track the flow of the questionnaire online.

The restrictions of COVID-19 had also prevented us from having face-to-face interviews with professionals and customers during the item generation phase of scale development. Moreover, the lack of research on the effects of the pandemic on consumer behavior led us make decisions with personal experiences and instincts. For instance, we need to put Safe dimension not only by thorough reading of reports on coronavirus but also by instincts.

In the beginning of our questionnaire, we ask respondents to specify the retail segment they will refer to while answering the questions. The participants of the panel during the item generation mentioned the importance of the retail segment chosen whilst answering the questions, as each segment may differ and affect the customer responses for each dimension. Conducting segment specific studies and

comparing the results (e.g., grocery and apparel) will develop the understanding on omnichannel customer experience. Furthermore, a cooperation with a specific retailer would increase the number of respondents and reliability of the scale.

5.3 Practical implications

As our study validates, the omnichannel customer experience is positively related to customer satisfaction and word-of-mouth. This leads us to the fact that an improvement in omnichannel customer experience will have a direct positive impact on customer satisfaction, which is priceless in today's competitive business environment and uncertainty. Thus far, even if the link between these two constructs were estimated, the academia or marketing practice had lacked the tools to execute this presumption.

The OCX scale can be converted into an OCX index, calculating OCX scores to rate the performance of the retailer in the context of omnichannel customer experience. Practitioners will benefit from this index in rapidly changing and converging retail business by detecting the development areas, identifying customers' comprehension of each OCX dimension and taking appropriate actions to improve customer relationships. The OCX score can be used quarterly to track performance among other customer metrics (e.g., customer satisfaction). The implementation of the scale will benefit not only customer satisfaction, but also word-of-mouth metrics of the companies.

APPENDIX A

QUESTIONNAIRE IN ENGLISH

You are invited to participate in academic research on omnichannel customer experience. We aim to understand how customers interpret their retail experiences in the context of omnichannel. To this aim; you will be asked to response 4 short demographic questions (age, gender, income level, and education), 1 retail segment question, and 38 different statements, which will take approximately 15 minutes to complete. The questions and statements address your specific experience with an omnichannel retailer X, offering store or digital channels not separately but all channels together in an integrated manner.

No one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Your responses will remain anonymous. Only researcher and research coordinator will have access to these data just for educational research purposes. Once the survey responses have been fully analyzed, they will be destroyed.

Your participation in this survey is voluntary and does not involve any payment or reward. The data gathered can be used for further studies. You may withdraw and discontinue participation at any time without penalty. If you exit, the answers will be deleted automatically by the system and not included even partially in the research. There are no known risks if you decide to participate in this research study.

If you have any questions or concerns regarding this study please contact researcher Dilek Erdem (dilek.erdem@boun.edu.tr) and project coordinator Assist.

Prof. Belgin Arısan (belgin.arisan@boun.edu.tr, +902123597150). If you have questions about your rights as a research participant, you may contact The Ethics Committee for Master and PhD Theses in Social Sciences and (SOBETİK) via sbe-ethics@boun.edu.tr

Which of the following age groups do you belong to?

Under 18____ 18-24____ 25-34 ____ 35-44 ____ 45+ ____

What is your gender? _____ (open ended)

Which one is your current level of education?

Prep _____ Undergraduate_____ Masters___ Doctorate/ PhD____

What is your monthly household income?

< 2500 TL ___ 2500-4999TL ____ 5000-9999TL____ 10000-20000TL ____

> 20000TL ____

What is omnichannel retail?

In omnichannel retail; all channels (store, mobile, online) of the same retailer are fully integrated and act as a single entity. customers may reach the same assortment, prices, promotions, customer service any time anywhere across fully integrated channels namely store, web site, mobile apps, etc.

While answering the questions below, please consider your experience with one specific omnichannel retailer which offers store or digital channel not separately

but all channels together in an integrated manner (Some examples are; Migros, GAP, Teknosa, Watsons, Mavi, LC Waikiki, de facto, etc.).

