

St. Petersburg University
Graduate School of Management

Master in Management Program

THE EFFECTS OF OMNICHANNEL CONTEXT-SPECIFIC FACTORS ON
CONSUMERS' PURCHASE INTENTION

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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Аннотация

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Описание цели, задач и основных результатов	<p>Развитие технологий меняет привычки покупателей и их пути взаимодействия с представителями розничной торговли. Следующим большим шагом для компаний является интеграция их различных каналов и предоставление потребителям удобного покупательского опыта, за счет перехода от многоканальности к омниканальности. Данное исследование способствует концептуализации феномена омниканальности и ставит своей задачей оценить влияние специфичных для данного явления факторов на намерение потребителей совершить покупку. В данном исследовании используется модифицированная версия Модели Принятия Технологий (Technology Acceptance Model) с добавлением "воспринимаемого удовольствия" в качестве медиатора отношений между исходными переменными (воспринимаемая полезность, воспринимаемая простота использования и намерение совершения покупки). В ходе исследования были собраны и проанализированы данные потребителей российского продуктового розничного рынка. Результаты показали, что выделенные факторы имеют значительный эффект на переменные воспринимаемой полезности и простоты использования, которые, в свою очередь, влияют на намерение совершения покупки.</p>
Ключевые слова	Омниканальность, омниканальный опыт, розничная торговля, Модель Принятия Технологий

Abstract

Master Student's Name	Dorofeev Denis Nikolaevich
Master Thesis Title	The Effects of Omnichannel Context-Specific Factors on Consumers' Purchase Intention
Faculty	Graduate School of Management
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Academic Advisor's Name	Yablonski Sergey Aleksandrovich
Description of the goal, tasks and main results	<p>Technological advancements change consumers' shopping habits and redefine the landscape in the retail sector. The next big step for companies is to integrate their multiple channels and provide consumers with a seamless shopping experience, shifting from multi- to omni-channel. This study contributes to the conceptualization of the phenomenon, assessing the effects of context-specific underlying factors that affect consumers' purchase intention in omni-channel settings. To do this, the research adopts a modified version of the Technology Acceptance Model with perceived enjoyment mediating relationships between the original constructs (perceived usefulness, perceived ease of use, and purchase intention). Then, we developed measurement items and filled them with primary data (n=191) collected from consumers of the Russian grocery retail market. The results demonstrated that the constructs representing omni-channel dimensions were good predictors of perceived usefulness and ease of use, which, in turn, affect consumer's purchase intention.</p>
Keywords	Omnichannel, omni-channel experience, retail, Technology Acceptance Model

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Introduction

Applicability of the research

Technological advancements change consumers' shopping habits and redefine the landscape in the retail sector. The growth of online retail sales demonstrates consumers' appreciation of web-based stores because of better convenience, more comprehensive goods selection, richer product information, and an ability to compare prices (Jin et al., 2020) quickly. The Harvard Business Review (2017) study demonstrated that among 46,000 respondents surveyed, 7% were exclusively online buyers, and 20% recognized only offline. The remaining 73% represented the omni group. The results mean that the vast majority of people are no longer ready for the same type of interaction - only at the point of sale or only on the site/application. Customers, being in the premises of stores, like to receive information from smart stands and tablets on the trading floor, look at catalogs, compare properties and prices of products. Sometimes they look at the goods on the spot and decide later, after which they make an online order. In other cases, they explore assortment on the Internet and go to the point of sale to finally make sure of the choice and make a purchase. The bottom line is that such user experience has long been no exception but instead claims to be the rule. A year earlier, Harvard Business Review (2016) found that customer loyalty is directly proportional to the number of channels that the customer uses to communicate with the brand. Within six months after the omni-channel interaction experience, customers are 23% more likely to make repeated visits to this retailer's stores and give their recommendations much more active than those who use one channel.

Although consumer behavior-related changes include the increased adoption of mobile devices, the extensive use of social media, and the popularity of apps (Berman, Thelen, 2018), the future does not come solely to digital. User polls conducted by McKinsey (2016) show that 35% of consumers are willing to close the "administrative" issues, such as, for example, changing the tariff and user data to digital. At the same time, only 24% are ready to abandon live counseling in solving technical problems. Thus, companies that quickly and self-confidently go online to the detriment of live sales may make a mistake, moving away from their target audience. Everything suggests that customers want to take advantage of the ubiquitous presence of retailers. They need showrooms, web rooms, technical support calls, sales consultants, online catalogs, and any other ways to surround them with attention and care

(Berman & Thelen, 2018). There is a shared notion that the omni-channel will become the new normal over the next several years and that the line between channels will blur to the point of seamless transitions (Briel, 2018).

Research gap

Many of the existing studies of the omni-channel are separated; they focus on particular aspects, relying on different supplementary concepts and theories. For example, different studies explored channel integration quality from a perspective of a particular channel. Particularly, Li et al. (2018), based on the Push-Pull-Mooring framework, descriptively describe cross-channel integration with an accent on showrooming. At once, Shen et al. (2018) include in their Wixom & Todd-based model variables of external and internal usage experience, putting that in the context when retailers implement omni-channel strategies on different competing platforms. Thus, based on the existing findings of specific directions and first efforts of the omni-channel experience conceptualization, we aim to obtain a more profound and more generalized knowledge about the roles of context-specific omni-channel directions, which affect consumer's intention of making purchases in the omni-channel settings. Some recent attempts of the phenomenon's conceptualization (e.g., Silva et al., 2019) explored the roles of predictors corresponding to well-established theoretical frameworks of the theory of technology acceptance and the innovation diffusion theory. However, we need to expand the understanding of underlining factors affecting the omni-channel experience quality with context-specific predictors to gain more insightful results.

The practices in the omni-channel environment progress fast, as the technologies do, so researches published five years ago can rely on outdated views about the omni-channel experience. For example, some theoretical and empirical studies of omni-channel experience explored mainly two main channels, online- and brick-and-mortar stores, and the extent of their integrity (Briel, 2018; Verhoef et al., 2015). However, nowadays, we can observe the dominance of mobile and social networks (Berman, Thelen, 2018). Since consumers obtain new behavioral habits in the digital environment, and companies' opportunities for channel integration are becoming broader and more accessible, it is essential to explore up-to-date conditions and compare the obtained results with those of previous studies.

Finally, while studies in the omni-channel experience field are rapidly developing globally, the phenomenon is understudied in Russia. Particularly, different researches on the phenomenon's conceptualization may rely on a sample of experts' opinions of one country and be tested on market audiences of a particular industry in that country (e.g., Li et al. 2018). Thus, there is a need to check the applicability of those findings with an analysis in different industrial and geographical conditions.

The research goal, question, and objectives

Hence, the purpose of this study is to examine omni-channel experience from a consumer perspective and identify key common context-specific factors that influence consumers to accept and use technology to analyze the effect on purchase intention. Thus, the goal and research questions of this study have been formulated in the following way:

Goal: To investigate the relationships between the context-specific factors of omni-channel experience and consumers' purchase intention in omni-channel settings.

RQ1: What are context-specific antecedents representing dimensions of omni-channel experience?

RQ2: What effect do they have on consumers' purchase intention in omni-channel shopping?

To achieve the research goal, we set the following research objectives: (1) to formulate a comprehensive list of the most common context-specific factors of omni-channel experience representing the phenomenon's dimensions based on the review of the existing literature, (2) create measurements for evaluation of the factors' role and fill them with primary data, and (3) analyze the collected data and evaluate the effects of the antecedents withing the suggested conceptual model.

Research contribution

Answering the research questions would allow us to examine the effects of a complete list of context-specific factors on consumers' omni-channel purchase intention and contribute to the existing literature in several ways. Firstly, while previous researchers focused mainly on

the effect of particular omni-channel predictors on consumers' choice (e.g., Lee et al., 2019; Shen et al., 2018) this study aims at the underlying common omni-channel mechanisms and critical drivers of omni-channel purchase intention. Secondly, recent studies frequently described the contribution of omni-channel experience to consumers' value perceptions such as perceived compatibility (Shi et al., 2020), identity attractiveness (Li et al., 2018), perceived fluency (Shen et al., 2018). Our study further considers customers' shopping behavior in the innovative environment and investigates how specific aspects of omni-channel experience influence consumers' perceived usefulness and perceived ease of use, which, in turn, increase purchase intention. Third, by adopting a modified version of the Technology Acceptance Model (TAM), this study attempts the omni-channel experience conceptualization from a new consumer-based perspective adding perceived enjoyment to the TAM's constructs of perceived usefulness and perceived ease of usage.

Chapter 1. Theoretical justifications

1.1 Omni-channel definition

Neslin et al. (2006) describe multi-channel customer management as the "design, deployment, coordination, and evaluation of channels to enhance customer value through effective customer acquisition, retention, and development." Thus, channels are combinations of consumer touchpoints or a medium through which the company and their consumers interact. The omni-channel concept developed from multi-channel. The main difference is in integration and coordination of independent channels to meet consumers' needs for seamless transitions across different physical and digital touchpoints (Shen et al., 2018). Omni-channel consumer experience implies the simultaneous use of multiple channels as well as the specific management of the channels that might be used parallelly to enable consumers' cross-channel migration. In this regard, channel integration and fluent cross-channel transition are believed to be the main components of the omni-channel business, which to a greater extent distinguishes these two phenomena.

Table 1. Multi-channel vs. Omni-channel

Criteria	Multi-channel	Omni-channel
Definition	A siloed approach that operates channels as independent entities.	A unified approach that manages channels as intermingled touchpoints allowing consumers to have a seamless experience within an ecosystem.
Channel scope	Stores, websites, and mobile channels.	Stores, websites, mobile channels, social networks, and all other consumer touchpoints.
Channel characteristics	Coexistence of several channels, considered to be separate and in competition.	Informational and transactional touchpoints are integrated within a unified channel to allow a seamless consumer experience.
Channel integration	No/partial switching between channels.	Seamless switching across all channels and touchpoints.

Channel management	Management of the channels and consumer touchpoints is geared towards optimizing the experience with each channel.	Synergetic management of the channels and consumer touchpoints is geared towards optimizing the holistic experience.
Data	Data are not shared across channels.	Data are shared across all channels.
Objectives	Sales per channel, experience per channel.	All channels and touchpoints work together to offer holistic consumer experience.
Consumer	Perceived interaction with the channel. No possibility of triggering interaction. Use channels in parallel.	Perceived interaction with the brand. Can trigger whole interaction. Use channels simultaneously.
Retailers	No possibility of controlling the integration of all channels.	Control full integration of all channels.
Salespeople	Do not adapt selling behavior.	Adapt selling behavior using different arguments depending on each customer's needs and knowledge of the product.

Source: Juaneda-Ayensa et al., 2016; Mirsch et al., 2016; Shen et al., 2018.

1.2 Literature overview

In the existing literature, omni-channel experience has been explored from both the perspective of companies' actions such as strategy, business model, technological aspects of building, and operational tools (Kotzab et al., 2016; Parise, 2016; Ailawadi & Farris, 2017) and consumer perception such as quality of experience, satisfaction, and shopping intention (Chen et al., 2018; Shi et al., 2020). From the company perspective, existing researches focus on particular strategic intentions such as pricing strategy and changing willingness to pay for different types of goods across retail channels (Chatterjee & Kumar, 2017) and increasing profit through adjusting return policy and optimization of the relevant costs (Jin et al., 2020). Additionally, researchers address special attention to segmentation issues (e.g., Hossain et al., 2019; Verhoef et al., 2015) because, combining the usage of different channels and touchpoints,

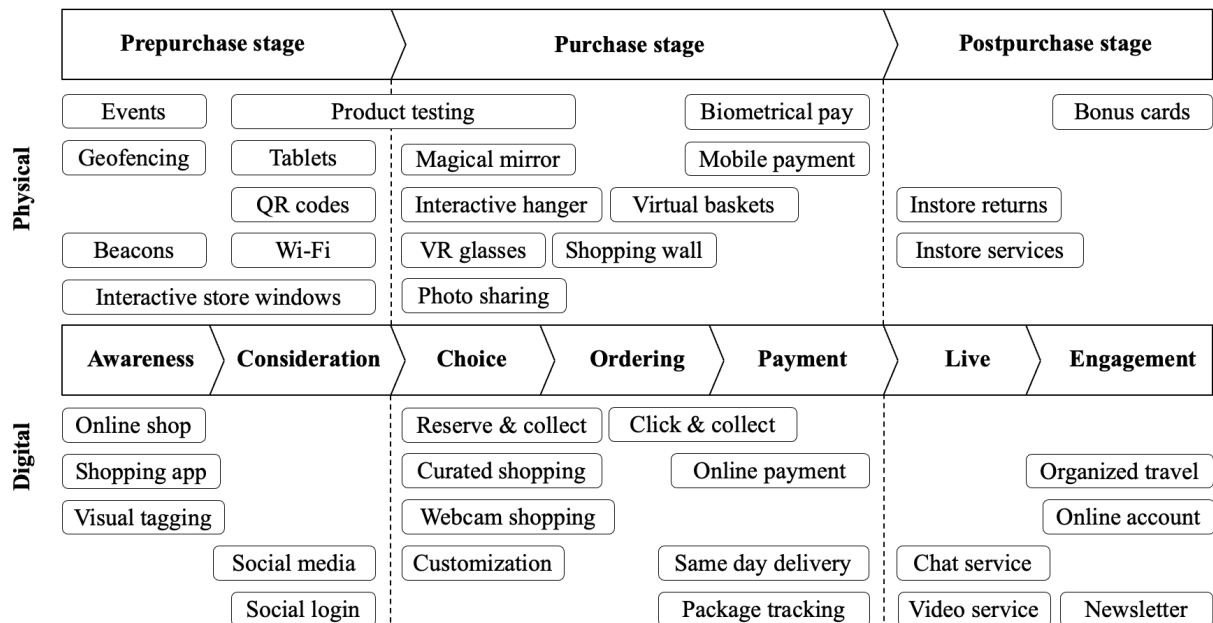
the number of possible consumer paths in the pre-purchase, purchase, and post-purchase phases are getting increasingly large. This fact makes it challenging for companies to segment consumers, determine and influence their interaction choices (Barwitz & Maas, 2018).

