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## Factors Affecting the Omnichannel Customer Experience: Evidence from Grocery Retail in Saudi Arabia

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### Abstract

The retail industry has been affected by advanced technology: Different channels have been connected to offer a seamless customer experience, leading to a shift from a multichannel to an omnichannel strategy. Both academia and industry have focused on this phenomenon in order to serve customers effectively. This study aims to explore the impact of omnichannel capability, customer service, and value on customer experience. In order to collect data, an online survey was administered to consumers who have experience buying from retailers via online and physical stores. To test the research hypotheses, structural equation modeling (SEM) was employed. Our findings indicate that customer service and value have a direct and significant impact on customer experience. Furthermore, it is found that omnichannel capability plays no significant role in customer experience.

**Keywords:** Omnichannel Capability, Customer Service, Value, and Customer Experience

### 1. Introduction

Retailers have been forced by technological advances to adopt new business strategies. If retailers are to convert the experience of using a single channel into a total retail experience, they must make more effort to deliver unified, consumer-focused technology (PWC, 2014). To offer customers the newest retail experience, retailers must implement an omnichannel strategy. (Li et al., 2015; Picot-Coupey et al., 2016). As a result of radical change in the retail business, a new paradigm has emerged which moves retailers' strategy from a multichannel to an omnichannel model (Kuhn, 1970; Piotrowicz & Cuthbertson, 2014), which offers a seamless and integrated channel experience (Palmatier et al., 2019; Truong, 2021; Verhoef et al., 2015). Multi-channel retail strategies are a response to changes in consumer buying behavior, in terms of whether they prefer to buy in-store or through the Internet (Palmatier et al., 2015) while the omnichannel strategy refers to managers rethinking "their service delivery to cater for the needs of a 'connected' customer (who often interacts) with several channels at the same time to make purchase decisions" (Akter et al., 2021, pp. 567-568). According to Beck and Rygl (2015), retailers usually employ data to lead consumers to purchase across all channels as part of their omnichannel strategy. However, retailers face challenges in applying an omnichannel strategy, as it requires the efficient use of capabilities and multiple resources as well as the management of interactions (Ye et al., 2018).

Digital technologies have implications for consumers' lifestyles in terms of shopping behavior, as well as for companies in terms of increasing complexities in the market environment. Dynamic capability theory (DCT) is used to explain the impact of omnichannel capability, customer service, and value on the omnichannel experience. DCT extends the resource-based view (Barney, 1991; Wernerfelt, 1984), which reflects how firms can compete in terms of dynamic changes (Eisenhardt & Martin, 2000) and suggests that they have to be able to know, recognize, and combine their resources and capabilities in fast-changing environments.

Enhancing customer experience is considered to be the main goal of omnichannel retailing (Kang et al., 2019). Since many studies have investigated omnichannel management (Beck & Rygl, 2015; Murfield et al., 2017; Yurova et al., 2017), more studies are needed on customer perception (Mishra et al., 2021; Manser Payne et al., 2017; Hüseyinoğlu et al., 2018).

This study therefore reflects on the omnichannel customer experience from a consumer viewpoint and explores the following primary question: Which factors related to omnichannel retailing lead to a positive customer experience within the context of the grocery retail sector in Saudi Arabia? The main contribution of this study is to explain the impact of omnichannel capability, customer service, and value on the customer experience.

This study is organized as follows. Section 2 presents the literature review and hypothesis development. Section 3 presents the research design. A discussion of the result is then reported, and implications are pointed out in the final section.

### 2. Literature review and hypothesis development

#### 2.1 Dynamic Capabilities Theory

DCT is considered to be a complement to the resource-based view of the company, which emphasizes that companies' resources are unique, valued, rare, and non-substitutable (Barney 1991). Teece et al. (1997, p. 516)



were the first to define dynamic capabilities, stating that they consist of “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments.” According to Eisenhardt and Martin (2000), the main element of DCT is that it recognizes those capabilities that support a company to modify its resources to maintain its competitive advantage in a sustainable way in a rapidly changing environment. Moreover, DCT looks to understand why companies can perform differently even within the same industry (Zott, 2003).