Please select the specific retail segment you will refer to while answering the questions of this survey:

- o Grocery (e.g., Migros, Carrefour)
- o Personal Care (e.g., Watsons, Gratis)
- o Apparel (e.g., GAP, Zara, De Facto, LC Waikiki)
- o Consumer Electronics (e.g., Teknosa, Mediamarkt)
- o Other _____

Please choose from the following seven response options:

1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neither Agree Nor Disagree; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree
	1	2	3	4	5	6	7
1. I can smoothly shop across all the channels (store, online, mobile) of the omnichannel retailer X at any time anywhere.							
2. I can find the same product variety across all the channels (store, online, and mobile) of the omnichannel retailer X.							
3. I can find any product across any channel (store, online, mobile) of the omnichannel retailer X with the same price.							
4. I can find the same special offers in store, online or mobile channels of the omnichannel retailer X.							
5. I can return the product at any store of the omnichannel retailer X without any problem even I bought it online.							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree
	1	2	3	4	5	6	7
6. I can check the stock-levels online before I go to the store of the omnichannel retailer X.							
7. I believe my overall experience with omnichannel retailer X is the sum of all my interactions across all channels.							
8. I believe omnichannel retailer X unites all experiences across all channels as one.							
9. I believe if the omnichannel retailer X is good then its online and offline experience will be good as well.							
10. Omnichannel retailer X unites the advantages of different channels.							
11. My past experiences with the omnichannel retailer X shape my future expectations from the omnichannel retailer X.							
12. I feel special because the omnichannel retailer X recognizes me across all channels.							
13. The omnichannel retailer X cares about what I need.							
14. Omnichannel retailer X knows me better than any other retailer.							
15. The omnichannel retailer X provides personalized offerings for me across all channels (store, online, and mobile).							
16. The omnichannel retailer X listens to my recommendations.							
17. I can design my own shopping experience (e.g., start shopping online, move on in-store, finalize the purchase online) for omnichannel retailer X.							
18. The omnichannel retailer X brings my regular retail experience to my doorstep.							
19. Despite the restrictions or lockdowns, the omnichannel retailer X enables me to instantly reach my needs whenever I need.							
20. Omnichannel retailer X enables me to time efficiently shop.							
21. Considering my experience with omnichannel retailer X; I don't have to wait in the queue.							
22. Omnichannel retailer X enables me to easily find information before I decide to shop							
23. I can easily reach omnichannel retailer X after the purchase (for returns or any other issues).							

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree
	1	2	3	4	5	6	7
24. I feel safe (from Covid-19) while shopping from the omnichannel retailer X.							
25. Omnichannel retailer X provides me the same shopping experience across all channels (store, online, and mobile) without taking any risk of contamination (COVID-19).							
26. Contactless encounters (contactless delivery, click-and-collect, online shopping, contactless payment, etc.) provided by the omnichannel retailer X makes me feel safe (from COVID-19).							
27. Omnichannel retailer X ensures risk free shopping experience (from COVID-19).							
28. My feelings towards the omnichannel retailer X are very positive.							
29. I feel good about the omnichannel retailer X.							
30. Overall I am satisfied with the omnichannel retailer X and the service provided.							
31. I feel satisfied that the omnichannel retailer X provides me the best that can be achieved.							
32. The extent to which the omnichannel retailer X has produced the best possible outcome is satisfying.							
33. I consider myself to be loyal to the omnichannel retailer X.							
34. Omnichannel retailer X would be my first choice.							
35. I will not choose any other retailer if the omnichannel retailer X continues to provide the same service.							
36. I am likely to say good things about the omnichannel retailer X.							
37. I would recommend the omnichannel retailer X to my friends and relatives.							
38. If my friends were looking for a new company of this type, I would tell them to try this omnichannel retailer X.							