The second stream of researches in the omni-channel environment focuses on consumers and addresses such questions as the adoption of different channels, consumers' perceptions, and their intentions of particular channels' usage in a specific context (e.g., Shi et al., 2020; Barwitz & Maas, 2018; Kazancoglu & Aydin, 2018). For instance, Kazancoglu and Aydin (2018) qualitatively explore factors, which influence consumers to choose omni-channel during their shopping at fashion retailers. Further, Cao and Li (2014) suggest retailers optimize activities across different channels rather than merge them, paying attention to channel integration quality. There is a stream of studies dedicated to this topic (e.g., Shen et al., 2018, Hossain et al., 2019; Li et al., 2018). A high integration quality allows retailers to provide consumers with an ability to seamlessly and fluently get all needed information and services by combining channels on different stages of their consumer journey. Eventually, a high-quality integration of channels is the most significant difference between omni- and multi-channel experience (Shi et al., 2020).

In the rapidly growing body of both theoretical and empirical studies of omni-channel experience, mainly two main channels of online- and brick-and-mortar stores and the extent of their integrity are the subjects of studies (Briel, 2018). It covers such product fulfillment links as buy-online, pick-up-at-store and buy-online, ship-to-store, also addressing the aspects of information delivery (e.g., Jin et al., 2020; Kazancoglu & Aydin, 2018). Moreover, some of the existing researches cover the omni-channel consumer experience in a separate manner and focus on particular aspects (e.g., Shi et al., 2020). For example, channel integration quality may be explored from a perspective of a certain channel. Particularly, Li et al. (2018), based on the Push-Pull-Mooring framework, descriptively study cross-channel integration with an accent on showrooming. At once, Shen et al. (2018) include in their Wixom & Todd-based model variables of external and internal usage experience, putting that in the context when retailers implement omni-channel strategies on different competing platforms. However, there is also a stream of works, which focuses on the general conceptualization of omni-channel experience and aims to develop context-specific directions of the phenomenon (e.g., Lee et al., 2019, Shi et al., 2020, Barwitz & Maas, 2018).

Both practitioners (McKinsey, 2019) and academics (e.g., Baier & Rese, 2020; Barwitz & Maas, 2018) declare that consumers nowadays have an immense number of possible interaction paths retailers, who expand their traditional channels to an emerging array of digital touchpoints. Many companies have invested in developing digital channels to partially replace traditional modes of engagement, and their consumers, who were becoming more technologically savvy, paid the companies off. As a result, the retailer gives preference to digital channels, which reduces the need for live agents and thus significantly reduces costs (Hossain et al., 2019). Particularly, many firms expected to benefit more than 40% through reducing live contacts (McKinsey, 2019). Utilizing the increased variety of interaction options on the prepurchase, purchase, and postpurchase stages, consumers create their personal journeys, which analyzes the interaction choices increasingly challenging (Verhoef et al., 2015). For example, Baier and Rese (2020) summarize existing technologies that have been integrated into consumer journeys in physical and digital channels by retailers (Figure 1). Supposing the opportunity the omni-channel to utilize combinations of them, we get approximately 75,000 possible touchpoints' combinations in the example, assuming that consumers will utilize only one touchpoint on each stage (awareness, consideration, choice, etc.).

Figure 1. Technologies integrated into the omni-channel consumer journey



Source: Baier & Rese, 2020

Given such complexity of the subject, companies struggle to obtain the insights needed for providing their consumers with superior experiences along their consumer journeys (Homburg et al., 2017). In practice, advanced analytics allows tracing channels, touchpoints, or keywords giving credits for the sale or conversions (Google, 2021). On average, it takes 7-13 touches (engagements) for a firm for a lead to convert, and attribution models allow to provide a clearer understanding of what channels had the largest effect in converting.

The firms seeking to keep pace with the technological development should initiate the development of the omni-channel transformation, treating these touchpoints not in isolation of a particular channel but as part of a seamless consumer journey. Since consumer journeys, becoming more complicated, they are changing from linear to combinations of transitions between physical and digital channels that can vary significantly by industry, retailer type, and consumer type (Barwitz & Maas, 2018). Obtaining the essential insights regarding factors affecting consumers' purchase intention would further allow to connect them to particular practices and technologies that should be implemented by retailers in consumer journeys.

1.3 Theoretical frameworks

As for the theoretical foundations, some of the studies described above emphasized the necessity to research customers' omni-channel behavior with theory-driven conceptual frameworks. In Table 2, such recent studies are presented. The authors explain consumer purchasing behavior in the omnichannel context based on the well-established theoretical frameworks such as the technology acceptance model (TAM), the theory of reasoned action (TRA), and the extended unified theory of acceptance and use of technology (UTAUT2). Although the following conventional concepts have proved explanatory powers in explaining and predicting usage behavior for various contexts (Shen et al., 2018), all of them rely on users' perceptions towards general information systems count specific of a specific context of the phenomenon of omni-channel. Along with the Push-Pull-Mooring and Wixom & Todd frameworks mentioned above, researchers use supplementary concepts for formulating first-level variables in their models determining the power of omni-channel experience components' effect of the consumers' behavior across channels. For example, Shi, Wang, Chen, and Zhang (2020) adopt the Innovation Diffusion Theory, underlining such variables as perceived compatibility and perceived risk. Then, based on these concepts and previous studies of the

particular directions, hypotheses for the phenomenon's conceptualization are formulated. Particularly, the specificity of omnichannel business and its key differences from other primary channel strategies used by retailers should be considered to develop a deeper understanding of customer omni-channel usage behavior.

Table 2. Overview of the IS conceptual frameworks

Theory/model	Components	Reference
Theory of reasoned action (TRA), Ajzen and Fishbein (1980)	Subjective norm, Attitudes, Behavioural intention	Jia, 2016; Pookulangara et al., 2011
Technology acceptance model (TAM), Davis et al. (1989)	Perceived ease of use, Perceived usefulness, Attitudes, Behavioral intention	Joo and Lee, 2016; Liu et al., 2017; Berg and Tornblad, 2017
Theory of planned behavior (TPB), Ajzen (1991)	Behavioral intention, Attitude, Subjective norm, Perceived behavioral control	Riantini, 2019
Innovation diffusion theory (IDT), Rogers (1995)	Relative advantage, Ease of use, Image, Visibility, Compatibility, Results demonstrability, Voluntariness of use, Behavioral intention	Shi et al., 2020; Truong, 2020
Unified theory of acceptance and use of technology (UTAUT2), Venkatesh et al. (2012)	Performance expectancy, Effort expectancy, Social influence, Facilitating conditions, Hedonic motivation, Price value and Habit, Behavioral intention	Lawry and Choi, 2013; Juaneda- Ayensa et al., 2016; Kazancoglu and Aydin, 2018
Wixom & Todd model, Wixom and Todd (2005)	Objective-based beliefs (information and system quality/satisfaction), Behavioral beliefs (usefulness and ease of use), Behavioral intention	Shen et al., 2018; Rukmana 2019

The applicability of the TAM model in the omni-channel context can be seen in the studies of recent years, specifically examining the omni-channel strategy in terms of the TAM and UTAUT model (Joo and Lee, 2016) and mobile technology (Liu et al., 2017). For example, based on TAM, Berg and Tornblad (2017) investigate the drivers of purchase intention in the omni-channel context. Like in other cases of the SI framework adoption, they modify the model with additional variables of perceived security and perceived personalization. The work results demonstrate that perceived security and perceived usefulness are key drivers of purchase intention. Additionally, the habit of using multiple channels was found to positively moderate the determination of purchase intention by perceived usefulness. Since the TAM model is well-compatible with the omni-channel concept, and more general factors of technology adoption are examined, it is reasonable to attempt omni-channel experience conceptualization within the framework adding the studied predictors.

1.4 Technology acceptance model

The technology acceptance model is a well-established conceptual framework originally developed to investigate consumers' behavior and intention to use technology in an organizational context (Davis, 1989). However, succeeding studies extended the model with additional variables (e.g., Venkatesh & Davis, 2000; Juaneda-Ayensa et al., 2016) and argued it to be generalizable in different contexts (Taylor & Todd, 1995). The TAM model includes the constructs of perceived ease of use and perceived usefulness as the predictors of behavioral intention (Davis, 1989). Some researchers also made hypotheses about the interdependence of the perceived usefulness and perceived ease of use (the easier to use, the more useful it will be) (Taylor & Todd, 1995). However, more recent works had rejected the relationship between the antecedents and examined them as two separate parallel factors (e.g., Venkatesh, 2012; Juaneda-Ayensa et al., 2016). Additionally, Juaneda-Ayensa et al. (2016) revealed a significant direct effect of both perceived ease of use and perceived usefulness on consumers' purchase intention in the omni-channel settings. Additionally, we modify the dependent construct of behavioral intention to purchase intention for a better relevance of the omni-channel context, as some researchers did (e.g., Khalifa & Liu, 2007; Juaneda-Ayensa et al., 2016; Berg & Tornblad, 2017).

There are many consumer-based studies with the construct of behavioral intention in the role of the dependent variable affected various of predictors (e.g., Venkatesh & Davis, 2000; Frassetto et al., 2015; Berg & Tornblad, 2017). Behavioral intention covers the motivational factors, which stimulate the person to perform a certain behavior, indicating how likely the individual will try to perform that behavior (Ajzen, 1991). The modified version of the purchase intention refers to consumers' intention to purchase from one of the available channels (Juaneda-Ayensa et al., 2016); in this study, purchase intention is the positive outcome considered as the dependent variable of the conceptual model.

Davis (1989, p. 320) defines *perceived ease of use* as “the degree to which a person believes that using a particular system would be free of effort,” as it relates to technology in different touchpoints of a consumer journey (Venkatesh et al., 2012). Comparing two applications, Davis (1989) suggests that the easier to use will be more accepted by consumers. Additionally, this construct has been described as closely connected to “individuals' self-efficacy beliefs and procedural knowledge” (Venkatesh & Bala, 2008, p. 279), which in turn requires the consumers to have the practical experience and use their skills (Davis, 1989). Several studies demonstrate a positive impact of Ease of use on purchase intention (e.g., Davis, 1989; Venkatesh et al., 2012), including those across the omni-channel context (Juaneda-Ayensa et al., 2016). However, there is no conclusion regarding the effect of perceived ease of use since other recent studies declared an insignificant effect on the purchase intention (Berg & Tornblad, 2017). Additionally, in both mentioned results, perceived enjoyment has been considered as a first-order construct. In this study, we suggest that perceived ease of use is, in turn, affected by underlining factors of the omni-channel experience. Hence, we propose the following hypothesis:

H1: Perceived ease of use is positively related to omni-channel purchase intention in omni-channel shopping.

Perceived usefulness is defined as the benefits that consumers get from the adoption of technology and how this adoption is perceived to increase performance (Venkatesh et al., 2012). Venkatesh & Davis (2000) explain that the perception of usefulness is partly shaped by cognitively comparing the capabilities of a considered system with the task that is to be performed. The construct has consistently been considered a strong determinant of purchase intention (Davis, 1989; Venkatesh et al., 2003; Venkatesh et al., 2013; Pascual-Miguel et al.,

2015), which is caused by the desire to enhance job performance promised by the adoption of a specific technology (Davis, 1989). Furthermore, the construct is proved to positively affect purchase intention in omni-channel studies (Berg & Tornblad, 2017; Juaneda-Ayensa et al., 2016). Thus, following previous researches, we propose the following hypothesis:

H2: Perceived usefulness is positively related to omni-channel purchase intention in omni-channel shopping.

Additionally, we add *perceived enjoyment*, which has been studied in the omni-channel context, in our model. Perceived enjoyment refers to the extent to which performing a particular activity utilizing technology is perceived by users (consumers) to be pleasurable apart from the result of this activity (Venkatesh et al., 2003; Davis et al., 1992). In the context of the omni-channel, perceived enjoyment means the entertaining experience and pleasant variety of the shopping process provided by retailers (Pillai et al., 2020). The previous studies argued that perceived enjoyment has a large impact both in traditional and digital channels (e.g., Lee and Chung, 2008). For example, consumers enjoy their playful experience in physical stores having the use of self-checkout machines (Jackson et al., 2014), and in the digital space, using VR and AR apps that allow them to try products out in a new format (Speicher et al., 2017). Consumers are likely to utilize new technology when they feel that it makes their shopping process more pleasurable (Yeo et al., 2017).