## 2.2 Omnichannel Capability

Omnichannel capability is defined as “the ability of a retailer’s marketing channels to provide the same level of service, assortment, notification (informing), return and delivery options from the consumers’ perspective” (Hüseyinoğlu et al., 2018, p. 1201). Hence, customers who experience omnichannel journeys will use different combinations of channels, such as websites, physical stores, and mobile apps (Li et al., 2015). Retailers have to own a number of capabilities in order to apply omnichannel management (Akturk et al., 2018). In our study, we use on three elements of omnichannel capability: channel consistency, cross-channel, and social media (Hüseyinoğlu et al., 2018). The first of these, channel consistency, means offering in each channel the same price, availability, delivery performance, and product assortment (Picot-Coupey et al., 2016). Moreover, when consumers use more than one channel when making a single purchase, it reflects cross-channel integration (Cao & Li, 2015). Social media are another form of omnichannel capability which offers an attractive strategy in terms of involving consumers with retailers’ touch points (Friedrich et al., 2019). According to Gatautis and Medziausiene (2014), social media are a vital part of people’s lives because they connect people’s experiences, facilitate shopping, and help merchants reach customers faster, so they are considered an important tool (Bell et al., 2013). Thus, we hypothesize:

Hypothesis (H1): Omnichannel capability positively affects the omnichannel experience.

## 2.3 Customer Service

Customer service reflects the set of activities provided by retailers and is an important key to profit and sales, if effective. Customer service can be defined as “all aspects of easing the shopping and purchase process for end-users as they interact with commercial suppliers (for business-to-business purchases) or retailers (for business-to-consumer purchases)” (Palmatier et al., 2015, p. 40).

There are many aspects of service, such as credit and payment transactions, merchandise assortment and support, call centers, and problem-solving (Zeithaml et al., 2002; Park & Kim, 2003). It is found that the quality of perceived customer service can impact satisfaction significantly, which, in turn, influences customers’ future purchase intention (Norizan & Abdullah, 2010).

We expect that customer service is related to the customer’s judgement of the support services provided by the retailer at all stages of the customer journey on any channel. Thus, the next hypothesis is as follows:

Hypothesis 2 (H2): Customer service positively affects the omnichannel experience.

## 2.4 Value

Value is a complex concept (Woodruff & Gardial, 1996) and can be interpreted in many ways (Van der Haar et al., 2001). Many scholars have defined value as the comparison between what is received and what is given (Rust & Oliver, 1994; Zeithaml, 1988; Monore, 1990).

According to Woodruff (1997, p.142), “Customer value is a customer’s perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations.” Hence, value in our study can be defined as a “customer’s evaluative judgment of the appropriateness of the retailer’s product assortment and pricing across any channels” (Rahman et al., 2022, p. 18).

Thus, we propose the following hypothesis:

Hypothesis 3 (H3): Value positively affects the omnichannel experience.

## 2.5 Customer Experience with Omnichannel Retailers

In order to provide customers with a smooth shopping experience across channels, retailers should ensure their omnichannel strategy operates in several online and physical channels with synergy and integration (Lee et al., 2019; Lynch & Barnes, 2020). Today’s consumers prefer to shop across channels during their purchase journey rather than use a single channel (Lynch & Barnes, 2020). Consequently, the omnichannel experience can occur during customer interaction with various of a retailer’s channels (Verhoef et al., 2015). For example, a customer may search for a product on the internet and buy it from a physical store or look for a product in a physical store and buy it online (Flavián et al., 2019). Therefore, in omnichannel retailing, it is important to consider the offline and online customer experience at the same time and how it can impact a customer’s behavioral and

psychological response, as retailers can gain a competitive advantage by providing a superior customer experience (Gao et al., 2021).

It is agreed by researchers that customer experience is subjective and context-determined (Becker & Jaakkola, 2020). However, several studies have underlined that during the customer’s purchase journey, companies should provide a great customer experience that can be considered multidimensional and holistic in nature, and they can do so by highlighting sensorial, cognitive, affective, behavioral, and social responses (Becker & Jaakkola, 2020; De Keyser et al., 2020; Manthiou et al., 2020).