APPENDIX B

MULTICOLLINEARITY ANALYSIS

(1/4)

		Collinearity Statistics		
		Tolerance	VIF	> 5
Seamless1	Holistic1	.611	1.636	0
	Holistic2	.594	1.684	0
	Holistic3	.585	1.710	0
	Holistic4	.574	1.743	0
	Unique1	.562	1.779	0
	Unique2	.321	3.113	0
	Unique3	.346	2.890	0
	Unique4	.345	2.896	0
	Unique5	.390	2.562	0
	Unique6	.580	1.725	0
	Conv1	.463	2.159	0
	Conv2	.498	2.010	0
	Conv3	.432	2.314	0
	Conv4	.449	2.227	0
	Conv5	.584	1.712	0
	Conv6	.713	1.402	0
	Conv7	.551	1.816	0
	Safe1	.455	2.198	0
	Safe2	.445	2.249	0
	Safe3	.487	2.052	0
	Safe4	.458	2.181	0
	Sat1	.279	3.590	0
	Sat2	.228	4.391	0
	Sat3	.324	3.084	0
	Sat4	.465	2.151	0
	Sat5	.398	2.512	0
	Loy1	.317	3.151	0
	Loy2	.337	2.972	0
	Loy3	.312	3.205	0
	WOM1	.285	3.504	0
	WOM2	.321	3.113	0
	WOM3	.404	2.473	0

		Collinearity Statistics		
		Tolerance	VIF	> 5
Holistic1	Seamless1	.628	1.591	0
	Seamless2	.608	1.646	0
	Seamless3	.607	1.646	0
	Seamless4	.462	2.165	0
	Seamless5	.652	1.534	0
	Seamless6	.690	1.449	0
	Unique1	.523	1.911	0
	Unique2	.310	3.221	0
	Unique3	.333	3.006	0
	Unique4	.332	3.009	0
	Unique5	.367	2.721	0
	Unique6	.567	1.763	0
	Conv1	.476	2.101	0
	Conv2	.467	2.141	0
	Conv3	.431	2.320	0
	Conv4	.426	2.348	0
	Conv5	.556	1.799	0
	Conv6	.690	1.450	0
	Conv7	.533	1.875	0
	Safe1	.461	2.167	0
	Safe2	.438	2.281	0
	Safe3	.485	2.062	0
	Safe4	.447	2.235	0
	Sat1	.261	3.829	0
	Sat2	.225	4.436	0
	Sat3	.332	3.012	0
	Sat4	.456	2.195	0
	Sat5	.380	2.631	0
	Loy1	.308	3.250	0
	Loy2	.328	3.053	0
	Loy3	.302	3.310	0
	WOM1	.285	3.505	0
	WOM2	.314	3.187	0
	WOM3	.395	2.530	0

APPENDIX B

MULTICOLLINEARITY ANALYSIS

(2/4)

		Collinearity Statistics		
		Tolerance	VIF	> 5
Unique1	Seamless1	.552	1.811	0
	Seamless2	.645	1.550	0
	Seamless3	.598	1.672	0
	Seamless4	.519	1.927	0
	Seamless5	.670	1.493	0
	Seamless6	.711	1.406	0
	Holistic1	.541	1.847	0
	Holistic2	.538	1.858	0
	Holistic3	.563	1.776	0
	Holistic4	.578	1.730	0
	Conv1	.477	2.097	0
	Conv2	.473	2.115	0
	Conv3	.435	2.301	0
	Conv4	.485	2.060	0
	Conv5	.557	1.795	0
	Conv6	.735	1.361	0
	Conv7	.541	1.848	0
	Safe1	.455	2.198	0
	Safe2	.458	2.182	0
	Safe3	.486	2.058	0
	Safe4	.449	2.225	0
	Sat1	.272	3.670	0
	Sat2	.224	4.471	0
	Sat3	.324	3.086	0
	Sat4	.468	2.137	0
	Sat5	.387	2.582	0
	Loy1	.335	2.987	0
	Loy2	.316	3.163	0
	Loy3	.310	3.223	0
	WOM1	.300	3.331	0
	WOM2	.316	3.163	0
	WOM3	.415	2.409	0