Previous studies, focusing on specific aspects of omni-channel experience, argued that perceived enjoyment positively affects consumers' purchase intention (e.g., Liu et al., 2018, Brill, 2018), including those adopting the technology acceptance model (Pillai et al., 2020). However, it is usually considered as the same-level construct as perceived enjoyment and perceived usefulness. Alternatively, Thomas Chesney (2006) suggested modifying the TAM model with perceived enjoyment, including it as a mediator between perceived ease of use and purchase intention. Thus, it has been done to make a transition from the utilitarian views of the origins of the model and examine recreational systems, which helps to achieve a better model fit adopting the TAM model for consumer-oriented studies. Therefore, we propose the following hypotheses:

H3a: Perceived enjoyment mediates the relationship between perceived ease of use and purchase intention.

H3b: Perceived enjoyment mediates the relationship between perceived usefulness and purchase intention.

1.5 Omni-channel experience dimensions

Depending on the selected framework, the existing literature presents such context-specific components (directions) of omni-channel experience as integration, personalization, flexibility, insecurity, connectivity, transparency, and consistency.

Integration refers to the extent to which consumers perceive information across different channels as unified and complete in areas of promotion, transaction information, product and pricing, information access and order fulfillment, and customer service (Li et al., 2018). Integration allows retailers to trace consumers' actions across channels and maintain a unified record for providing clients all needed information in place, improving the overall quality of consumer experience (Saghiri et al., 2017). For example, an integrated information system allows recording member points in the same account for each customer for all purchases through different channels (Shi et al., 2020). When consumers are utilizing a single channel, it is widespread that the data and product information are highly integrated, so having the same benefits in the omni-channel environment makes consumers feel that they can obtain valuable offers in a convenient way personally for them. All these advantages delivered to customers by omni-channel marketing will allow them to save time and effort to choose the right channel and migrate among channels, increasing perceived usefulness. Therefore, we propose the following hypothesis:

H4: Integration is positively related to perceived usefulness in omni-channel shopping.

Personalization refers to the extent to which consumers receive accurate, personalized, and tailor-made information and services. Some researchers declare that personalization is one of the most important service quality criteria in the digital environment (Shi et al., 2020). For example, by collecting and managing all historical data across channels, retailers can provide consumers with shopping recommendations related to his/her previous shopping records (Joseph, 2015). Likewise, by developing a technological system, companies can utilize consumer data from different channels for reaching them with fit promotions, such as sending discount information to customers on their birthdays based on cross-channel data and providing

location-based services (Shi et al., 2020). By effectively managing consumption records in the omni-channel environment, retailers could develop an intricate understanding of customers' preferences, which can heighten the switching costs through highly personalized and appreciated offerings (Li et al., 2018), driving provided usefulness. Furthermore, Piotrowicz & Cuthbertson (2014) and Peltola et al. (2015) argue that the creation of a personalized and seamless experience is a factor of an omni-channel business. So far, personalization has been argued to positively affect purchase intention in the online settings (Pappas et al., 2014). Further, Juaneda-Ayensa et al. (2016) suggest that personalization in omni-channel retailing is a predictor that needs a special exploration. Results of Berg & Tornblad's (2017) research could not find a positive effect of personalization of omni-channel purchase intention, while Shi et al. (2020) declare its negative impact on the perceived risk in the IDT-based model. Based on the above, we propose the following hypotheses:

H5: Personalization is positively related to perceived usefulness in omni-channel shopping.

Flexibility refers to the extent to which consumers are provided with an opportunity for continuous migration across different channels perceiving their tasks. In practice, flexibility covers such benefits for consumers as the possibilities to make a purchase online and receive a post-purchase service in a physical store, to return bought goods in the nearest outlet regardless of where they were bought from, and to search goods online and then evaluate the quality of goods in a physical store before making an order. Consumers also may worry about products' availability and delivery effectiveness during migration across channels (Kazancoglu & Aydin, 2018). By providing relevant information and optimizing integration, retailers can achieve larger perceived trust from their consumers and provide them with more options for a convenient journey, reducing such risks associated with omni-channel shopping as system failure and low autonomy (Shen et al., 2018), which affects consumers' acceptance of the technology. To determine the relationships between flexibility and the TAM model constructs, we propose the following hypotheses:

H6a: Flexibility is positively related to perceived ease of use in omni-channel shopping.

H6b: Flexibility is positively related to perceived usefulness in omni-channel shopping.

Insecurity refers to the extent to which consumers feel insecure during their shopping process exploiting a new technology due to a high level of uncertainty and a low level of trust for the acceptance of new technology (Parasuraman & Colby, 2015). In the existing literature, there is a commonly shared notion that insecurity is a negative factor, preventing technology readiness of consumers to adopt new technology (Kuo et al., 2013). However, as for the studies in the omni-channel settings, previous works demonstrated confronting findings. For example, some of them showed that insecurity negatively influenced perceived ease of use (Kim and Chiu, 2019; Martens et al., 2017), while others found that there was no association between the two constructs (Ali et al., 2015; Rahman et al., 2017). Similarly, the existing literature showed that insecurity negatively affects perceived usefulness (Pillai, 2020; Kim and Chiu, 2019; Rahman et al., 2017), while other researchers argue that there is no association between insecurity and perceived usefulness (Martens et al., 2017; Ali et al., 2015). Since in the existing studies there is no consensus regarding the effect of insecurity on the TAM model constructs, we formulate the following hypotheses:

H7a: Insecurity is negatively related to perceived ease of use in omni-channel shopping.

H7b: Insecurity is negatively related to perceived usefulness in omni-channel shopping.

Connectivity refers to the extent to which information and services are linked and interconnected across different channels (Shi et al., 2020). Since consumers actively transit across the channel, they expect retailers to navigate them and provide them with timely and accurate directions to make these transitions smooth (Joseph, 2015). In practice, connectivity uncovers such possible transitions as consumers' migration from the store to online channels to comment or read reviews in real-time (Shi et al., 2020) or get more product information and options for ordering in an online store through scanning QR-codes in a physical store (Beck & Rygl, 2015). The extent to which customers feel smooth when migrating tasks from one channel to another is also associated in the literature with perceived fluency (e.g., Shen et al., 2018), which in turn has five sub-directions (Majrashi & Hamilton, 2015): task, content, interaction, cognition, and feeling fluency. A high-quality consumer experience is to be achieved through deep linking with other relevant channels for the sake of funnel traffic optimization. For instance, a mobile app or an online store can provide consumers with information about the nearest physical store so they could check and try on the products they are interested in (Dwivedi et al., 2017). Thus, a connected shopping experience can enhance the perceived usefulness and perceived ease of use of the omni-channel shopping process so

that consumers will be able to freely choose a channel that is most compatible with their habits or preferences during cross-channel shopping. We could not determine attachment to the TAM model constructs from the previous studies; therefore, we propose the following hypotheses:

H8a: Connectivity is positively related to perceived ease of use in omni-channel shopping.

H8b: Connectivity is positively related to perceived usefulness in omni-channel shopping.

Transparency refers to the degree to which customers are aware of the available channels and services as well as of attributes associated with different channels. When retailers cannot properly integrate and present their channels, customers may get confused with the difference of services between them; such confusion causes difficulties in their consumer journey (Bitner et al., 2002). Retailers who clearly show the options for channel-service configuration are able to offer a valued exchange to consumers (Lee et al., 2019). The complementary roles of the online and physical channels have been frequently highlighted in the existing researches. For instance, consumers can explore assortment online and then go to a physical store to try the merchandise and get a recommendation from a sales representative or find out about an additional benefit for purchase from a certain channel. Some recent studies conclude that customers' familiarity with attributes of available channels can reduce the uncertainty and improve the efficiency of migration across those channels (Shen, 2018). Based on the above, when channel service transparency is higher, consumers will be more likely to effortlessly migrate across channels, which will positively influence ease of use compared to managing with offerings from separated channels. Therefore, we propose the following hypothesis:

H9: Transparency is positively related to perceived ease of use in omni-channel shopping.

Consistency refers to the extent to which consumers perceive information and processes to be consistent across different channels. For instance, Shi, Wang, Chen, and Zhang (2020) highlight consistency as an independent, stand-alone dimension, arguing this by potential synergies and promotion of service continuity, leading to lower performance risks in situations of switching to another channel. On the other hand, some researchers (e.g., Shen et al., 2018;

Lee et al., 2019) treat consistency as a part of the integration dimension and state about its role in improving transparency of the experience, which in turn "refers to the level of customer's familiarity with the attributes of all available channels, and implies that customers are aware of the existence of all available channels and are familiar with their attributes" (Shen et al., 2018, p. 64). For example, it is particularly important for consumers that the price and quality of products are consistent across all channels, and Kazancoglu and Aydin (2018) point out that the consistency of product quality and price strategy across channels reduce information asymmetry and perceived risk. Accordingly, we propose the following hypothesis:

H10: Consistency is positively related to perceived ease of use in omni-channel shopping.

1.6 Conceptual research model

As a result of the overview of existing literature on omni-channel experience, we have come to the conceptual factors of the phenomenon (Table 3), created a model aimed at assessing the roles of these factors on consumers' omni-channel purchase intention (Figure 2), and related formulated hypotheses (H1-H10).

Figure 2. Suggested conceptual model based on the literature review

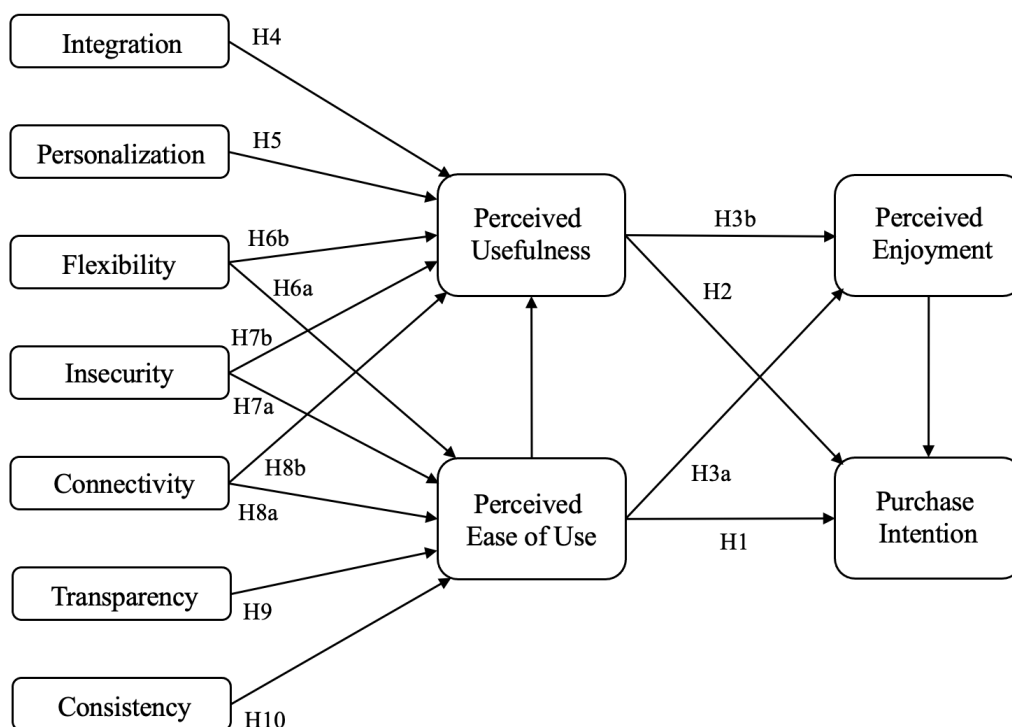


Table 3. Dimensions of omni-channel experience

	Definition	Examples from literature	Reference
Connectivity	The extent to which information and services are linked and interconnected across different channels.	Availability of products can be checked through mobile devices;	Bhalla, 2014; Cao, 2014;
		The location of offline stores can be found online;	Shen et al., 2018;
		Direct links from the store to online channels so that customers can comment in real-time;	Shi et al., 2020.
		The online service can be reached offline and vice versa.	
Insecurity	The extent to which consumers feel insecure during their omni-channel shopping process.	Leakage of personal and financial information; Sharing of information with third parties for undesired communications.	Pillai, 2020; Berg & Tornblad, 2017.
Integration	The extent to which customers perceive all information systems and management operations are unified and integrated well across channels.	The launch of new products is synchronized across channels; The member points are recorded in the same account for each customer; Coherence between the information exchanged with customers over different channels.	Beck & Rygl, 2015; Joseph, 2015; Li et al., 2018.

Transparency	The extent to which consumers are aware of the available channels and services as well as the differences between such service attributes across channels.	Research products online but go in-store to solicit additional advice from sales representatives; Find out about an additional benefit for purchase from a certain channel.	Lee et al., 2019; Shen et al., 2018.
Consistency	The extent to which consumers perceive information and processes to be consistent across different channels.	Interactive and consistent branding experience across channels; Offer consistent marketing messages through various channels; The customer receives the same response through different channels; Consistent design elements across channels.	Beck & Rygl, 2015; Cook, 2014; Shen et al., 2018; Shi et al., 2020.
Flexibility	The extent to which consumers are provided with an opportunity for continuous migration across different channels perceiving their tasks.	Pay online and pick up in-store; Buying a product from one channel and returning it in another; Customers can return merchandise regardless of what channel they bought it from; Multiple payment solutions.	Joseph, 2015; Lewis, Whysall, & Foster, 2014; Shen et al., 2018.