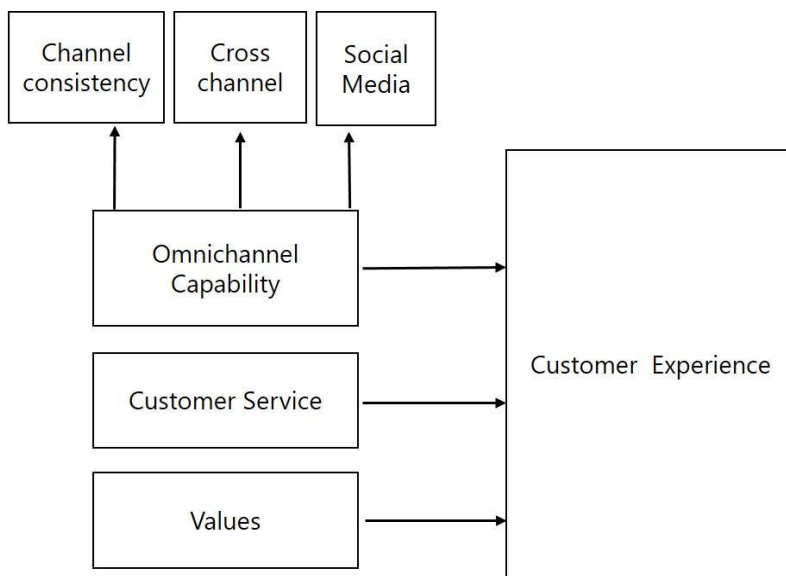
Reason and emotion are the key drivers of customer experience (Lemon & Verhoef, 2016) and can be measured by two generally documented and well-validated variables: customer satisfaction and customer emotions (McLean et al., 2018). The concept of satisfaction is considered to be a rational comparison between customer expectations and actual performance (Lemon & Verhoef, 2016). Customer emotions have been recognized as a vital dimension of the customer experience in many retail settings, such as physical stores (Das & Varshneya, 2017), e-retailing (Rose et al., 2012), and omnichannel retailing (Lynch & Barnes, 2020). Emotion is defined as a “mental state of readiness that arises from cognitive appraisals of events or thoughts; has a phenomenological tone; is accompanied by physiological processes; is often expressed physically (e.g., in gestures, posture, facial features); and may result in specific actions to affirm or cope with the emotion, depending on its nature and meaning for the person having it” (Bagozzi et al., 1999, p.184). In our study, therefore, the operationalized construct of the customer experience has two dimensions, namely positive emotions, and satisfaction with the experience.

### 3. Research Methodology

#### 3.1 Research Model

This study will be based on the following proposed model

Figure 1. Research model



#### 4.2 Research Hypotheses

H1: Omnichannel capability positively affects the omnichannel experience.

H2: Customer service positively affects the omnichannel experience.

H3: Value positively affects the omnichannel experience.

#### 3.3 Data Collection and Sample

Consumers in omnichannel retailing are more likely to evaluate the integration across channels effectively, so this study was organized to collect data on the research constructs from a consumer perspective (Sorkun et al., 2020). The questionnaire included a filter question to select only those omnichannel customers who use both online and physical stores to complete their purchasing process. A pilot test was run in order to ensure content and face validity due to the translation of survey items into Arabic, which is the respondents’ native language.

We obtained 168 useable responses to the questionnaire. After checking answers to the filter question, we excluded 16 responses from the analysis, leaving a final sample size of 152 respondents. The omnichannel concept is a relatively recent phenomenon, so it is suggested that young people feel more comfortable with it

than older people (Liebermann & Stashevsky, 2002). The sample in this study supports this suggestion, as 28.9 percent were under 40 years old, and 27 percent were under 30. Most respondents were females (69.7%), in alignment with a suggestion by Kimbrough et al. (2013) that women tend to make more purchases than men, both physically and online. Table 1 presents the demographic characteristics in detail.

Table-1 Demographic characteristics

N= 152	
Gender	
Female	69.7%
Male	30.3%
Age	
18–22 years old	13.2%
23–30 years old	27%
31–40 years old	28.9%
41–50 years old	15.8%
>55 years old	15.1%
The highest degree of education completed	
Master/PhD	18.4%
Bachelor	71.7%
High school	9.9%
Income	
< 5000 SR	7.2%
6000–10000 SR	9.2%
11000–20,000 SR	41.4%
>20,000 SR	42.1%

### 3.4 Methodology and Measurement

In order to test the research hypotheses, structural equation modeling (SEM) was employed. In the measurement models, constructs are operationalized with multiple indicators to decrease measurement error (Kline, 2015). A structural model tests the direct relationships between constructs.