		Collinearity Statistics		
		Tolerance	VIF	> 5
Safe1	Seamless1	.534	1.871	0
	Seamless2	.606	1.650	0
	Seamless3	.578	1.729	0
	Seamless4	.435	2.298	0
	Seamless5	.643	1.555	0
	Seamless6	.677	1.478	0
	Holistic1	.540	1.852	0
	Holistic2	.543	1.841	0
	Holistic3	.552	1.812	0
	Holistic4	.549	1.823	0
	Unique1	.530	1.887	0
	Unique2	.310	3.227	0
	Unique3	.333	3.005	0
	Unique4	.328	3.045	0
	Unique5	.361	2.768	0
	Unique6	.578	1.729	0
	Conv1	.455	2.199	0
	Conv2	.460	2.173	0
	Conv3	.418	2.395	0
	Conv4	.435	2.298	0
	Conv5	.560	1.786	0
	Conv6	.695	1.438	0
	Conv7	.531	1.882	0
	Sat1	.266	3.757	0
	Sat2	.223	4.474	0
	Sat3	.329	3.041	0
	Sat4	.456	2.191	0
	Sat5	.389	2.574	0
	Loy1	.311	3.211	0
	Loy2	.312	3.205	0
	Loy3	.315	3.177	0
	WOM1	.290	3.444	0
	WOM2	.322	3.103	0
	WOM3	.397	2.520	0

APPENDIX B

MULTICOLLINEARITY ANALYSIS

(3/4)

		Collinearity Statistics		
		Tolerance	VIF	> 5
Conv1	Seamless1	.524	1.908	0
	Seamless2	.600	1.667	0
	Seamless3	.578	1.731	0
	Seamless4	.433	2.309	0
	Seamless5	.629	1.591	0
	Seamless6	.671	1.491	0
	Holistic1	.552	1.810	0
	Holistic2	.525	1.904	0
	Holistic3	.544	1.837	0
	Holistic4	.547	1.827	0
	Unique1	.513	1.949	0
	Unique2	.309	3.232	0
	Unique3	.325	3.075	0
	Unique4	.334	2.994	0
	Unique5	.360	2.777	0
	Unique6	.546	1.831	0
	Conv2	.501	1.997	0
	Conv3	.412	2.429	0
	Conv4	.427	2.344	0
	Conv5	.545	1.834	0
	Conv6	.681	1.468	0
	Conv7	.550	1.819	0
	Safe1	.448	2.232	0
	Safe2	.432	2.314	0
	Safe3	.480	2.084	0
	Safe4	.443	2.256	0
	Sat1	.259	3.858	0
	Sat2	.219	4.561	0
	Sat3	.320	3.122	0
	Sat4	.453	2.206	0
	Sat5	.377	2.652	0
	Loy1	.304	3.290	0
	Loy2	.315	3.172	0
	Loy3	.306	3.270	0
	WOM1	.283	3.537	0
	WOM2	.310	3.227	0
	WOM3	.382	2.619	0