Personalization	The extent to which consumers receive accurate personalized and tailor-made information and services.	Personalized product recommendations based on historical data;	Bodhani, 2012;
		Placing of situation-related advertising information via various channels;	Joseph, 2015;
		Send discount information to customers on their birthdays based on cross-channel data;	Lewis et al., 2014;
		Receive shopping rewards based on shopping points across channels;	Shen et al., 2018;
			Berg & Tornblad, 2017.

Chapter 2. Method and data description

This chapter is dedicated to the methodology of the work in the defined research area. First of all, there are theoretical justifications of the research design choice followed by the description of omni-channel specific dimensions (factors) described in the literature. Secondly, there is a description of the research strategy and primary data gathering process. Finally, this is followed by a discussion of the quality and limitations of the research.

2.1 General research design

The research is aimed at the consumer's perspective towards the omni-channel phenomenon. For instance, Bell et al. (2014) underline it as the most constructive navigation path within the omni-channel context. The practical part of the consumer-centered research is aimed at contributing to the phenomenon's conceptualization. This study contributes to the first attempts of the phenomenon's conceptualization. Weathington et al. (2012) argue that replication plays an important part in research; thus, based on the partial first findings in this field (e.g., Lee et al., 2019, Shi et al., 2020, Barwitz & Maas, 2018), synthesis of other popular separated factors, and adding of a new theoretical framework for this field, the work is assessing the extent to which omni-channel directions affect consumers' purchase intention.

The nature of the study design is explanatory since causal relationships are to be established between antecedents and consumer behavioral intentions (Saunders et al., 2012). Therefore, this study aimed to test the causal relationship between the independent variables represented by omni-channel experience dimensions, combined into second-order factors presented by conceptual ease of use and usefulness, with a mediator of perceived enjoyment, and the dependent variable of purchase intention.

The quantitative findings play the main role in the research. Primary data have been collected via an Internet survey. According to Saunders et al. (2012), this is the preferable way of data collection for explanatory purposes when it is necessary to determine the causal relationship. This method allows obtaining results that are more generalizable and answer the research questions on a larger scale. Then, model building with the appliance of Structural Equation Modeling (SEM) is used in many studies that focus on consumers' perspective of

omni-channel experience (e.g., Shen et al., 2018; Li et al., 2018; Shi et al., 2020; Berg & Tornblad, 2017), and the findings in specific components helped to raise hypotheses for the model.

A deductive approach was applied since an extensive literature review became a base for hypotheses formulation and further testing. Hypotheses are often extracted from existing studies, and they are defined as “a specific prediction about the relationships among two or more variables” (Weathington et al., 2012:42). Accordingly, the theoretical part of the work led to the formulation of the direct and mediating effects among the variables.

2.2 Measurement

By the analysis of the existing literature in the field, the measurement items for eight dimensional factors of omni-channel experience (i.e., connectivity, consistency, transparency, insecurity, integration, flexibility, and personalization) were organized in accordance with the previous studies (Shi et al., 2020, Shen et al., 2018; Hoehle & Venkatesh, 2015). By utilizing measurement items from the relevant literature, the initial items list was developed, and it consisted of 30 positions, as demonstrated in Table 4.

Table 4. Scale of omni-channel consumer experience

Construct (reference)	Item	Label
Connectivity (Shi et al., 2020)	Connect1	I can check the inventory status of the products I am interested in via my mobile phone.
	Connect2	I can check offline inventory through different online channels.
	Connect3	My reading of contents is continuous and connected across different channels
	Connect4	My member accounts across different channels are connected.
	Connect5*	My interactions with customer service across different channels are interconnected.

Integration (Shi et al., 2020; Li et al., 2018)	Integr1	My interactions across different channels are integrated and taken into account for each purchase.
	Integr2	Descriptions of products are integrated across different channels.
	Integr3	The launches of new products and promotions are synchronous across different channels.
	Integr4	Promotion activities are aligned across different channels.
Transparency (Lee et al., 2019; Shen et al., 2018)	Transp1	I can find out about additional benefits for purchase from a certain channel.
	Transp2	I am aware of the existence of all available channels and am familiar with their attributes.
	Transp3	I know how to utilize different channels to meet my consumption needs.
Consistency (Shi et al., 2020; Beck & Rygl, 2015)	Consist1	Trademarks, brand names, and slogans are consistent across different channels.
	Consist2	I receive consistent promotions through different channels.
	Consist3	The quality of products is consistent across different channels.
	Consist4	The service feelings are consistent across different channels.
	Consist5	The service performance is consistent across different channels.
Flexibility (Shen et al., 2018; Joseph, 2015)	Flex1	I can choose alternative channels for a given service.
	Flex2	I can order online and make payment and pick up offline.
	Flex3	The after-sales service is available across different channels.
	Flex4	I can utilize many functions for different channels in one app/website.
	Flex5*	I can accomplish specific tasks through preferred channels.
Personalization (Shi et al., 2020; Berg & Tornblad, 2017)	Pers1	Shopping recommendations are offered according to purchase records and personal information across different channels.
	Pers2	Shopping discounts and privileges are offered based on purchase records and personal information across different channels.

	Pers3	Online browsing pages are customized based on purchase records and personal information across different channels.
	Pers4	I feel that the company make me purchase recommendations that I might like.
	Pers5	Client-specific rewards or member points are offered based on my purchase history across different channels.
Insecurity (Pillai et al., 2020; Berg & Tornblad, 2017)	Ins1	Someone will misuse the data which is provided by me while shopping.
	Ins2	For grocery shopping, the physical presence in brick-mortar stores is imperative.
	Ins3	I don't feel secure shopping across different channels.

Note: *Items deleted after reliability and validity check

Then, the items were translated into the Russian language, and a qualitative validity check was conducted in order to ensure clarity and accuracy of the items. Six persons who had omni-channel experience in Russian food retail were invited to take the survey and share their feedback. Based on it, formulations of several items were changed, and duplicated ones were deleted. Secondly, respondents were asked to sort items among the constructs after a short description of each factor. Each participant selected one dimension to assign an item to, which allowed calculating the proportion of substantive agreement (PSA). The threshold of the content validity was met for all remained items, exceeding 60% (Podsakoff et al., 2003). Finally, comments for a number of items were added to the questionnaire to ensure a better understanding of the questions for the survey's respondents.

The measurement items for the TAM model constructs (perceived usefulness, perceived ease of use, and purchase intention), as well as the mediator, perceived enjoyment, were derived from the existing literature. In the first-order constructs, there are 13 items in total (Table 5). In the result of measurement items' collection, we obtained the questionnaire with translated relevant questions that satisfy the first step of validity analysis. The full translated questionnaire is presented in appendix 1.

Table 5. Scale of Perceived Enjoyment and the TAM constructs

Construct (reference)	Item	Label
Perceived Enjoyment (Pillai et al., 2020)	Penj1	I enjoy shopping across different channels.
	Penj2	To me, shopping across different channels would be an adventure.
	Penj3	To me, shopping across different channels would be a thrill.
Perceived Usefulness (Berg & Tornblad, 2017)	Usf1	Being able to use multiple channels throughout the purchase process allows me to purchase quickly.
	Usf2	Being able to use multiple channels throughout the purchase process is useful to me.
	Usf3	Being able to use multiple channels throughout the purchase process makes my life easier.
Perceived Ease of Use (Berg & Tornblad, 2017)	Peou1	I find the different online channels easy to use.
	Peou2	Learning how to use the different online channels is easy for me.
	Peou3	My interaction with the different online channels is clear and understandable.
Purchase Intention (Shi et al., 2020)	Intent1	I will use omnichannel shopping in the near future.
	Intent2	I would like to repeat my experience in this kind of store.
	Intent3	I intend to use omnichannel shopping frequently in the future.
	Intent4	I would recommend omnichannel shopping to people around me.

2.3 Primary data collection

The main data source for this research is primary data collected through a web-based survey, an empirical tool frequently used in business studies within the deductive research approach (Bryman & Bell, 2011; Saunders et al., 2012). Surveys allow obtaining quantitative data that becomes a base for further statistical analysis (Saunders et al., 2012). In addition, this data collection method provides an opportunity to build generalizability and enable replicability (Teo & Benbasat, 2003; Fink, 2009), both of which are at the very core of the research.

The survey has two stages; first, it has been piloted to ensure that the questions, scales, and instructions are clear, as well as to maximize the response rate and to evaluate the reliability of the obtained data. In total, we collected 60 valid responses during the pilot stage. Making a validity check, we analyzed the reliability of the scale by assessing the Cronbach's alpha values of the collected sample. Since all constructs met the threshold of 0.7, the main stage of the survey distribution has got in the process. All elements in the survey are measured on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree).

Both pilot and the main stages of the study will collect the data using a third-party online survey service Anketolog (<https://anketolog.ru>), which is a particularly useful platform for gathering self-reported data since it provides an access to thousands of registered respondents from a wide range of backgrounds and experience and allows to filter them. The survey has been distributed to people who had relevant experience purchasing food products on the Internet. Additionally, the definition and examples of the omni-channel were provided to the respondents before they started taking the survey to ensure they had had a relevant experience. In total, we collected 220 responses with an average response rate for two stages of 85%. To protect the data from irresponsible participants, we excluded the answers from the respondents for whom it took less than 4.5 minutes to complete the survey, so we end up with 191 responses.

2.4 Reliability and validity

We started our work with the collected data by exploring it. Following the research methodology (Pallant, 2013), the data was checked on the presence of errors and missing values. None of those was revealed and the data set of 191 responses contained 100% valid cases. Since the set consists of measures of a seven-point Likert scale, normality of distribution was not a great concern. According to Jamieson (2004), the data collected through such a scale is often skewed or polarized.

We consistently evaluated first- and second-order measurement models for convergent validity, discriminant validity, and reliability. The first was assessed utilizing the following criteria: all factor loadings (FL) should exceed 0.7 (Chin, 1998), composite reliability (CR) should be greater than 0.7 (Chin, 1998), and average variance extracted (AVE) should be above

0.5 (Fornell & Larcker, 1981). As presented in Tables 5 and 6, factor loadings of all items are above 0.7, the CRs vary from 0.71 to 0.90, and the AVEs lie between the values of from 0.50 to 0.71.

The analysis of empirical data has been carried out in several stages using the SPSS software package. At the first stage, we conducted reliability and validity analysis for each first-order latent construct. Table 6 summarizes reliability indicators of the first-order constructs utilized in the final model; Cronbach's alpha values of all constructs exceeded the threshold of 0.7 (Nunnally, 1978). Thus, the variables showed good internal consistency, indicating adequate reliability.

Table 6. Convergent validity and reliability analysis of the second-order constructs

Construct / item	FL (> 0.5)	Cronbach's Alpha (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Connectivity		0.720	0.73	0.57
Connect1	0.797			
Connect2	0.711			
Connect3*				
Connect4*				
Transparency		0.790	0.74	0.50
Transp1	0.849			
Transp2	0.605			
Transp3	0.635			
Flexibility		0.712	0.71	0.55
Flex1	0.727			
Flex2	0.762			
Flex3*				
Flex4*				
Personalization		0.807	0.82	0.60
Pers1	0.794			
Pers2	0.712			
Pers3*				
Pers4	0.805			

Pers5*			
Insecurity		0.736	0.74
Ins1	0.783		
Ins2*			
Ins3	0.744		

Note: *Items deleted to meet the model fit thresholds

Then, we build a measurement model for the first-order constructs of connectivity (Connect), integration (Integr), transparency (Transp), flexibility (Flex), personalization (Pers), and insecurity (Ins) to evaluate the validity of the proposed dimensions and their affiliation to the first-order constructs through confirmatory factor analysis (CFA). In order to meet key thresholds demonstrating a good model fit as well as to satisfy requirements of the discriminant validity analysis, it was decided to drop two initially suggested constructs of integration and consistency. The relevant items, having factor loadings of less than 0.5, affected the AVE score of the constructs and poor discriminant validity of the whole model. This decision is addressed in the next sections of limitations of the research as well as theoretical implications.

For the remaining five factors, it was decided to drop such items as Connect2, Connect4, Flex3, Flex4, Pers5, and Ins2. Deleting those variables allowed to improve goodness of fit (Table 7, Model 1) and meet the requirements of the validity analysis (Table 8). Respectfully, a satisfactory two-factor solution has been achieved, and construct validity was reached for all five remaining constructs.

Table 7. Model fit of measurement models

Model	X²	df	X² / df	p-value	GFI	TLI	CFI	RMSEA (p-close)
			< 2	< .05	> .90	>.90	> .90	< .08 (> .05)
Model 1	77.03	43	1.79	.001	.938	.935	.958	.065 (.147)
Model 1.1	23.68	17	1.39	.128	.970	.976	.985	.045 (.528)
Model 1.2	19.40	11	1.76	.054	.960	.932	.964	.077 (.194)
Model 2.4	13.29	8	1.66	.102	.985	.963	.992	.059 (.343)

The second stage of confirmatory factor analysis was conducted in order to evaluate construct validity between the first-order constructs of perceived ease of use (PEOU), perceived usefulness (USFL), perceived enjoyment (PEJ), and purchase intention (INTENT) in the same way as previous analysis. After running an initial CFA with all 13 items representing the first-order construct, the item Pej2 was deleted. Although it had an acceptable factor loading, there was a high modification index between it and Pej1. Deleting it and running the analysis with 12 remaining items, the final solution met thresholds of reliability analysis (Table 9), indicating adequate validity of the conceptual model.

