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Research Paper



Omni Channel Retailing And Customer Retention At Matahari: A Comprehensive Analysis Of Matahari Department Store

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ABSTRACT: This study examines the impact of omnichannel retailing on customer retention at Matahari Department Store, one of Indonesia's leading retail chains. The research identifies key problems related to the integration of online and offline channels, the seamlessness of customer experiences, and fulfilment processes. These issues are critical in the post-COVID-19 retail environment where consumer behaviour has shifted significantly towards online shopping. The purpose of this research is to investigate how the dimensions of omnichannel retailing—integration, seamlessness, and fulfilment—affect customer retention, with the shopping experience acting as a mediating variable. A mixed-methods approach was employed, combining quantitative data from structured surveys analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) and qualitative insights from customer interviews and observation. The SEM-PLS analysis results indicate that all three dimensions of omnichannel retailing—integration, seamlessness, and fulfilment—have a significant positive impact on customer retention. Fulfilment emerged as the most influential factor, emphasizing the importance of timely and accurate delivery processes. The shopping experience was found to mediate the relationship between omnichannel strategies and customer retention, underscoring the need for a cohesive and enjoyable customer journey across all channels. These findings suggest that for Matahari to enhance customer retention, a focus on improving fulfilment processes and ensuring a seamless and integrated shopping experience across all platforms is crucial. The study provides actionable insights for retail managers seeking to refine their omnichannel strategies in a competitive and rapidly evolving market.

KEYWORDS: Omnichannel retailing, customer retention, integration, seamlessness, fulfilment, shopping experience, PLS-SEM, Matahari Department Store, retail strategy, post-COVID-19 consumer behaviour.

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I. INTRODUCTION

The evolution of retailing has been a pivotal shift with emergence of digital technology Omnichannel retailing, where consumers can engage with a company in physical store, on an online website app, or through a mobile app, is becoming a fundamental business model. It seeks to provide seamless and integrated customers experiences, irrespective of the channel or device used. The integration of multiple channels aims to enhance the shopping experience, meet diverse consumers needs, and foster customers loyalty and retention. Disruption Disruptions have occurred in the retail industry roughly every 50 years. Major disruptions in retail include department stores (1860s), shopping malls (1910s), and big-box discount stores (1960s). But the disruption based on digital technology (2010+) may be the most significant of all. This technology will fundamentally change the retail shopping experience [2].

The world of fashion in around the world and specifically Indonesia, can be said to have developed very quickly in the last few decades. Forced by COVID19 outbreak has change the customers behaviour how to get their fashion preference. Except impacted from covid outbreak also supported by various aspect, including local designer who are increasingly potential, the improving economic level, and the retail sector which is developing rapidly [1]. Digital technology is the most powerful disruption to hit the retail industry in 50 years.

It provides a mindboggling array of possibilities and represents both significant threat and a major opportunity for traditional retailers. This disruption is changing the game in retail. It is giving consumers even more information and power, and is forcing retailers to innovate and rethink their value propositions and economic models [2].

Similarly, digital disruption is now reshaping the retailing landscape, and, like the case of previous disruption, the changes are redefining consumer expectations [3]. Internet technologies and the dot-com bubble lured many e-retailers to online platforms with high expectation of gaining a first-mover competitive advantage [4]. According to [5] in [3] because of the continuous development of technology and digital platforms, the conventional retail environment, from the economic growth aspect Indonesia is an attractive market for textile and clothing because of its steady economy growth, as well as the world's fourth most populated country. Both local and global fashion companies are vying for market share. The world of fashion in around the world and specifically Indonesia, can be said to have developed very quickly in the last few decades. Forced by COVID19 outbreak has change the customers behaviour how to get their fashion preference. Except impacted from covid outbreak also supported by various aspect, including local designer who are increasingly potential, the improving economic level, and the retail sector which is developing rapidly [1].

In recent years, Matahari has faced challenges in maintaining growth since the outbreak of Covid19, followed by the growth in the use of technology in the application of omnichannel retailing and digital technology. These innovations have led to significant changes in consumers' lifestyles and their interactions with brands and businesses [6]. This change certainly increases the Company's challenge to be able to move agilely in the face of change and competition, one of the several challenges faced by the Company is maintaining customer retention, which is proof of how the Company maintains performance and profits and plays dynamic role in the long-term accomplishments [7].