		Collinearity Statistics		
		Tolerance	VIF	> 5
Sat1	Seamless2	.634	1.578	0
	Seamless3	.626	1.598	0
	Seamless4	.452	2.212	0
	Seamless5	.640	1.562	0
	Seamless6	.744	1.345	0
	Holistic1	.567	1.763	0
	Holistic2	.579	1.728	0
	Holistic3	.627	1.595	0
	Holistic4	.573	1.745	0
	Unique1	.541	1.849	0
	Unique2	.315	3.171	0
	Unique3	.332	3.014	0
	Unique4	.330	3.027	0
	Unique5	.387	2.584	0
	Unique6	.559	1.789	0
	Conv1	.462	2.163	0
	Conv2	.485	2.063	0
	Conv3	.442	2.264	0
	Conv4	.425	2.354	0
	Conv5	.554	1.806	0
	Conv6	.689	1.451	0
	Conv7	.554	1.805	0
	Safe1	.466	2.147	0
	Safe2	.446	2.240	0
	Safe3	.508	1.970	0
	Safe4	.450	2.220	0
	Loy1	.333	3.003	0
	Loy2	.333	3.004	0
	Loy3	.333	3.002	0
	WOM1	.310	3.225	0
	WOM2	.315	3.172	0
	WOM3	.396	2.525	0

APPENDIX B

MULTICOLLINEARITY ANALYSIS

(4/4)

		Collinearity Statistics		
		Tolerance	VIF	> 5
Loy1	WOM1	.283	3.536	0
	WOM2	.319	3.135	0
	WOM3	.390	2.564	0
	Seamless1	.554	1.804	0
	Seamless2	.626	1.598	0
	Seamless3	.574	1.741	0
	Seamless4	.445	2.249	0
	Seamless5	.632	1.583	0
	Seamless6	.694	1.441	0
	Holistic1	.541	1.850	0
	Holistic2	.552	1.810	0
	Holistic3	.554	1.807	0
	Holistic4	.555	1.801	0
	Unique1	.532	1.881	0
	Unique2	.307	3.254	0
	Unique3	.338	2.960	0
	Unique4	.327	3.057	0
	Unique5	.366	2.734	0
	Unique6	.547	1.828	0
	Conv1	.470	2.127	0
	Conv2	.470	2.129	0
	Conv3	.411	2.435	0
	Conv4	.429	2.333	0
	Conv5	.590	1.695	0
	Conv6	.683	1.464	0
	Conv7	.570	1.754	0
	Safe1	.460	2.176	0
	Safe2	.444	2.250	0
	Safe3	.494	2.023	0
	Safe4	.446	2.243	0
	Sat1	.266	3.763	0
	Sat2	.225	4.442	0
	Sat3	.325	3.072	0
	Sat4	.525	1.906	0
	Sat5	.393	2.546	0

		Collinearity Statistics		
		Tolerance	VIF	> 5
WOM1	Seamless1	.538	1.859	0
	Seamless2	.613	1.631	0
	Seamless3	.582	1.719	0
	Seamless4	.431	2.318	0
	Seamless5	.640	1.562	0
	Seamless6	.683	1.463	0
	Holistic1	.537	1.862	0
	Holistic2	.532	1.880	0
	Holistic3	.554	1.805	0
	Holistic4	.560	1.787	0
	Unique1	.546	1.830	0
	Unique2	.309	3.234	0
	Unique3	.327	3.061	0
	Unique4	.344	2.906	0
	Unique5	.360	2.780	0
	Unique6	.541	1.848	0
	Conv1	.455	2.198	0
	Conv2	.456	2.193	0
	Conv3	.416	2.405	0
	Conv4	.426	2.346	0
	Conv5	.545	1.836	0
	Conv6	.689	1.451	0
	Conv7	.536	1.865	0
	Safe1	.452	2.213	0
	Safe2	.442	2.264	0
	Safe3	.499	2.004	0
	Safe4	.456	2.195	0
	Sat1	.262	3.821	0
	Sat2	.225	4.438	0
	Sat3	.326	3.071	0
	Sat4	.452	2.215	0
	Sat5	.378	2.648	0
	Loy1	.303	3.295	0
	Loy2	.314	3.181	0
	Loy3	.310	3.227	0

APPENDIX C

FINDINGS OF EXPLORATORY FACTOR ANALYSIS (EFA)