Table 8. Discriminant validity analysis

Construct	1	2	3	4	5
Connectivity	0.75				
Transparency	0.70	0.71			
Insecurity	-0.32	-0.31	0.76		
Flexibility	0.51	0.71	-0.36	0.74	
Personalization	0.49	0.64	-0.11	0.45	0.77

Note: Square root of AVE for each construct is presented in diagonals.

Table 9. Convergent validity and reliability analysis of the first-order constructs

Construct / item	FL (> 0.5)	Cronbach's Alpha (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Perceived Ease of Use		0.876	0.88	0.71
Peou1	0.783			
Peou2	0.860			
Peou3	0.875			
Perceived Usefulness		0.888	0.87	0.69
Usfl1	0.815			
Usfl2	0.810			
Usfl3	0.865			
Perceived Enjoyment		0.766	0.74	0.59
Pej1	0.877			
Pej2*				

Pej3	0.637			
Purchase Intention		0.887	0.90	0.69
Intent1	0.752			
Intent2	0.929			
Intent3	0.886			
Intent4	0.727			

Note: *Items deleted to meet the model fit thresholds

2.5 Limitations of the data collection

Since data collection for all variables proceeded in the self-reported format from a single source, a concern of common method bias (CMB) might be raised for the work (Podsakoff & Organ, 1986). We undertook several actions to reduce this potential issue (Podsakoff et al., 2003). Firstly, during the questionnaire design, the questions, representing mismeasurement items, were placed on different pages (sections) of the survey so that it would be harder for respondents to find direct connections between the measurement items. Secondly, we provided respondents who were taking the survey with anonymity and confidentiality to minimize a potential problem of social desirability. Thirdly, Harman's single factor test was utilized to check out the severity of CMB for the collected data (Podsakoff et al., 2003; Podsakoff & Organ, 1986). More than one factor was revealed during the principal factor analysis, and no factor accounted for the majority of the variance. Respectfully, common method bias is unlikely to be a serious concern for this work.

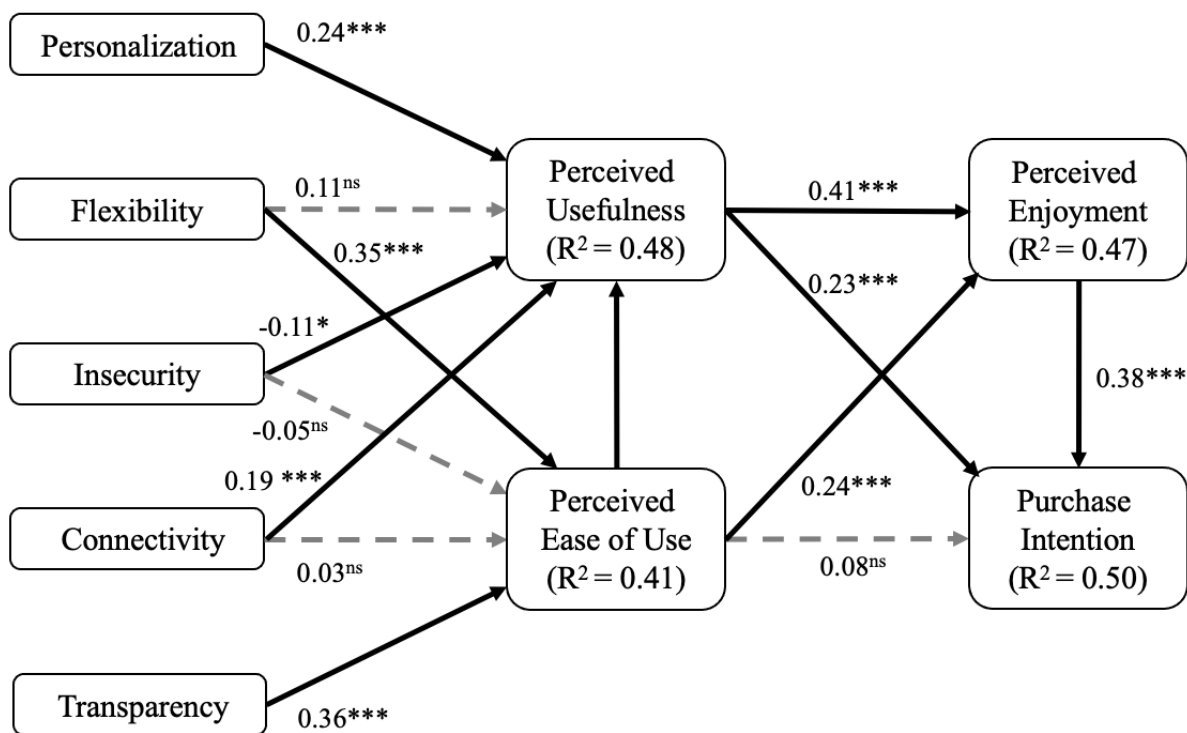
Monetary rewards for submitted answers partially ensured the responsibility of respondents. In addition, duplicate filling of the questionnaire was excluded by checking the respondent's IP address and comparing it with those from the already enrolled participants. Finally, the respondents' responsibility was checked for the time that it took to complete the survey. With an average time of 7.5 minutes, we excluded all questionnaires completed in less than 4 minutes because it is unlikely that during this time participants could thoughtfully read all the questions and provide reliable answers.

Chapter 3. Results and discussion

This section is dedicated to the result of the empirical part of the study. The hypotheses raised in Chapter 1 have been tested through assessment of the direct effects and the mediation effects, and the findings are summarized in the research model. Based on it, the effects of different omni-channel dimensions on consumers' purchase intention are described. Then, we provide theoretical and practical implications of the results obtained through the qualitative analysis and address the research limitations.

3.1 Structural model

Figure 3. Results of the model's path analysis



Note: \longrightarrow Supported hypotheses \dashrightarrow Rejected hypotheses *p < 0.5, **p < 0.01, ***p < 0.001

With an adequate measurement model, the hypotheses stated based on the literature review in Chapter 1 were tested using statistical software IBM SPSS AMOS 23. Figure 3 represents the results of the structural path analysis. The model explained 41%, 48%, 47%, and 50% of the variances in perceived ease of use, perceived usefulness, perceived enjoyment, and

omni-channel purchase intention, respectively (Table 10). As hypothesized, the analysis's results revealed that all variables demonstrating omni-channel experience dimensions were positively associated with second-order constructs of perceived usefulness and ease of use, associated significantly with one of them. Table 11 summarizes estimates as well as p-values; personalization and connectivity are positively associated with perceived usefulness ($\beta = 0.24$, $p < 0.001$; $\beta = 0.19$, $p = 0.001$). Additionally, perceived usefulness is negatively affected by the insecurity variable ($\beta = -0.11$, $p < 0.05$). As for perceived ease of use, two variables, flexibility and transparency, were positively associated with the second-order variable ($\beta = 0.35$, $p < 0.001$; $\beta = 0.36$, $p < 0.001$). Respectfully, raised alternative hypotheses regarding the effects of insecurity and connectivity on perceived ease of use and the effect of flexibility on perceived usefulness have been rejected due to insignificant impacts ($\beta = -0.05$, $p > 0.1$; $\beta = 0.03$, $p > 0.1$; $\beta = 0.11$, $p < 0.1$ respectfully).

The results also revealed a significant impact of most of the first-order variables on the dependent one, omni-channel purchase intention. Perceived usefulness and ease of use are positively associated with the mediator, perceived enjoyment ($\beta = 0.41$, $p < 0.001$; $\beta = 0.24$, $p < 0.001$). Perceived enjoyment, in turn, has significant impact on purchase intention ($\beta = 0.38$, $p < 0.001$). As for the theoretical framework constructs, perceived usefulness is positively associated with the dependent variable ($\beta = 0.23$, $p < 0.001$). In contrast, perceived ease of use does not impact purchase intention of omnichannel shopping ($\beta = 0.08$, $p > 0.1$).

Table 10. Percentage Variance Explained (Squared Multiple Correlation)

Construct	R²
Perceived ease of use	0.413
Perceived usefulness	0.482
Perceived enjoyment	0.466
Purchase intention	0.498

Table 11. Estimates of the path analysis

Path	Coefficients	p-value	Hypothesis
PEOU – INTENT	0.080	0.224	H1
USFL – INTENT	0.243	0.001	H2
CONNECT – PEOU	0.031	0.634	H5a

CONNECT – USFL	0.185	0.001	H5b
TRANSP – PEOU	0.361	<0.001	H4
INS – PEOU	-0.052	0.368	H5a
INS – USFL	-0.109	0.046	H5b
FLEX – PEOU	0.351	<0.001	H6a
FLEX – USFL	0.111	0.086	H6b
PERS – USFL	0.242	<0.001	H7
PEJ – INTENT	0.383	<0.001	-
PEOU – PEJ	0.239	<0.001	-
USFL – PEJ	0.409	<0.001	-

Then, the results of empirical work help us to evaluate the role of perceived enjoyment as a mediator in the conceptual model. Using bootstrapping in AMOS, we obtained estimates and p-values for direct, indirect, and total effects of the first-order variables (Table 12). The results revealed that perceived enjoyment mediates the relationships between the theoretical framework's variables and the dependent one (significant indirect effects, $p < 0.010$), allowing to make conclusions about the remaining hypotheses.

Table 12. Direct, Indirect, and Total Effects (Bootstrapping)

Path	Effect type	St. effects	p-value	Hypothesis
PEOU – PEJ	Direct	0.239	<0.001	
	Indirect	0.144	0.010	-
	Total	0.383	0.010	
USFL – PEJ	Direct	0.409	<0.001	
	Indirect	-	-	-
	Total	0.409	<0.001	
PEOU – INTENT	Direct	0.080	0.224	
	Indirect	0.232	0.010	H3a
	Total	0.312	0.010	
USFL – INTENT	Direct	0.243	0.001	
	Indirect	0.157	0.010	H3b
	Total	0.400	0.010	

It is necessary to notice that in order to achieve an acceptable model fit of the measurement model and proceed with path analysis, we built additional paths inside it. As it has been mentioned in Chapter 1, the theoretical concept's constructs of perceived usefulness and ease of use are controversially mutually exclusive, in accordance with which alternative hypotheses have been raised. During the analysis, we built an additional path between them, which resulted in a significant effect of perceived ease of use on usefulness ($\beta = 0.427$, $p < 0.001$). The process of the model improvement can be seen in appendix 2.

3.2 Discussion of the results

The results of the empirical work allow us to confirm most of our hypotheses regarding omni-channel factors' effects. The five factors of omnichannel experience left in the model (connectivity, transparency, insecurity, flexibility, and personalization) are accounting for 48% and 41%, respectively, of the variances in perceived usefulness and perceived ease of use in the context of omni-channel shopping. The results show that the enhancement of demanding consumer experience in the omni-channel environment allows to better shape clients' perceptions toward omni-channel shopping and improve their purchase intention by increasing perceived usefulness and perceived ease of use. The research findings reveal that personalization and connectivity of omni-channel experience are positively related to perceived usefulness, and insecurity in the experience is associated to decreasing in perceived usefulness of omni-channel by consumers. Further, flexibility and transparency positively impact consumer's perceived ease of use.

Taken together, the results of the analysis supported most of the hypotheses. The exception includes H1, H6b, H7a, and H8a. Table 13 below summarizes conclusions with all hypotheses based on their estimates. Then, we looked at the roles of each variable and compared the obtained results with those of the previous studies, provided possible explanations for the obtained results.

The results of the analysis suggest that personalization and connectivity are positively related to perceived usefulness. Together with perceived ease of use, personalization and connectivity explain 48% of variances in the perceived usefulness. In turn, perceived usefulness is positively related to consumers' purchase intention in the omni-channel settings. These findings, regarding both the roles of omni-channel dimensions and the TAM construct,

find confirmation in some existing studies dedicated to the phenomenon conceptualization (e.g., Shi et al., 2020; Berg & Tornblad, 2017).

Table 13. Hypotheses overview

Hypothesis	Conclusion
H1 Perceived Ease of Use positively affects omni-channel Purchase Intention	Rejected
H2 Perceived Usefulness positively affects omni-channel Purchase Intention	Supported
H3a Perceived enjoyment mediates the relationship between perceived ease of use and purchase intention	Supported
H3b Perceived enjoyment mediates the relationship between perceived usefulness and purchase intention	Supported
H4 Integration positively affects Perceived Usefulness	N/A
H5 Personalization positively affects Perceived Usefulness	Supported
H6a Flexibility positively affects Perceived Ease of Use	Supported
H6b Flexibility positively affects Perceived Usefulness	Rejected
H7a Insecurity negatively affects Perceived Ease of Use	Rejected
H7b Insecurity negatively affects Perceived Usefulness	Supported
H8a Connectivity positively affects Perceived Ease of Use	Rejected
H8b Connectivity positively affects Perceived Usefulness	Supported
H9 Transparency positively affects Perceived Ease of Use	Supported
H10 Consistency positively affects Perceived Ease of Use	N/A

Although insecurity has the least strong effect among other factors in the model, the results confirmed conclusions from some of the existing studies (e.g., Pillai et al., 2020; Berg & Tornblad, 2017; Frassetto et al., 2015) that consumers see the importance in providing security during their shopping process. However, these results contradict the opposite findings within the omni-channel context; for instance, Juaneda-Ayensa et al. (2016) found no significant impact of security (opposite variable, having a positive effect) on omni-channel purchase intention. Such variances in findings could be explained by the differences in the researched industries as well as by the differences in levels of development of digital environment within the studies countries.