II. PROBLEM STATEMENT

The main problem faced by the Company that will be carried out in this study is how to increase customer retention by explaining how omnichannel retailing plays an important role in increasing customer retention, considering the existence of mediating variables in customer behavior in shopping, for this research according Matahari Department Store has described on previous sub chapter, here propose the research question to be answer:

- 1. What is the effect of omnichannel retailing dimensions (integration, seamlessness, fulfilment) on customer retention?
- 2. What is the role that the shopping experience plays in the relationship between omnichannel retailing and customer retention?

According, the research's main objective are to investigate the effect that omnichannel retailing dimension (Integration, Seamlessness, and fulfillment) have on customer retention, and the mediating role of shopping experience in this relationship.

III. LITERATURE REVIEW

III.1 Omnichannel Retailing: Concept and Factors

Omnichannel retailing is defined as a retail strategy that integrates all sales channels to facilitated customers to have a seamless experience by eliminating the traditional boundaries between them [8]. With the grow of digitalization, the retailing industry as experienced a radical change in term of serving customers [9], the concept of omni-channel retiling was first coined by [2] reveal that Omni-channel is the seamless integration of the customer experience across all channels of interaction. This includes physical stores, personal computers, smartphones and tablets, social media, televisions, call centers, catalogs, and more. As defined by [10]. Also endorsed that omnichannel retailing entails the solution of "Integrated management of the various customers touch points in such manner that customer experience across all interactions can be maximized, whereas [11], write on their paper that inculcates that a real omnichannel strategy solely focused on customer value throughout their buying experience, in this study also to complement the value and retailing literature by understanding how shopping value in relate with buying experience delineates across touch point when it comes to considering omnichannel journeys. Cites form [12] supported the same inception and explored on how fashion retailers use omnichannel shopping functionalities to attain a strong base of customers. The study appraised the channel consolidation process and suggested that retailers update their customers on the efficacy of using multiple channels. Another study [13] revealed that understanding customer needs and expectations is the first building block of true omnichannel experience. To streamline customers experience, it is important to know that all customers are not identical to one another, therefore, there is a need to design different customers profile for an effective omnichannel strategy [3]. Omnichannel Retailing (OCR) extends the concept of multichannel retailing with a broader channel focus and scope, especially to include emerging digital channels.

OCR is defined through its management as the synergetic management of the numerous available channels and customers touchpoint, in such a way that the customer experience across channels and the performance over channels is optimized, this definition is holistic (performance across all channels), and it emphasizes cross-channel management (integration). Omnichannel retailing is a complex adaptive system that has several aspects that are related to each other These aspects are utilized for identifying and specifying a strategy foundation for OCR [14].

III.2 Omnichannel Retailing and Customer Retention

Omnichannel consumption and problematizes the established OCR literature. Omnichannel consumption is driven by quest for a seamless consumer experience, utilization of modern retail technology, and the holistic management of channel integration. Marketing channels are very important for any organization as they serve as a way of interaction with customers [15]. As suggested by [16], customers exhibit a tendency to utilize various channels because they offer customers varying levels and types of services and outputs and help customers in assimilating product information throughout the shopping process. To capture the interest of consumers and address their needs, companies have adopted a multichannel strategy [17].

A multichannel approach refers to a collection of strategies employed to market and distribute products or services through multiple channels. These channels, however, do not have any form of interaction with one another [18]. The utilization of a multichannel approach capitalizes on customers' inclination to seek out more convenient methods for enhancing their shopping experience. According to [19], the emergence of multichannel retailing has led retailers to utilize diverse online channels to enhance sales by offering merchandise to customers. Multichannel retailing encompasses the strategic planning, implementation, synchronization, and assessment of various channels utilized by retailers to offer customers information, products, services, and support. This approach aims to enhance customer value and cultivate a lasting relationship with consumers [20]. According to [21], the multichannel marketing approach has undergone a transformation to enhance customer experiences, resulting in the emergence of the omnichannel approach. [22], explained that omnichannel retailing can be defined as the cooperative handling of multiple channels and customer interaction points. Omnichannel retailing is distinguished by the integration of the processing of orders, which involves an ongoing transfer of information, collaborative operations, efficient logistics, and effective management of risks across multiple channels [23]. The competitiveness of omnichannel retailing is contingent upon the successful attainment and sustenance of outstanding interactions across all customer contact points, thereby engendering a comprehensive shopping experience [24]. This strategy is used by Matahari during the development of technology to increase customer retention, this aims to maintain the growth rate and profit achievement that has been set, in this case the author compiles the following hypothetical formula:

- H1: Omnichannel Integration has a positive effect on customer retention within the fashion retailing industry for Matahari Department Store.
- H2: Omnichannel Seamlessness has a positive effect on customer retention within the fashion retailing industry for Matahari Department Store.
- H3: Omnichannel Fulfillment has a positive effect on customer retention within the fashion retailing industry for Matahari Department Store

III.3 Omnichannel Retailing, Shopping Experience and Customer Retention

Omnichannel consumption and problematizes the established OCR literature. Omnichannel consumption is driven by quest for a seamless consumer experience, utilization of modern retail technology, and the holistic management of channel integration. An omnichannel consumer seeks a seamless customer experience across all channels [14]. The omnichannel shopping experience refers to a strategy that combines many channels to optimize and simplify all customer interactions, resulting in a cohesive and seamless experience [25]. Retailers have been motivated to have a deeper comprehension of the entire customer journey to enhance the customer shopping experience [26].

Shopping experience has emerged as a crucial factor in the success of clothing businesses. In the context of omnichannel retailing, customer loyalty is influenced by both the perceived coordination between various channels and the overall shopping experience across those channels [27]. Customers derive emotional gratification in addition to the utilitarian benefits of using and enjoying fashion products. Simultaneously, through a well-executed omnichannel coordination plan, customers will accumulate experiences from each channel and formulate an assessment. The retailer's omnichannel approach, as described by [28], leads to a phenomenon known as integrated experience. Positive shopping experiences lead to greater merchant evaluations, resulting in increased purchasing frequency and the development of consumer loyalty which increases the ability of the firm to retain customers [29].

From the foundation theory which has been explained by referring to the research question and the objectives of the research, the author tries to collect several review literature to get a broader understanding and

theory from previous research, here are some research results that have been carried out by several authors, in this case the author refers to research conducted by Naglaa Mohammed Diaa and Heba Abdel Wahab in research entitled "Omnichannel Retailing and Customer Retention: The Mediating Effect of Omnichannel Shopping Experience" by combining research conducted by Hadiqa Raiz, Umair Baiq, Leva Meidute-Kavaliauskeine, Hassan Ahmad with the research title Factor effecting Omnichannel Customer Experience: evidence from fashion retail. These arguments have resulted in the formulation of the subsequent hypotheses:

- H4: Customer Shopping Experience has a positive effect on customers retention.
- H5: Omnichannel Integration has a positive effect on variable mediation shopping experience within the fashion retailing industry for Matahari Department Store.
- H6: Omnichannel Seamlessness has a positive effect on variable mediation shopping experience within the fashion retailing industry for Matahari Department Store.
- H7: Omnichannel Fulfillment has a positive effect on variable mediation shopping experience within the fashion industry for Matahari Department Store.

III.4 Omnichannel Integration

Channel Integration is defined as "*the degree to which different channels interact with each other*". Physical channels can promote knowledge of digital channels (offline-online integration), or digital channels can promote knowledge of physical channels (online-offline integration) [30]. Channel integration has three elements: channel stages, type, and agents [31]. A of multiple channels integration is variability of the delivered customer experience: only integrated channels can provide a seamless customers experience. To achieve such an objective, successful channel integration requires functional coordination and supply chain redesign [14].

Cross channel integration and the shift towards omnichannel strategy enables retailers to retain their customers while cohesively integrating the best of both offline and online consumerism. Researcher of [32] defined channel integration as a coordination and orchestration among various omnichannel operations and strategies including purchase and return of products, promotions, price, and distribution in such a way that the experience of interacting across all touchpoints become more efficient and rewarding than engaging solely with a single channel. According to [33], omnichannel integration falls under two categories. First, integrating online channels or information with offline channels. Second, integrating offline channels or information with online channel integration was one of the key determinants of a successful omnichannel strategy and claimed that without an absolute integration of silo channels, the multichannel model could not transform into the omnichannel model.