All items were taken from prior studies. The omnichannel capability consists of three constructs: channel consistency, cross channel, and social media, adopted from Yumurtaçı Hüseyinoğlu et al. (2018). Customer experience, a multidimensional construct which consists of satisfaction with experiences, was measured by three items, while positive emotion was measured by ten items taken from Le and Nguyen-Le (2020). Value and customer service constructs were measured by four items taken from Rahman et al. (2022).

### 3.5 Construct Operationalization

Channel consistency, cross-channel, social media, customer service, values, satisfaction with the experience, and positive emotions were designed as first-order constructs. They were operationalized with the items of the survey scale listed alongside the studies consulted in Table 2. The constructs “omnichannel capability” and “customer experiences” were operationalized as second-order constructs. Omnichannel capability consists of three constructs: channel consistency, cross-channel, and social media, while customer experience consists of two constructs: satisfaction with the experience and positive emotions.

Table-2

Construct	Source	Adapted items
Omnichannel capability		



Channel consistency Source	Yumurtacı Huseyinoglu et al., 2018	OCC1: I can purchase the products from the retailer's online stores which are available at its physical stores. OCC2: I can complete my shopping without difficulty regardless of which of the retailer's marketing channels I use. OCC3 All the retailer's sales channels (physical and online stores) are equally effective.
Cross-channel source	Yumurtacı Huseyinoglu et al., 2018	OCC4: I can collect the products purchased online from the retailer's physical stores. OCC5: The order I place in online stores can be delivered the same day to the retailer's physical store for collection. OCC6: I can purchase a product from the retailer's physical store which I ordered from the online store.
Social media	Yumurtacı Huseyinoglu et al., 2018	OCC7: The retailer uses social media effectively to promote its products in all marketing channels. OCC8: The retailer uses social media effectively to notify customers of current discounts on products in all marketing channels.
Value	Rahman et al., 2022	VALU1 XYZ has a good selection of products across all channels. VALU2 XYZ offers competitively priced products across all channels. VALU3 XYZ offers good deals across all channels. VALU4 XYZ has a wide variety of products across all channels that interest me.
Customer service	Rahman et al., 2022	CSER1c XYZ provides courteous customer service across all channels. CSER2 XYZ provides helpful customer service across all channels. CSER3 XYZ has knowledgeable customer service representatives across all channels to answer my questions. CSER4 XYZ's customer service across all channels is prompt.
Customer experience		
Satisfaction with experience	Le & Nguyen-Le, 2020	Satisfaction with experience (1) I am satisfied with the shopping experience at X. (2) The shopping experience at X is exactly what I need. (3) The shopping experience at X has worked out as well as I thought it would.
Positive emotions	Le & Nguyen-Le, 2020	(1) I feel frustrated when shopping at X. (R) (2) I feel confident when shopping at X. (3) I feel assured when shopping at X. (4) I feel confused when shopping at X. (R) (5) I feel optimistic when shopping at X.

		(6) I feel uncertain when shopping at X. (R) (7) I feel disappointed when shopping at X. (R) (8) I feel relieved when shopping at X. (9) I feel doubtful when shopping at X. I (10) I feel satisfied when shopping at X.
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### 3.6 Data Analysis

The reliability and validity of the measures were verified with confirmatory factor analysis (CFA). Survey items OE4, OE6, and OE7 were removed as their factor loading was <.4 (Hair et al., 2017). Then, the data were analyzed with respect to suitability, reliability, and validity (Table 3). In order to test convergent validity, the indicators' loading and average variance extracted (AVE) should be applied. A CFA shows that the weights of all items are acceptable, which means they load significantly on their constructs with standard loadings greater than 0.5 (Hair et al., 2017). The AVE from all constructs is greater than 0.5, verifying that convergent validity was achieved. The composite reliability (CR) of all constructs exceeds 0.7, which indicates that the scale items are internally consistent (reliable) (see Table 3).