As for flexibility and transparency, two factors increasing perceived ease of use, we can find indirect connections between them in the literature. There are indications in previous studies that a higher level of flexibility may increase the uncertainty of consumers (e.g.,

Merschmann & Thonemann, 2011). Thus, it is possible that when omni-channel retailers increase the extent to which consumers are provided with an opportunity for continuous migration across different channels, consumers feel those migrating tasks to contain more uncertainty affected by possible system errors complicating the transition. Transparency, being the extent to which consumers are aware of the available channels as well as the differences between such service attributes across channels, also affects uncertainty and perceived fluency (Shen, 2018), and a higher level of transparency is associated with higher perceived fluency and lower uncertainty. According to the obtained results, both factors have a positive impact on perceived ease of use and account for 41% of the first-level variable. Further, the findings demonstrate that customers' perceived ease of use does not directly predict omni-channel shopping intention, although it has a significant positive total effect on the dependent variable due to mediation of perceived enjoyment. The modified version of the TAM demonstrated better goodness of fit, and the issue of the TAM model's applicability in the omni-channel context is addressed in the limitations of the research.

As for the mediator role in the model, perceived enjoyment positively mediates the relationships between the TAM model constructs and behavioral purchase intention, as consumers perceive fun and enjoyment during their omni-channel experience, which confirms the findings in the online shopping context (Rese et al., 2017). Perceived enjoyment also directly influences consumers' purchase intention during omni-channel shopping as most people can diversify their experience. Thus, this confirms the results of some existing studies dedicated to the roles of more specific aspects, that perceived enjoyment is positively associated with behavioral intention to shop in the omni-channel environment (Kim, 2018; El Shamy and Hassanein, 2017).

3.3 Theoretical implications

There is an emphasis in recent studies as well as in practitioners' reports that it is important to understand the aspects of the omni-channel business from consumers' perspectives and to explore the omni-channel shopping experience, which is getting an increasingly complicated subject of study (e.g., Shi et al., 2020; Cheung et al., 2018; Shen et al., 2018). The presented work contributes to this emerging branch of studies in three following ways.

Firstly, this research identified the key factors of the omni-channel consumer experience, which are the subject of this study, based on an extensive literature review, serving the need for rigorous analysis in order to explore the current extent of the phenomenon's conceptualization. Then, bringing those factors altogether, we have developed and validated context-specific measurement items for holistic measuring the omni-channel experience's dimensions, partially based on the existing literature, adopting them, and adding new ones (such as transparency). Our research gap formulated based on the review of existing literature on the topic suggested that many existing studies had explored the omni-channel experience in a piecemeal manner, focusing on the industry- and retailer-type-specific factors and not fully capturing the underlying antecedents of the omni-channel. Thus, we suggest the conceptualized representation and dimensions of the omni-channel experience be adopted for further researches in the field since they provide a more comprehensive view compared to prior studies.

Secondly, although consumer experience has been investigated for a long time in the areas of marketing and information systems, this research provides context-specific insights into consumer omni-channel experience. Both academia's and recent practical studies presented the shreds of evidence that consumers are increasingly interested in the integrated shopping experience that provides opportunities for a diverse choice of available channels, seamless transition among them, and opportunity to build unique journey for clients based on their personal preferences (e.g., McKinsey, 2021; Pillai et al., 2020; Shi et al., 2020). However, many of those existing studies on consumer experience have been aimed at traditional or most popular channels' strategies, paying little attention to the experimental nature of omni-channel marketing. This work contributes to the conceptualization of the omni-channel phenomenon, confirming the findings of the first attempts in this research stream and adds new context-specific attributes improving consumers' experience, thus, extending the understanding of the object of the study in a dynamic and technology-intensive marketing environment.

Finally, the presented study contributes to the existing literature by the adoption of the TAM model as second-order constructs in order to explore how the omni-channel experience shapes consumers' perception of provided omni-channel service by retailers and how it affects their behavioral purchase intention. We have tried to suggest a holistic view with the conceptual model, relying on rational perception of usefulness and ease of use when making a decision of a technology's adoption by consumers, particularly the behavioral intention of making a

purchase. Given that omni-channel is an innovative service that strongly depends on technologies, this study had premises to expand the theoretical understanding of how the omni-channel factors affect consumers' purchase intention through perceived usefulness and ease of use. However, based on the results of the analysis, we can declare a bad fit of this theoretical framework at least within this study since perceived ease use demonstrated an insignificant direct effect on the dependent variable. The modified version of the model with perceived enjoyment included as a mediator showed better goodness of fit, which implies that even in such traditional areas as grocery retail, consumers strive for entertaining experience during shopping and appreciate the diversity of touchpoints added by technologies.

3.4 Managerial implications

For practitioners, this research can suggest insights on the essential principles for developing a successful omni-channel strategy that would provide their consumers with a joyful, integrated, and seamless shopping experience. Since both constructs of the theoretical framework have a significant total effect on the dependent variable of consumers' purchase intention, it is feasible to influence perceived usefulness and perceived ease of use through the relevant omni-channel experience dimensions.

Firstly, in order to increase consumers' omni-channel shopping intention, retailers should pay attention to increasing perceived usefulness of omni-channel shopping for their clients. To enhance usefulness of provided omni-channel experience, in accordance with this study, retailers should work on connectivity, personalization, and insecurity across the channels.

Accordingly, retailers should connect the products, services, and content and make them consistent across all available channels to make sure that their clients can get the maximum value of the shopping process depending on their individual needs. To achieve better connectivity and personalization, retailers should optimize rather than simply merge different channels' set-ups in order to provide this greater value to their clients. Particularly, to achieve a seamless consumer experience, retailers should optimize their chains, connecting products, services, communications, and so forth. This recommendation matches those of some previous studies (Shi et al., 2020; Cao, 2014), and it has been associated with optimization of functional both internal and external activities by retailers; such activities usually mean significant

changes for a company at strategic and organizational levels. Such optimization of a firm's marketing processes, as well as physical and digital infrastructures, enables retailers to utilize an omni-channel strategy to better facilitate connectivity across their channels. For instance, to avoid cannibalization of sales by online and physical stores, reduce costs of physical infrastructure, and maximize synergies across the two channels, retailers may optimize their network of stores. Then, to forward personalization, retailers developing an omni-channel strategy should adopt emerging technologies in their digital infrastructure. To facilitate personalization, companies may utilize artificial intelligence, the tool of current interest, to better predict and match consumer preferences with recommendations and promotions within omni-channel experience based on historical data.

Additionally, according to the results of the study, insecurity negatively predicts perceived usefulness of omni-channel shopping. Since omni-channel experience is comparatively new for consumers, they may perceive risks associated with performance, personal information, and finances as important factors affecting their decision regarding utilization of the omni-channel. Given that the omni-channel is strongly based on technologies, it may carry uncertainty for clients about their shopping process. Therefore, to facilitate technology acceptance and reduce perceived insecurity, retailers should focus on creating such a shopping process that would integrate a sense of security across it in order to drive sales, since consumers' personal information is needed to be shared across a firm's channels to enable omni-channel experience.

Secondly, retailers can increase purchase intention by positively affecting consumers' perceived ease of use through facilitating flexibility and transparency. Therefore, developing an omni-channel strategy, retailers should consider perceived ease of use as a dynamic construct. Companies can expand their channels and implement new tools for omni-channel shopping, increasing the number of possible scenarios of interaction for consumers, facilitating by this flexibility. In balance with it, retailers should pay attention to clients' shopping preferred patterns of interaction based on previous experience and expectations, which are changing along with the technology development (Juaneda-Ayensa et al., 2016). For example, implementing such topical instruments as AR, VR, and sensory devices omni-channel experience, retailers should be sure that consumers have relevant experience and shopping habits for these technologies. Additionally, facilitating transparency, retailers may educate their consumers and provide them with information regarding all available channels, particular

attributes, and benefits associated with each of them, and suggest possible transitions among these channels. To keep touch on the consumer preferences and habits within different channels and transitions, retailers may adopt timely prompts and feedback tools across channels to improve perceived ease of use by reducing possible hesitations of clients.

3.5 Limitations of the study and possible future research

Firstly, the goal of the research is to identify context-specific factors of omni-channel experience. Based on an extensive literature review, we formulated a list of the most common such factors to further test their effect in the model. However, after conducting validity and reliability analysis for the obtained data, we had to exclude such factors as integration and consistency from the model to meet the methodological requirements and satisfy all statistical thresholds. We could face this issue due to several following reasons: (1) there were made errors in measurement items developed for these constructs, (2) the differences in the collected data may be traced to the differences in the studied industries and geographical markets, and (3) it is hard for consumers to these factors since these omni-channel dimensions are not significant predictors of behavioral intention in the stream of consumer-centered studies. The latter reason unlikely appears to be the actual cause since a number of previous studies have demonstrated acceptable validity indicators and claimed significant effect of these factors in the context of omnichannel (Shi et al., 2020). Therefore, we suggest including integration and consistency as the omni-channel dimensions in further studies to evaluate their roles and extend the tested context-specific factors.

Secondly, we adopted the TAM model as the theoretical framework, and perceived usefulness and ease of use acted as first-order constructs in the suggested conceptual model. The results of the analysis further did not confirm that both constructs were significant determinants of consumers' behavioral intention to adopt omni-channel shopping. Although some previous researches had demonstrated a significant impact of perceived ease of use on shopping intention (e.g., Juaneda-Ayensa et al., 2016; Venkatesh et al., 2012), within this study, the relationship was not found to be significant. These results are consistent with those of some other works in the omni-channel context, where the TAM model's constructs were tested in first-order models (Berg & Tornblad, 2017). Such contrasting results can be explained by the different expectations of effort required to utilize the various channels and transit among them during the shopping process. Since perceived ease of use is the degree of effort consumers

believe it takes to use a certain system or channel (Davis, 1989), it may be influenced by other preceding factors within the context as well as the respondent's personal characteristics. Further, we can state a better model fit of the modified version of the TAM suggested by Chesney (2006), which we would recommend adopting in further consumer-oriented studies in the field due to its higher statistical accuracy in the omni-channel context and general better correspondence to the modern world's realities.

Finally, this study can be extended within further researches by adding new, more specific factors of omni-channel experience and particular touchpoints of omni-channel consumer journey as well as by accounting for different types of retailers. This study is limited in providing managerial implications by essential principles with examples of particular initiatives from the existing literature. Therefore, we would suggest further explore how more common factors highlighted in this study are connected to more specific ones and link them with particular technologies associated with touchpoints of an omni-channel consumer journey. For example, what are the relationships between personalization and customized products and services across channels, which can be offered by vertically integrated companies that produce and sell goods directly to consumers? Similarly, do virtual and augmented reality, two other trending tools that can be introduced by some retailers, have an effect on personalization or flexibility, and how do they impact perceived enjoyment? Along with the development of advanced technologies, retailers are likely to make their channels and scenarios of possible interactions with them more diverse, and a comprehensive conceptual model for omni-channel experience should be at the base of it.

Conclusion

Consumer behavior in the omni-channel context is an emerging topic in both academic and practical research fields. In this study, we have made an attempt to conceptualize the consumers' omni-channel experience and evaluate how its context-specific predictors affect clients' acceptance of the technology and impact their purchase intention in omni-channel shopping.

Firstly, after an extensive literature review, we collected a comprehensive list of the most common context-specific factors associated with different dimensions of the omni-channel experience. We suggested such factors as integration, personalization, flexibility, insecurity, connectivity, transparency, and consistency. In the conceptual model, we hypothesized their effects on the second-order constructs of the modified TAM theoretical framework with perceived enjoyment added, which, in turn, hypothetically impact consumers' purchase intention.

Secondly, we developed measurements for the obtained constructs in accordance with the previous studies. To come up with a more generalized knowledge, we collected primary data within the measurements for a new industry (grocery) and geographical area (Russia), contributing to the existing studies in the field. The data has been collected through an online survey from 191 valid respondents of the pre-paid base. Then, we conducted reliability and validity analysis of the obtained items and constructs; due to its results, we had to exclude two constructs (integration and consistency) from the model, which is addressed in the limitations of the research as well as further possible researches.

Finally, we conducted a structural equation modeling analysis of the collected data using SPSS AMOS software. After deleting problematic factors, we have achieved an acceptable model fit of the conceptual model and evaluated the hypothesized effects of the factors. The results demonstrated significant positive effects of personalization and connectivity on perceived ease usefulness, a significant negative effect of insecurity on perceived usefulness, and significant positive effects of flexibility and transparency on perceived ease of use. As for the second-order constructs, both perceived usefulness and perceived ease of use showed a significant positive total effect on consumers' purchase intention with a positive mediation of perceived enjoyment.

Therefore, our findings confirmed most of the hypotheses and, in accordance with the research goal, allowed us to highlight the main predictors of omni-channel consumer's experience that significantly affect behavioral purchase intention in omni-channel shopping. Based on the obtained results, we provided theoretical implications for future studies aimed at the conceptualization of the omni-channel phenomenon as well as essential insights on developing omni-channel marketing strategies for practitioners.