In recent years, much research has drooled over the augmented market value aligned with the implication of omnichannel integration [35]. It vanished the distinction between offline and online customer touch points where customers can easily transfer their shopping between devices [36]. Omnichannel retailing takes a wider perspective on creating synchronization and integration across channels to optimize customer experience with overall functional proficiency [37]. The recent literature on channel integration articulates various dimensions of omnichannel integration based on unification between online and offline resource, channel process consistency and order fulfillment with integrated planning which are the prerequisite for customer experience [38]. Omnichannel integration is likely to have an influence on omnichannel customer behavior and customer experience. With the support of the above literature, we have developed the following hypothesis.

Omnichannel is integrating all communication channels between the retailer and customer. Mobile technologies play a critical role as they are blurring the line between in-store and online shopping [39] cover this topic in relation to the use of mobile technologies by customers while physical, traditional, store. Mobile technologies include not just phones but also smartphones and tablets as they are used by customers.

III.5 Omnichannel Seamlessness

Matahari Department Store in recent years have encountered a growing complexity in the market environment, primarily caused by rapid advancements in digital technology These innovations have led to significant changes in consumers' lifestyles and their interactions with brands and businesses [6]. The concept of seamless shopping experiences encompasses various components, such as interactions with different channels, devices, and touchpoints [40]. The increasing prevalence of technological devices has led to a growing expectation among customers for an omnichannel experience that is characterized by accessibility, convenience, and seamlessness. In the context of omnichannel retailing, the seamlessness of the shopping experience is contingent upon the ease with which customers are able to restart their buying actions from the point at which they left off [41], According to the [42], omnichannel seamlessness refers to the degree to which customers perceive shopping across all physical, digital, and mobile devices as being adaptable, uniform, and user-friendly. The achievement of a seamless omnichannel experience necessitates the restructuring of customer value proposition components and activities to ensure the availability of products across various sales channels [43]. Nurturing omnichannel seamlessness requires reshaping customer value proposition elements and activities in term of product availability across different sales channels, Matahari with a lot of number inventory using traditional approached to manage and sale, face the challenge to provide seamless and deliver the promise, aligned the same point and suggested that retailers offer a seamless customer journey by removing perceived resistance and to ensure collaborative channel integration to maximize the advantage of omnichannel retailing, mentioned by [44] there are signified that customers with a positive shopping experience attempted to purchase online. In his cross sectional study, he determined that past online purchase experience directly linked to ease of use and performance expectancy.

III.6 Omnichannel Fulfillment

Omnichannel strategies could be considered from various perspectives, such as last mile fulfilment and omnichannel distribution in the supply chain [23], as well as embracing channel partners and leveraging employees' roles [44]. While various approaches, and do not specifically address the cross-channel specifications. However, [45] suggested omnichannel success could be achieved by focusing on each individual cross-channel, which could be segmented into four quadrants of online/offline information and product pickup/delivery. The focus is on information delivery and product fulfilment. According to [3] an effectively implemented omnichannel approach encompasses a streamlined fulfillment procedure that guarantees the convenient ordering, allocation, and shipment of products to the ultimate customer.

Omnichannel fulfilment is a mutual support method that manages customer orders received from a loop of multiple channels. These channels may involve, buy online return in store (BORIS), and buy online pick up in store (BOPIS), home delivery or any other approach to deliver the order to the final customers, has stated by [46]. From a supply chain perspective, omnichannel fulfilment exemplifies the unification of warehouse and physical distribution system to satisfy customer demand and enable retailers to nurture positive customer experience [3].

IV. METHODOLOGY

IV.1 Sample Selection and Sample Technique

Questionnaires spread through convenience sampling customers of Matahari which have experienced shopping through online and offline channel from Matahari. Determine the sample population, especially for customers who have experience with Matahari and we collect the data from chosen sample using the instruments which have designed, mention earlier we conduct the survey to get the data use electronic link Microsoft form, the link is circulated via WhatsApp, and email, a population is described as the aggregate of all elements that share some common set of characteristics and that comprise the universe for the purpose of the marketing research problem [47]. The total population gathered for this research is from customers which have experience with Matahari both of offline and online channel at various area in Indonesia by age groups 18-40 years old in 2024, which is gather in data 465.