Table -3

Factor name	Items	Factor loading	Composite reliability (CR)	Average variance extracted (AVE)
Channel consistency	OCC1	0.683	0.748	.50
	OCC2	0.694		
	OCC3	0.737		
Cross-channel	OCC4	0.832	0.845	0.646
	OCC5	0.784		
	OCC6	0.794		
Social media	OCC7	0.922	0.906	
	OCC8	0.899		
Value	VALU1	0.65	0.873	0.636
	VALU2	0.843		
	VALU3	0.877		
	VALU4	0.801		
Customer service	CSER1	0.859	0.923	0.75
	CSER2	0.876		
	CSER3	0.87		
	CSER4	0.859		
Satisfaction with experience	CE1	0.926	0.94	0.84
	CE2	0.93		
	CE3	0.893		
Positive emotions	CE5	0.738	0.861	0.47
	CE8	0.689		
	CE9	0.669		

	CE10	0.641		
	CE11	0.73		
	CE12	0.67		
	CE13	0.656		

Discriminant validity was applied as the next step of data analysis, which indicates that a construct is different from other constructs by empirical standards. The AVE for each construct should be greater than the shared variance between other constructs. The square root of each of the seven constructs is greater than the correlation of other constructs. The values are provided in Table 4

Table-4

	Channel consistency	Cross channel	Customer service	Positive emotions	Satisfaction with experience	Social media	Value
Channel consistency	0.497						
Cross channel	.686	.821					
Customer service	0.692	0.517	0.816				
Positive emotions	0.413	0.303	0.434	0.617			
Satisfaction with experience	0.58	0.326	0.638	0.708	0.872		
Social media	0.518	0.396	0.537	0.34	0.37	0.814	
Value	0.71	0.473	0.669	0.548	0.624	0.542	0.72

#### 4. Results

In order to test the research model hypotheses, an SEM technique was applied. The results of the hypothesized relationships in this study, reported in Table 5, supported H2, that customer service positively affects the customer experience, and H3, that value has a positive effect on the customer experience. However, no support was found for H1, that omnichannel capability positively affects the customer experience.

Table 5 Hypotheses' Test Results

Hypotheses	Hypothesis Path	Standardized Estimate	P (**p<0.001)
H1	OC----> OE	0.097	.518
H2	CS----> OE	0.089	.002
H3	Values----> OE	0.08	.000

#### 5. Discussion and Implications

Research on omnichannel retailing has increased in order to understand the antecedents of its successful application as a channel strategy. In this regard, some studies have examined the relationship between omnichannel capability, operational logistics, and satisfaction (Sorkun et al., 2020).

This study contributes to a better understanding of omnichannel capability, customer service, and value effects on customer experience. First, the conceptual model tested whether the omnichannel capability, together with customer service and value, leads to an enhancement of the customer experience. The findings indicate that customer service and value play a significant role in improving customer experience, supporting previous studies that highlight the positive effect of omnichannel retailing, as part of providing customer service, on customer experience (Quach et al., 2020; Verhoef et al., 2015). However, the results confirmed that omnichannel capabilities do not affect the customer experience. Prior research has examined how omnichannel capability leads to customer satisfaction (Sorkun et al., 2020), and other papers have studied the impact of logistics service quality on omnichannel capability (Yumurtacı Huseyinoglu et al., 2018).

The findings of this study provide useful practical insights. Managers of retailers should emphasize customer service by ensuring it is courteous and helpful across all channels. Moreover, value should be considered as a valuable factor that enhances the customer experience, and therefore a variety of products should be provided at competitive prices.

Furthermore, practitioners can promote an omnichannel strategy, which ultimately enhances the customer experience, by using the differences between the loadings of survey items. The pattern of item loadings shows that items with lower loadings represent omnichannel shoppers' taken-for-granted practices. Product availability at both physical and online stores (OCC1 and OCC2) is essential for an omnichannel strategy, and providing a variety of products across all channels (Value1) is important to enhance customer experience.

## 6. Limitations and Future Research

This study used a survey based on consumers' perspectives on omnichannel strategy; therefore, retailers' views should be considered in future research. Moreover, other constructs could be added to the framework as the outcome of customer experiences, such as word of mouth, loyalty, and trust in the retailer. Finally, the framework was tested in the grocery store industry, so future studies should be conducted in other contexts, such as fashion retail.