List of sources

1. Adhi P., Hazan E., Kohli S., & Robinson K. (2021). Omnichannel shopping in 2030. McKinsey insights, [online]. Available at: <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/omnichannel-shopping-in-2030> Accessed: (17.05.2021).
2. Ailawadi K. & Farris P. (2017). Managing multi- and omni-Channel distribution: metrics and Research directions. *Journal of Retailing*, 93 (1), 120-135.
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50 (2), 179-211.
4. Ali H., Ali T., Matar Z., & Jawad F. (2015). Citizens' acceptance and readiness towards adopting E-participation tools in kingdom of Bahrain. *Int. J. Infonomics* 8, 1029–1036.
5. Baier D. & Rese A. (2020). How to increase multichannel shopping satisfaction? An adapted Kano based stage-gate approach to select new technologies. *Journal of retailing and consumer service*, 56.
6. Barwitz N. & Maas P. (2018). Understanding the Omnichannel Customer Journey: Determinants of Interaction Choice. *Journal of Interactive Marketing*, 43, 116–133.
7. Beck, N., & Rygl, D. (2015). Categorization of multiple channel retailing in multi-, cross-, and omni-channel retailing for retailers and retailing. *Journal of Retailing and Consumer Services*, 27, 170–178.
8. Bell, D. R., Gallino, S., & Moreno, A. (2014). How to win in an omnichannel world. *MIT Sloan Management Review*, 56(1), 45.
9. Berg, U. & Tornblad, J. (2017). Decorating omnichannel: shedding light on the consumer Investigation perspective on omnichannel behavior master's thesis. Uppsala University
10. Berman B. & Thelen S. (2018). Planning and implementing an effective omnichannel marketing program. *International Journal of Retail & Distribution Management*, DOI: 10.1108/IJRDM-08-2016-0131.
11. Bhalla R. (2014). The omni-channel customer experience: Driving engagement through digitization. *Journal of Digital and Social Media Marketing*, 1, 365–372.

12. Bianchi R., Cermak M., & Dusek O. (2016). More than digital plus traditional: A truly omnichannel customer experience. McKinsey insights, [online]. Available at: https://www.mckinsey.com/business-functions/operations/our-insights/more-than-digital-plus-traditional-a-truly-omnichannel-customer?utm_medium=referral&utm_source=blog.calltouch.ru&utm_campaign=Что%20такое%20и%20как%20работает%20omni-channel Accessed: (10.01.2021).
13. Bitner M., Ostrom A., & Meuter, M. (2002) Implementing successful self-service technologies, *Academy of Management Executive*, 16 (4), 96–108.
14. Briel F. (2018). The future of omni-channel retail: a four-stage Delphi study. *Technology forecasting, and social change*, 132, 217-229.
15. Brill T.M. (2018). Siri, Alexa, and Other Digital Assistants: A Study of Customer Satisfaction with Artificial Intelligence Applications.
16. Bryman, A., & Bell, E. (2011). *Business research methods*, Oxford University Press, USA
17. Cao L. & Li L. (2018). Determinants of Retailers' Cross-channel Integration: An Innovation Diffusion Perspective on Omni-channel Retailing. *Journal of interactive marketing*, 44, 1-16.
18. Cao, L. (2014). Business model transformation in moving to a cross-channel retail strategy: A case study. *International Journal of Electronic Commerce*, 18, 69–96.
19. Chatterjee P. & Kumar A. (2017). Consumer willingness to pay across retail channels. *Journal of retail and consumer service*, 34, 264-270.
20. Chen, Y. & Cheung, (2018). Omnichannel business research: Opportunities and challenges. *Decision Support Systems*, 109, 1–4.
21. Chesney T. (2006). An acceptance model for useful and fun information systems. *An interdisciplinary journal of humans in ICT environments*, 2 (2), 225-235.
22. Chin, W. W. (1998). *The partial least squares approach for structural equation modeling*. Mahwah, NJ: Lawrence Erlbaum Associates.
23. Cook G. (2014). Customer experience in the omni-channel world and the challenges and opportunities this presents. *Journal of Direct Data and Digital Marketing Practice*, 15, 262–266.

24. Davis F.D., Bagozzi R.P., & Warshaw P.R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *J. Appl. Soc. Psychol.* 22, 1111–1132.
25. Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13 (3), 319-339.
26. Dwivedi, Y., Kumar, V., & Kumar, U. (2017). Content design of advertisement for consumer exposure: Mobile marketing through short messaging service. *International Journal of Information Management*, 37, 257–268.
27. El Shamy, N. & Hassanein, K., (2017). A meta-analysis of enjoyment effect on technology acceptance: the moderating role of technology conventionality. *Proc. 50th Hawaii Int. Conf. Syst. Sci.*, 4139–4147.
28. Fink, A. (2009). *How to Conduct Surveys* (4th ed), Thousand Oaks, CA: Sage.
29. Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
30. Frasquet M., Mollá A., & Ruiz, E. (2015). Identifying patterns in channel usage across the search, purchase, and post-sales stages of shopping. *Electron. Commer. Res. Appl.* 14, 654–665.
31. Frasquet, M., Mollá, A., & Ruiz, E. (2015). Identifying patterns in channel usage across the search, purchase, and post-sales stages of shopping, *Electron. Commer. Res. Appl.* 14, 654–665.
32. Google Analytics Help (2021) [online]. Available at: <https://support.google.com/analytics/answer/1662518?hl=en> (Accessed: 01.06.2021).
33. Hoehle, H. & Venkatesh, V. (2015). Mobile application usability: Conceptualization and instrument development. *MIS Quarterly*, 39, 435–472.
34. Homburg C., Danijel J., & Christina K. (2017). Customer Experience Management: Toward Implementing an Evolving Marketing Concept. *Journal of the Academy of Marketing Science*, 45, 3, 377–401.
35. Hossain T., Akter S., Kattiyapornpong U., & Dwivedi Y. (2019). Multichannel integration quality: a systematic review and agenda for future research. *Journal of retailing and consumer services*, 49, 154-163.

36. Jackson T.W., Parboteeah P., & Metcalfe-Poulton S. (2014). The effects of consumer personality types on the attitudes and usage of self-checkout technology in the retail sector among 18–22 Years old. *Int. J. Market. Stud.* 6, 15–30.
37. Jamieson, S. (2004). Likert scales: how to (ab) use them. *Medical education*, 38(12), 1217-1218.
38. Jia X. (2016). *How E-WOM Influences Consumer Behavior in an Omni-Channel Retailer Environment: A Brand Attitude Moderated Model*, Kent State University.
39. Jin D., Caliskan D., Chen F., & Huang M. (2020). Omnichannel retail's return policy strategies in the presence of competition, *International Journal of Production Economics*, 225 (107595).
40. Joo, H. & Lee, E.J. (2016). A study on the user acceptance model of omni channel service based on Unified Theory of Acceptance and Use of Technology (UTAUT). *Family & Environment Research*, Vol. 54 No. 4, 405-414.
41. Joseph, G. (2015). Sustaining brick & mortar through omnichannel: An emerging story of retail business model convergence. *International Journal of Business and Management*, 3, 203–211.
42. Juaneda-Ayensa, E., Mosquera, A. & Murillo, Y.S. (2016). Omni-channel customer behavior: key drivers of technology acceptance and use and their effects on purchase intention. *Frontiers in Psychology*, Vol. 7 No. 1117, 1-11.
43. Kazancoglu I. & Aydin H. (2018). An investigation of consumer's purchase intentions towards omni-channel shopping. *International journal of retail and distribution management*, vol. 46, №10, 959-976.
44. Khalifa M. & Liu V. (2007). Online consumer retention: contingent effects of online shopping habit and online shopping experience. *European Journal of Information Systems*, 16 (6), 780-792.
45. Kim T. & Chiu W. (2019). Consumer acceptance of sports wearable technology: the role of technology readiness. *Int. J. Sports Mark. Spons.*, 20, 109–126.
46. Kim, J.-C. & Chun, S.-H. (2018). Cannibalization and competition effects on a manufacturer's retail channel strategies: Implications on an omni-channel business model, *Decision Support Systems*, 109, 5–14.

47. Konus U., Nelsin S., & Verhoef P. (2014). The effect of search channel elimination on purchase incidence, order size and channel choice, *International journal of research on marketing*, 31, 49-64.
48. Kotzab, X. B., Herbert, C. T., Hübner, A., Kuhn, H., & Wollenburg, J. (2016). Last mile fulfillment and distribution in omni-channel grocery retailing: A strategic planning framework. *International Journal of Retail & Distribution Management*, 44, 228–247.
49. Kuo K.M., Kiu C.F., & Chen-Chuang M. (2013). An investigation of the effects of technology readiness on technology acceptance in e-HRM. *BMC Med. Inf. Decis. Making*, 2 (13), 2–14.
50. Lawry, C.A. & Choi, L. (2013). The omnichannel luxury retail experience: building mobile trust and technology acceptance of Quick Response (QR) codes. *Marketing ZFP*, Vol. 35 No. 2, 144-154.
51. Lee C., Chan T., Chong A., & Thadani D. (2019). Customer engagement through omnichannel retailing: the effects of channel integration quality. *Industrial marketing management*, 77, 90-101.
52. Lee K.C. & Chung N. (2008). Empirical analysis of consumer reaction to the virtual reality shopping mall. *Comput. Hum. Behav.* 24, 88–104.
53. Lewis J., Whysall P., & Foster C. (2014). Drivers and technology-related obstacles in moving to multichannel retailing. *International Journal of Electronic Commerce*, 18, 43–68.
54. Li Y., Liu H., Lim E., Goh J., Yang F., & Lee M. (2018). Customer's reaction to cross-channel integration in omni-channel retailing: the mediating roles of retailer uncertainty, identity attractiveness, and switching costs. *Decision support systems*, 109, 50-60.
55. Liu F., Hu X., & Li F. (2018). Research on business model and innovation model-taking MI company as an example, 248, 285–287.
56. Liu, J., Abhishek, V. & Li, B. (2017). *The Impact of Mobile Channel Adoption on Customer Omni-Channel Banking Behavior Approaches*. Sage Publications, Thousand Oaks, CA.
57. Majrashi K. & Hamilton M. (2015). A cross-platform usability measurement model, *Lect. Notes Softw. Eng.* 3 (2), 132–144.

58. Martens M., Roll O., & Elliott R. (2017). Testing the technology readiness and acceptance model for mobile payments across Germany and South Africa. *Int. J. Innovat. Technol. Manag*, 14.
59. Merschmann, U. & Thonemann, U. W. (2011). Supply chain flexibility, uncertainty, and firm Performance: An empirical analysis of german manufacturing firms. *International Journal of Production Economics*, 130, 43–53.
60. Mirsch T., Lehrer C., & Jung R., (2016). Channel integration towards omnichannel management: a literature review, *Proceedings of the 20th Pacific Asia Conference on Information Systems*, Chiayi, Taiwan.
61. Neslin S., Grewal D., Leghorn R., Shankar V., Teerling M., Jacquelyn S. & Verhoef P. (2006). Challenges and opportunities in multichannel customer management. *Journal of Service Research*, 9 (2), 95–112.
62. Nunnally, J.O. (1978). *Psychometric theory*, New York: McGraw-Hill.
63. Pallant, J. (2013). *SPSS survival manual*, McGraw-Hill Education (UK).
64. Parasuraman A. & Colby C.L. (2015). An updated and streamlined technology readiness index: TRI 2.0. *J. Serv. Res*, 18, 59–74.
65. Parise S., Guinan P., & Kafka R., (2016). Solving the crisis of immediacy: How digital technologies can transform the customer experience. *Business Horizons*, vol. 59, 411-420.
66. Pascual-Miguel, F., Agudo-Peregrina, Á., & Chaparro-Peláez J. (2015). Influences of gender and product type on online purchasing. *J. Bus. Res.* 68, 1550–1556.
67. Podsakoff, P. M. & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
68. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies, *Journal of Applied Psychology*, 88(5), 879–903.
69. Pookulangara S., Hawley J., & Xiao G. (2011). Explaining multi-channel consumer's channel-migration intention using theory of reasoned action. *International Journal of Retail & Distribution Management*, 39 (3), 183-202.