Construct	Dimension	Item	Description	EFA Loading	α	KMO	Total Variance Explained (%)
OCX	Seamless	Seamless1	I believe omnichannel retailer X unites all experiences across all channels as one.	.554	.666	.685	50,05
		Seamless2	I can find the same product variety across all the channels (store, online, and mobile) of the omnichannel retailer X.	.706			
		Seamless3	I can find any product across any channel (store, online, mobile) of the omnichannel retailer X with the same price.	.778			
		Seamless4	I can find the same special offers in store, online or mobile channels of the omnichannel retailer X.	.609			
	Holistic	Holistic1	I believe my overall experience with omnichannel retailer X is the sum of all my interactions across all channels.	.555	.703	.723	53,50
		Holistic2	I believe if the omnichannel retailer X is good then its online and offline experience will be good as well.	.579			
		Holistic3	Omnichannel retailer X unites the advantages of different channels	.705			
		Holistic4	My past experiences with the omnichannel retailer X shape my future expectations from the omnichannel retailer X.	.619			
	Unique	Unique1	I feel special because the omnichannel retailer X recognizes me across all channels.	.644	.844	.760	61,94
		Unique2	The omnichannel retailer X cares about what I need.	.800			
		Unique3	Omnichannel retailer X knows me better than any other retailer	.807			
		Unique4	The omnichannel retailer X provides personalized offerings for me across all channels (store, online, and mobile).	.803			
		Unique5	The omnichannel retailer X listens to my recommendations.	.756			
	Convenience	Convenience1	The omnichannel retailer X brings my regular retail experience to my doorstep.	.711	.763	.714	58,51
		Convenience2	Despite the restrictions or lockdowns, the omnichannel retailer X enables me to instantly reach my needs whenever I need.	.747			
		Convenience3	Omnichannel retailer X enables me to shop time efficiently.	.622			
		Convenience7	I can smoothly shop across all the channels (store, online, mobile) of the omnichannel retailer X at any time anywhere.	.663			
	Safe	Safe1	I feel safe (from Covid-19) while shopping from the omnichannel retailer X.	.802	.837	.809	67,30
		Safe2	Omnichannel retailer X provides me the same shopping experience across all channels (store, online, and mobile) without taking any risk of contamination (COVID-19).	.693			
		Safe3	Contactless encounters (contactless delivery, click-and-collect, online shopping, contactless payment, etc.) provided by the omnichannel retailer X make me feel safe (from COVID-19).	.743			
		Safe4	Omnichannel retailer X ensures risk free shopping experience (from COVID-19).	.788			

APPENDIX D

MODEL COMPARISON IN CFA

Model	Chi-square (x^2)	df	x^2 diff.	x^2 / df	RMSEA	CFI	TLI	IFI
Model 1 - Initial first order five factor model from EFA	372.50	179	-	2.081	0.074	0.88	0.86	0.88
Model 2 - Revised first order five factor model	254.99	141	117.5*	1.808	0.064	0.92	0.91	0.93
Model 3 - Second-order five factor model	255.30	144	0.31	1.773	0.063	0.93	0.91	0.93

Note: The table is adapted from Brakus et al., 2009, * $p < 0.001$

APPENDIX E

FACTOR LOADINGS OF MODEL THREE (CFA)

		Loading
OCX	Seamless	0.359*
	Safe	0.622*
	Unique	0.216**
	Convenient	0.883*
	Holistic	0.910*
Seamless	Seamless4	0.821*
	Seamless3	0.457*
	Seamless2	0.600*
Holistic	Holistic4	0.625*
	Holistic3	0.625*
	Holistic2	0.617*
	Holistic1	0.656*
Convenient	Conv3	0.767*
	Conv2	0.649*
	Conv1	0.726*
	Conv7	0.535*
Unique	Unique5	0.838*
	Unique4	0.830*
	Unique3	0.815*
	Unique2	0.849*
Safe	Safe4	0.729*
	Safe3	0.579*
	Safe2	0.715*
	Safe1	0.858*
Note: *$p < 0.001$; **$p < 0.05$		