## References

- Akter, S., Hossain, T.M.T., & Strong, C. (2021). What omnichannel really means? *Journal of Strategic Marketing*, 29(7), 567-573.  
<https://doi.org/10.1080/0965254X.2021.1937284>
- Akturk, M.S., Ketzenberg, M., & Heim, G.R. (2018). Assessing impacts of introducing ship-to-store service on sales and returns in omnichannel retailing: a data analytics study. *Journal of Operations Management*, 61, 15-45.  
<https://doi.org/10.1016/j.jom.2018.06.004>
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the academy of marketing science*, 27(2), 184-206.  
<https://doi.org/10.1177/0092070399272005>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.  
<https://doi.org/10.1177/014920639101700108>
- Beck, N. & Rygl, D. (2015). Categorization of multiple channel retailing in multi-, cross-, and omnichannel retailing for retailers and retailing. *Journal of Retailing and Consumer Services*, 27(November), 170-178.  
<https://doi.org/10.1016/j.jretconser.2015.08.001>
- Becker, L. & Jaakkola, E. (2020). Customer experience: fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48, 630-648.  
<https://doi.org/10.1007/s11747-019-00718-x>
- Bell, C., Fausset, C., Farmer, S., Nguyen, J., Harley, L., & Fain, W. B. (2013, May). Examining social media use among older adults. In *Proceedings of the 24th ACM conference on hypertext and social media* (pp. 158-163).  
<https://doi.org/10.1145/2481492.2481509>
- Cao, L. & Li, L. (2015). The impact of cross-channel integration on retailers' sales growth. *Journal of Retailing*, 91(2), 198-216.  
<https://doi.org/10.1016/j.jretai.2014.12.005>
- Das, G. & Varshneya, G. (2017). Consumer emotions: Determinants and outcomes in a shopping mall. *Journal of Retailing and Consumer Services*, 38, 177-185.  
<https://doi.org/10.1016/j.jretconser.2017.06.008>
- De Keyser, A., Verleye, K., Lemon, K. N., Keiningham, T. L., & Klaus, P. (2020). Moving the customer experience field forward: introducing the touchpoints, context, qualities (TCQ) nomenclature. *Journal of Service Research*, 23(4), 433-455.  
<https://doi.org/10.1177/1094670520928390>



Eisenhardt, K.M. & Martin, J.A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10), 1105-1121

[https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)

Flavián, C., Gurrea, R., & Orús, C. (2019). Feeling confident and smart with webrooming: understanding the consumer's path to satisfaction. *Journal of Interactive Marketing*, 47(1), 1-15.

<https://doi.org/10.1016/j.intmar.2019.02.002>

Flavian, C., Gurrea, R., & Orús, C. (2021). Mobile word of mouth (m-WOM): analysing its negative impact on webrooming in omnichannel retailing. *International Journal of Retail & Distribution Management*, 49(3), 394-420.

<https://doi.org/10.1108/IJRDM-05-2020-0169>

Friedrich, T., Schlauderer, S., & Overhage, S. (2019). The impact of social commerce feature richness on website stickiness through cognitive and affective factors: An experimental study. *Electronic Commerce Research and Applications*, 36(5), 100861. doi: 10.1016/j.elerap.2019.100861.

<https://doi.org/10.1016/j.elerap.2019.100861>

Fornell, C. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

<https://doi.org/10.1177/002224378101800104>

Gao, W., Li, W., Fan, H., & Jia, X. (2021). How customer experience incongruence affects omnichannel customer retention: The moderating role of channel characteristics. *Journal of Retailing and Consumer Services*, 60, 102487.

<https://doi.org/10.1016/j.jretconser.2021.102487>

Gatautis, R., & Medziausiene, A. (2014). Factors affecting social commerce acceptance in Lithuania. *Procedia-Social and Behavioral Sciences*, 110, 1235-1242.

<https://doi.org/10.1016/j.sbspro.2013.12.970>

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial management & data systems*.

<https://doi.org/10.1108/IMDS-04-2016-0130>

Kang, J., Majer, M., & Kim, H.J. (2019). Empirical study of omnichannel purchasing pattern with real customer data from health and lifestyle company. *Sustainability*, 11(24), 7185.

<https://doi.org/10.3390/su11247185>

Kimbrough, A.M., Guadagno, R.E., Muscanell, N.L., & Dill, J. (2013). Gender differences in mediated communication: Women connect more than do men. *Computers in Human Behavior*, 29(3), 896-900.

<https://doi.org/10.1016/j.chb.2012.12.005>

Kline, R.B. (2015). *Principles and practice of structural equation modeling*. The Guilford Press.

Kuhn, T. (1970). *The structure of scientific revolutions*. (2nd ed.). The University of Chicago Press.