70. Rahman S.A., Taghizadeh S.K., Ramayah T., & Alam M.M.D. (2017). Technology acceptance among micro-entrepreneurs in marginalized social strata: the case of social innovation in Bangladesh. *Technol. Forecast. Soc. Change* 118, 236–245.
71. Riantini R. (2019). The Effect of Omni Channel Marketing on the Online Search Behavior of Jakarta Retail Consumers with Theory of Planned Behavior (TPB) Approach. *International Conference on Information Management and Technology (ICIMTech)*, doi: 10.1109/ICIMTech.2019.8843833.
72. Rukmana W., Susyanto H., & Murwani I. (2019). The Determinant Factors of Omnichannel Service Adoption in Jakarta. *Asian Journal of Research in Computer Science*, 3 (4), 1-12.
73. Saghiri, S., Wilding, R., Mena, C., & Bourlakis, M. (2017). Toward a three-dimensional framework for omni-channel. *Journal of Business Research*, 77, 53–67.
74. Saunders M., Lewis P., & Thornhill A. (2009). *Research methods for business students*. Harlow: Financial Times Prentice Hall.
75. Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Harlow: Financial Times Prentice Hall.
76. Shen X., Li Y., Sun Y., & Wang N., (2018). Channel integration quality, perceived fluency and omnichannel service usage: the moderating roles of internal and external usage experience. *Decision support systems*, 109, 61-73.
77. Si Shi, Yi Wang, Xuanzhu C., & Qian Z., (2020). Conceptualization of omnichannel customer experience and its impact on T shopping intention: A mixed-method approach, *International Journal of Information Management*, vol. 50, 325-336.
78. Sopadjieva E., Dholakia U., Benjamin B., A Study of 46,000 Shoppers Shows That Omnichannel Retailing Works, *Harvard Business Review*, January 03, 2017 [online]. Available at: https://hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works?utm_medium=referral&utm_source=blog.calltouch.ru&utm_campaign=%D0%A7%D1%82%D0%BE%20%D1%82%D0%B0%D0%BA%D0%BE%D0%B5%20%D0%B8%20%D0%BA%D0%B0%D0%BA%20%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%B0%D0%B5%D1%82%20omni-channel (Accessed: 10.01.2021).

79. Speicher M., Cucerca S., & Krüger A. (2017). VRShop: a mobile interactive virtual reality shopping environment combining the benefits of on- and offline shopping. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol*, 1.
80. Taylor S., & Todd P. (1995). Understanding Information Technology Usage: A Test of Competing Models, *Information Systems Res.*, 6, 2, 144-176.
81. Teo, H., Wei, K., & Benbasat, I. (2003). Predicting intention to adopt interorganizational linkages: an institutional perspective. *MIS Quarterly* 27(1), 19–49.
82. Truong T. (2020). The drivers of omni-channel shopping intention: a case study for fashion retailing sector in Danang, Vietnam, *Journal of Asian Business and Economic Studies*, doi: 10.1108/JABES-05-2020-0053.
83. Venkatesh V. & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions, *Decision sciences*, 39 (2), 273-315.
84. Venkatesh V., Morris M.G., Davis G.B., & Davis F.D. (2003). User acceptance of information technology: toward a unified view. *MIS Q.*, 425–478.
85. Venkatesh, V., & Davis, F. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46 (2), 186-204.
86. Venkatesh, V., Thong, J., & Xu X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, Vol. 36 (1), 157-178.
87. Verhoef P., Kannan P., & Inman J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing: Introduction to the Special Issue on Multi-Channel Retailing. *Journal of Retailing*, 91 (2), 174-181.
88. Weathington, B. L., Cunningham, C. J. L., & Pittenger, D. J. (2012). *Understanding business research*, Hoboken, N.J.: John Wiley & Sons.
89. Yeo V.C.S., Goh S.K., & Rezaei S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *J. Retailing Consum. Serv.*, 35, 150–162.

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Appendix 1. Survey questionnaire (translated)

Appendix 2. Measurement model optimization process

Appendix

Appendix 1. Survey questionnaire (translated)

Данный опрос оценивает влияние омниканального потребительского опыта на намерение совершения покупок в продуктовых магазинах. **Омниканальность** отвечает за взаимную интеграцию различных каналов продаж и коммуникации в единую систему. **Различные каналы торговой сети:** традиционные магазины, онлайн-магазин, сторонние сервисы доставки, социальные сети и т.д. Например, Вы можете посмотреть товары на сайте, оформить заказ, а оплатить и получить его в традиционном магазине. Другими примерами подобной интеграции являются email-рассылки на основе совершенных покупок и единая программа лояльности для традиционных магазинов и Интернет-магазина одной торговой сети.

1. Я могу проверить наличие доступных для заказа продуктов через сайт или приложение. (Одиночный выбор)

- 1. Совершенно не согласен(а)
- 2. Не согласен(а)
- 3. Более или менее не согласен(а)
- 4. Оцениваю нейтрально
- 5. Более или менее согласен(а)
- 6. Согласен(а)
- 7. Совершенно согласен(а)

2. Я могу проверить наличие в ближайшем магазине интересующих меня продуктов. (Одиночный выбор)

3. При переходе со сторонних источников (социальные сети, реклама), я попадаю на релевантные и актуальные страницы. (Одиночный выбор)

4. Мои учетные записи по разным каналам связаны. (Одиночный выбор)

Например, быстрая идентификация по номеру телефона на сайте и в магазине.

Разнообразные каналы: традиционные магазины, онлайн-магазин, сторонние сервисы доставки.

5. Мои взаимодействия по разным каналам интегрированы и учитываются при каждой покупке. (Одиночный выбор)

Например, баллы программы лояльности копятся при покупках по разным каналам.

Разнообразные каналы: традиционные магазины, онлайн-магазин, сторонние сервисы доставки.

6. Описания продуктов доступны по разным каналам. (Одиночный выбор)

Например, пищевая ценность и регион производства можно узнать по всем каналам.

Разнообразные каналы: традиционные магазины, онлайн-магазин, сторонние сервисы доставки.

7. Запуск новых продуктов и рекламные акции одновременны по разным каналам.

(Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазин, сторонние сервисы доставки.

8. Рекламные мероприятия согласованы по разным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазин.

9. Я легко могу узнать о дополнительных выгодах за покупку через определенный канал. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, сторонние сервисы доставки.

10. Я знаю о существовании всех доступных каналов того или иного ритейлера и знаком с их атрибутами. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, сторонние сервисы доставки.

11. Я знаю, как использовать разные каналы для удовлетворения своих потребительских потребностей. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

12. Удовлетворение от обслуживания одинаково по разным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазин.

13. Я получаю регулярные рекламные сообщения по разным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

14. Качество продуктов одинаково по разным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, сторонние сервисы доставки.

15. Товарные знаки, торговые марки и слоганы одинаковы по разным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

16. Качество предоставляемого сервиса одинаково по разным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, сторонние сервисы доставки.

17. Я могу выбрать альтернативные каналы покупки. (Одиночный выбор)

Например, создать список продуктов и купить их в физическом магазине или заказать эти продукты в Интернете.

18. Я могу сделать заказ онлайн и выбрать удобный для меня способ оплаты.

(Одиночный выбор)

19. Обслуживание после покупки доступно по разным каналам. Например, возврат или обмен товара. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

20. Я могу использовать большинство функций для разных каналов в одном приложении / на одном сайте. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины.

21. Рекомендации по покупкам предлагаются в соответствии с записями о покупках и личной информацией по различным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

22. Скидки и привилегии предлагаются на основе записей о покупках и личной информации по различным каналам. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

23. Страницы онлайн-каталога настраиваются на основе записей о покупках и личной информации по различным каналам. (Одиночный выбор)

24. Я получаю рекомендации от компаний по покупкам, которые мне могут понравиться. (Одиночный выбор)

25. Я могу самостоятельно выбрать товары и категории, на которые буду получать скидки или повышенные баллы. (Одиночный выбор)

26. Я считаю, что использовать различные онлайн-каналы легко. (Одиночный выбор)

27. Мне легко научиться пользоваться различными онлайн-каналами. (Одиночный выбор)

28. Мое взаимодействие с различными онлайн-каналами ясно и понятно. (Одиночный выбор)

29. Возможность использовать несколько каналов в процессе покупки позволяет мне совершать покупки быстро. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

30. Я нахожу выгоды от использования нескольких каналов в процессе покупки. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

31. Возможность использовать несколько каналов в процессе покупки облегчает мою жизнь. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

32. Кто-то будет неправомерно использовать мои данные, которые я предоставил при совершении покупок. (Одиночный выбор)

33. Для продуктовых покупок мое присутствие в физических магазинах обязательно. (Одиночный выбор)

34. Я не чувствую себя в безопасности при покупках через различные каналы. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

35. Мне нравится делать покупки через разные каналы. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, сторонние сервисы доставки.

36. Для меня совершение покупок по разным каналам своего рода приключение. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, сторонние сервисы доставки.

37. Я получаю удовольствие от взаимодействия с разнообразными каналами. (Одиночный выбор)

Разнообразные каналы: традиционные магазины, онлайн-магазины, социальные сети и т.д.

38. В ближайшее время я намерен(а) совершить омниканальные покупки. (Одиночный выбор)

Омниканальность отвечает за взаимную интеграцию различных каналов продаж и коммуникации в единую систему. Например, Вы можете посмотреть товары на сайте, оформить заказ, а оплатить и получить его в традиционном магазине. Другими примерами подобной интеграции являются email-рассылки на основе совершенных покупок и единая программа лояльности для традиционных магазинов и Интернет-магазинов одной торговой сети.

39. Я хочу повторно совершить покупки в магазине, предоставляющем омниканальный опыт. (Одиночный выбор)

Омниканальность отвечает за взаимную интеграцию различных каналов продаж и коммуникации в единую систему. Например, Вы можете посмотреть товары на сайте, оформить заказ, а оплатить и получить его в традиционном магазине. Другими примерами подобной интеграции являются email-рассылки на основе совершенных покупок и единая программа лояльности для традиционных магазинов и Интернет-магазинов одной торговой сети.

40. Я планирую часто использовать омниканальные покупки в будущем. (Одиночный выбор)

Омниканальность отвечает за взаимную интеграцию различных каналов продаж и коммуникации в единую систему. Например, Вы можете посмотреть товары на сайте, оформить заказ, а оплатить и получить его в традиционном магазине. Другими примерами подобной интеграции являются email-рассылки на основе совершенных

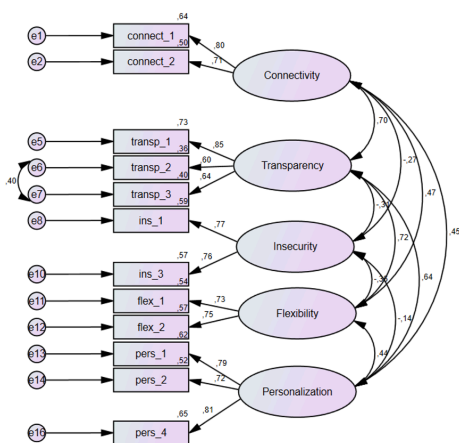
покупок и единая программа лояльности для традиционных магазинов и Интернет-магазинов одной торговой сети.

41. Я бы рекомендовал(а) моим знакомым омниканальные покупки. (Одиночный выбор)

Омниканальность отвечает за взаимную интеграцию различных каналов продаж и коммуникации в единую систему. Например, Вы можете посмотреть товары на сайте, оформить заказ, а оплатить и получить его в традиционном магазине. Другими примерами подобной интеграции являются email-рассылки на основе совершенных покупок и единая программа лояльности для традиционных магазинов и Интернет-магазинов одной торговой сети.

Appendix 2. Measurement model optimization process

Model 1. First-order construct with good model fit



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	35	77,025	43	,001	1,75
Saturated model	78	,000	0		
Independence model	12	875,504	66	,000	13,26

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	,086	,938	,888	,517
Saturated model	,000	1,000		
Independence model	,492	,443	,342	,375

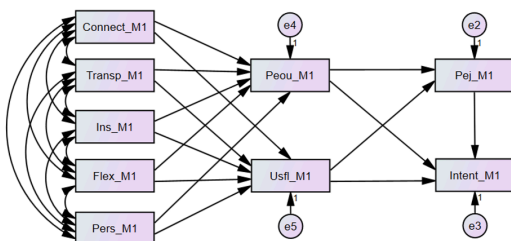
Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	,912	,865	,959	,935	,958
Saturated model	1,000	1,000	1,000	1,000	1,000
Independence model	,000	,000	,000	,000	,000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,065	,040	,087	,147
Independence model	,254	,239	,269	,000

Model 2.0 Full model (Imperfect model fit)



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	34	51,247	11	,000	4,659
Saturated model	45	,000	0		
Independence model	9	684,973	36	,000	19,027

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	,066	,943	,766	,230
Saturated model	,000	1,000		
Independence model	,440	,392	,240	,314

Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	,925	,755	,940	,797	,938
Saturated model	1,000	1,000	1,000	1,000	1,000
Independence model	,000	,000	,000	,000	,000

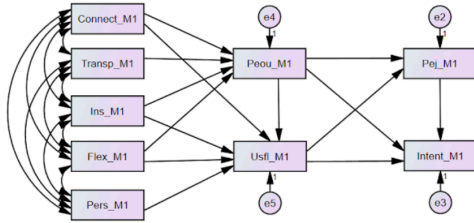
RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,139	,102	,178	,000
Independence model	,308	,288	,328	,000

Regression Weights: (Group number 1 - Default model)

		M.I.	Par Change
Usfl_M1 <---	Peou_M1	11,781	,229
Peou_M1 <---	Usfl_M1	11,569	,154
Pej_M1 <---	Pers_M1	5,943	,141
Intent_M1 <---	Connect_M1	6,348	,112

Model 2.4 Full model (Perfect model fit)



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	37	13,293	8	,102	1,662
Saturated model	45	,000	0		
Independence model	9	684,973	36	,000	19,027

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	,028	,985	,917	,175
Saturated model	,000	1,000		
Independence model	,440	,392	,240	,314

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,981	,913	,992	,963	,992
Saturated model	1,000	1,000	1,000	1,000	1,000
Independence model	,000	,000	,000	,000	,000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,059	,000	,113	,343
Independence model	,308	,288	,328	,000