APPENDIX F

CONVERGENT VALIDITY OF MODEL THREE

		Model 3			
Factor	**Items**	**Factor Loadings**	**Cronbach's Alpha**	**AVE**	**CR**
OCX	Unique	0.216**	0.85	0.43	0.76
	Safe	0.622*			
	Convenient	0.883*			
	Holistic	0.910*			
	Seamless	0.359*			
Unique	Unique5	0.838*	0.84	0.69	0.90
	Unique4	0.830*			
	Unique3	0.815*			
	Unique2	0.849*			
Safe	Safe4	0.729*	0.84	0.53	0.81
	Safe3	0.579*			
	Safe2	0.715*			
	Safe1	0.858*			
Convenient	Conv7	0.535*	0.76	0.46	0.77
	Conv3	0.767*			
	Conv2	0.649*			
	Conv1	0.726*			
Seamless	Seamless4	0.821*	0.67	0.41	0.67
	Seamless3	0.457*			
	Seamless2	0.600*			
Holistic	Holistic4	0.625*	0.70	0.40	0.73
	Holistic3	0.625*			
	Holistic2	0.617*			
	Holistic1	0.656*			

Note: * $p < .001$; ** $p < .05$

APPENDIX G

DISCRIMINANT VALIDITY OF MODEL THREE

First-order constructs	**Unique**	**Safe**	**Convenient**	**Seamless**	**Holistic**
Unique	**0.694**				
Safe	0.019	**0.529**			
Convenient	0.035	0.312	**0.456**		
Seamless	0.441	0.038	0.015	**0.414**	
Holistic	0.039	0.319	0.638	0.116	**0.398**

Note: Average variances extracted (AVEs) are shown on diagonal compared to squared correlation coefficients.

APPENDIX H

CONVERGENT VALIDITY OF MEASUREMENT MODEL

		Measurement Model			
Factor	**Items**	**Factor Loadings**	**α**	**AVE**	**CR**
OCX	Unique	0,277**	0.85	0.45	0.78
	Safe	0,674*			
	Convenience	0,913*			
	Holistic	0,872*			
	Seamless	0,382*			
Unique	Unique5	0,839*	0.84	0.69	0.90
	Unique4	0,831*			
	Unique3	0,815*			
	Unique2	0,848*			
Safe	Safe4	0,729*	0.84	0.53	0.82
	Safe3	0,586*			
	Safe2	0,716*			
	Safe1	0,854*			
Convenient	Conv7	0,584*	0.76	0.43	0.75
	Conv3	0,780*			
	Conv2	0,597*			
	Conv1	0,647*			
Seamless	Seamless4	0,805*	0.67	0.41	0.66
	Seamless3	0,465*			
	Seamless2	0,602*			
Holistic	Holistic4	0,575*	0.70	0.38	0.71
	Holistic3	0,632*			
	Holistic2	0,655*			
	Holistic1	0,594*			
WOM	WOM3	0,777*	0.86	0.70	0.87
	WOM2	0,867*			
	WOM1	0,859*			
Loyalty	Loy3	0,786*	0.87	0.67	0.86
	Loy2	0,799*			
	Loy1	0,866*			
Customer Satisfaction	Sat1	0,822*	0.87	0.58	0.87
	Sat2	0,778*			
	Sat3	0,801*			
	Sat4	0,631*			
	Sat5	0,756*			

Note: *p < .001; **p < .05

APPENDIX I

DISCRIMINANT VALIDITY OF MEASUREMENT MODEL

	OCX	**CustSat**	**Loyalty**	**Word-of-mouth**
OCX	**0,454**			
CustSat	0,461	**0,578**		
Loyalty	0,233	0,349	**0,669**	
Word-of-mouth	0,477	0,404	0,413	**0,698**

Note: Average variances extracted (AVEs) are shown on diagonal compared to squared correlation coefficients

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