Le, A. N. H., & Nguyen-Le, X. D. (2020). A moderated mediating mechanism of omnichannel customer experiences. *International Journal of Retail & Distribution Management*, 49(5), 595-615.

<https://doi.org/10.1108/IJRDM-02-2020-0054>

Lee, Z.W.Y., Chan, T.K.H., Chong, A.Y.L., & Thadani, D.R. (2019). Customer engagement through omnichannel retailing: The effects of channel integration quality. *Industrial Marketing Management*, 77, 90-101.

<https://doi.org/10.1016/j.indmarman.2018.12.004>

Lemon, K.N. & Verhoef, P.C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69-96.

<https://doi.org/10.1509/jm.15.0420>

Li, Q., Luo, H., Xie, P.X., Feng, X.Q., & Du, R.Y. (2015). Product whole life-cycle and omni-channels data convergence oriented enterprise networks integration in a sensing environment. *Computers in Industry*, 70(June), 23-45.

<https://doi.org/10.1016/j.compind.2015.01.011>



Liebermann, Y. & Stashevsky, S. (2002). Perceived risks as barriers to internet and e-commerce usage. *Qualitative Market Research: An International Journal*, 5(4), 291-300.

<https://doi.org/10.1108/13522750210443245>

Lynch, S., & Barnes, L. (2020). Omnichannel fashion retailing: examining the customer decision-making journey. *Journal of Fashion Marketing and Management: An International Journal*, 24(3), 471-493.

<https://doi.org/10.1108/JFMM-09-2019-0192>

Manser Payne, E., Peltier, J.W., & Barger, V.A. (2017). Omni-channel marketing, integrated marketing communications and consumer engagement: a research agenda. *Journal of Research in Interactive Marketing*, 11(2), 185-197.

<https://doi.org/10.1108/JRIM-08-2016-0091>

Manthiou, A., Hickman, E., & Klaus, P. (2020). Beyond good and bad: Challenging the suggested role of emotions in customer experience (CX) research. *Journal of Retailing and Consumer Services*, 57, 102218.

<https://doi.org/10.1016/j.jretconser.2020.102218>

McLean, G., Al-Nabhani, K., & Wilson, A. (2018). Developing a mobile applications customer experience model (MACE) - implications for retailers. *Journal of Business Research*, 85, 325-336.

<https://doi.org/10.1016/j.jbusres.2018.01.018>

Mishra, R., Singh, R.K., & Koles, B. (2021). Consumer decision-making in Omnichannel retailing: Literature review and future research agenda. *International Journal of Consumer Studies*, 45(2), 147-174.

<https://doi.org/10.1111/ijcs.12617>

Monroe, K. B. (1990). *Pricing: Making profitable decisions*. McGraw-Hill College.

Murfield, M., Boone, C.A., Rutner, P., & Thomas, R. (2017). Investigating logistics service quality in omni-channel retailing. *International Journal of Physical Distribution & Logistics Management*, 47(4), 263-296.

<https://doi.org/10.1108/IJPDLM-06-2016-0161>

Norizan, K. & Abdullah, N.A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: a cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics*, 22(3), 351-371. doi: 10.1108/13555851011062269.

<https://doi.org/10.1108/13555851011062269>

Palmatier, R.W., Sivadas, E., Stern, L.W., & El-Ansary, A.I. (2015). *Marketing channel strategy*. Pearson Education.

<https://doi.org/10.4324/9781315506456>

Palmatier, R.W., Sivadas, E., Stern, L.W., & El-Ansary, A.I. (2019). *Marketing channel strategy: An omni-channel approach*. Routledge.

<https://doi.org/10.4324/9780429291999>

Park, C. & Kim, Y. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *International Journal of Retail & Distribution Management*, 31(1), 16-29. doi: 10.1108/09590550310457818.

<https://doi.org/10.1108/09590550310457818>

Picot-Coupey, K., Huré, E., & Piveteau, L. (2016). Channel design to enrich customers' shopping experiences: Synchronizing clicks with bricks in an omni-channel perspective - the direct optic case. *International Journal of Retail & Distribution Management*, 44(3), 336-368.

<https://doi.org/10.1108/IJRDM-04-2015-0056>

Piotrowicz, W. & Cuthbertson, R. (2014). Introduction to the special issue information technology in retail: Toward omnichannel retailing. *International Journal of Electronic Commerce*, 18(4), 5-16.

<https://doi.org/10.2753/JEC1086-4415180400>

PWC (2014). *Achieving total retail consumer expectations driving the next retail business model*. [www.pwc.com/gx/en/retail-consumer/assets/achieving-total-retail.pdf](http://www.pwc.com/gx/en/retail-consumer/assets/achieving-total-retail.pdf).



- Quach, S., Barari, M., Moudry, D.V., & Quach, K. (2020). Service integration in omnichannel retailing and its impact on customer experience. *Journal of Retailing and Consumer Services*, 102267. <https://doi.org/10.1016/j.jretconser.2020.102267>
- Rahman, S. M., Carlson, J., Gudergan, S. P., Wetzels, M., & Grewal, D. (2022). Perceived omnichannel customer experience (OCX): Concept, measurement, and impact. *Journal of Retailing*, 98(4), 611-632. <https://doi.org/10.1016/j.jretai.2022.03.003>
- Rose, S., Clark, M., Samouel, P., & Hair, N. (2012). Online customer experience in e-retailing: An empirical model of antecedents and outcomes. *Journal of Retailing*, 88(2), 308-322. <https://doi.org/10.1016/j.jretai.2012.03.001>
- Rust, R. T., & Verhoef, P. C. (81). L. Oliver.(1994),"Service Quality Insights and Managerial Implications From the Frontier,". *Service Quality: New Dimensions in Theory and Practice*, 1-9. <https://doi.org/10.4135/9781452229102.n1>
- Sorkun, M.F., Hüseyinoğlu, I.Ö.Y., & Börühan, G. (2020). Omni-channel capability and customer satisfaction: Mediating roles of flexibility and operational logistics service quality. *International Journal of Retail & Distribution Management*, 48(6), 629-648. <https://doi.org/10.1108/IJRDM-07-2019-0235>
- Van der Haar, J. W., Kemp, R. C., & Omta, O. (2001). Creating value that cannot be copied. *Industrial Marketing Management*, 30(8), 627-636. [https://doi.org/10.1016/S0019-8501\(99\)00128-5](https://doi.org/10.1016/S0019-8501(99)00128-5)
- Verhoef, P. C., Kannan, P. K., & Inman, J. 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. <https://doi.org/10.1016/j.jretai.2015.02.005>
- Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Truong, T. H. H. (2021). The drivers of omni-channel shopping intention: a case study for fashion retailing sector in Danang, Vietnam. *Journal of Asian Business and Economic Studies*, 28(2), 143-159. <https://doi.org/10.1108/JABES-05-2020-0053>
- Wernerfelt, B. (1984). A resource based view of the firm. *Strategic Management Journal*, 5(2), pp. 171-180. <https://doi.org/10.1002/smj.4250050207>
- Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the academy of marketing science*, 25, 139-153. <https://doi.org/10.1007/BF02894350>
- Woodruff, R. B., & Gardial, S. (1996). *Know your customer: New approaches to understanding customer value and satisfaction*. Wiley.
- Ye, Y., Lau, K.H., & Teo, L.K.Y. (2018). Drivers and barriers of omni-channel retailing in China: a case study of the fashion and apparel industry. *International Journal of Retail and Distribution Management*, 46(7), 657-689. <https://doi.org/10.1108/IJRDM-04-2017-0062>
- Yumurtacı Hüseyinoğlu, I. Ö., Sorkun, M. F., & Börühan, G. (2018). Revealing the impact of operational logistics service quality on omni-channel capability. *Asia Pacific Journal of Marketing and Logistics*, 30(5), 1200-1221. <https://doi.org/10.1108/APJML-08-2017-0169>
- Yurova, Y., Rippé, C.B., Weisfeld-Spolter, S., Sussan, F. & Arndt, A. (2017). Not all adaptive selling to omni-consumers is influential: The moderating effect of product type. *Journal of Retailing and Consumer Services*, 34(January), 271-277. <https://doi.org/10.1016/j.jretconser.2016.01.009>

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of marketing*, 52(3), 2-22.

<https://doi.org/10.1177/002224298805200302>

Zeithaml, V.A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4), 362-375.

<https://doi.org/10.1177/009207002236911>

Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: Insights from a simulation study. *Strategic Management Journal*, 24(2), 97-125.

<https://doi.org/10.1002/smj.288>