From this population, a sample is the examined as the subgroup of the population selected for participation in the study (Rosendo Rios and Perez del Campo, 2013), because the study is used to analyse the structural relationship between measured variables and latent construct (Structural Equation Modelling), the sample size will follow the sample-to-item ratio. The ratio should not be less than 5-to-1 according to [48]. This study include 24 items (questions), so the required respondent amount would be 24x5, which are minimum should 120 respondents. Moreover, [49] argue that sample between 200-400 respondents should be acquired to reduce biases and to generate accurate and reliable results. For determining sample size, the sample size of 465 omnichannel shoppers was satisfactory to run statistical tests and to generate significant results. After studying the dynamic of the population and prior research thoroughly, the respondents were selected for an online survey under the following criteria in order to gain the probability of selection in a sample.

- The respondent must have used more than one sales channel (online shopping from a desktop or mobile device, or in an off line stores).
- Have purchase fashion related items from Matahari Department Store.
- Range of age groups within 18-40 years old in 2024

IV.2 Case Study

For the case study the author to choose Matahari Department Store for research, the following criteria have been adopted to select Matahari Department Store as fashion retail companies for the research:

- Matahari department store as the fashion retailer have more than one sales channel (off line storebrick and mortar store, website for e-commerce and mobile app for shopping)
- Matahari Department Store dealing in fashion industries.
- Matahari Department store work within the Indonesia market.

IV.3 Measuring Instrument and Data Collection

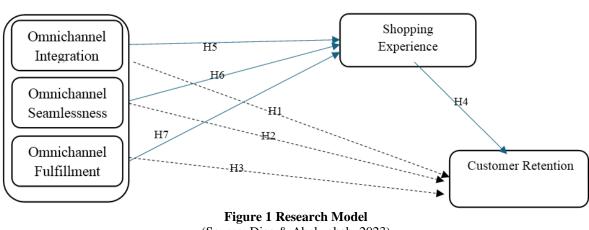
Author decided to adopt a quantitative approach since we have to undergo in depth analysis of omnichannel retailing and omnichannel customer retention throughout their buying journey. Data were collected with the help of a properly structured five-point Likert scale survey questionnaire to explore the efficiency of omnichannel retailing and to determine whether these selected Matahari Department store. The questionnaire was adopted from the scale developed by [41] and make some modification to meet with the result expectation, which assesses two of the omnichannel retailing dimension: omnichannel integration (10 items) and omnichannel fulfilment (4 items). The measurement of the third dimension of the omnichannel retailing which is the omnichannel seamlessness (2 items) was measure using the scale developed by [50], while the measurement of the shopping experience (3 items) was carried out using the scale of [51] [52]. Finally, the customer retention (5 items) was measured using the scale adapted from [53]. The various components of the instruments were assessed using a five-point Linkert scale, which encompassed responses ranging from "strongly agree" to " strongly disagree". The concluding section of the questionnaire gathered demographic information from the respondents, encompassing variables such as gender, age, average monthly income, education. Data collection method for this research through online convenience sample survey, the author is able to collect primary data by giving questionnaires use convenience technique to every respondent, the author use the element of omnichannel retailing which described early on conceptual framework.

IV.4 Data Analysis Methods

The data were analyzed using SmartPLS. Construct reliability and validity (Discriminant and convergent) were examined through a regular PLS algorithm, the bootstrapping resampling method was used to test the statistical significance of various hypothesized relationships, in addition, standardized root mean square residuals (SRMR) and Table R square were used to asses model fitness. PLS structural equation modelling was performed because of its capability to model multiple relationships concurrently and curb the endogeneity problem.

IV.5 Research Model

This study develops the conceptual framework to determine the factors of omnichannel retailing to create the customer retention. Omnichannel factors also hypothesized the influence on Shopping experience, which is conceptualized as a mediating variable in this research. The below diagram presents a proposed research model and display five postulated research hypotheses related to direct and indirect effect. Omnichannel retailing dimensions (such as omnichannel integration, omnichannel seamlessness, and omnichannel fulfilment) were evaluated by using 3 items and were adopted from the study [41].



Omnichannel Retailing

V. **RESULT AND DISCUSSION**

5.1 **Respondent Demographic Profiling**

From the initial stage of preparing the questions in the questionnaire, the author has filtered the sample to consumers who already have experience shopping in the Matahari by using several channels in omnichannel shopping. Out of 428 omnichannel customer, indicate that the largest percentage of respondents were female with 67.3% compared to males 32.7%, and the age group from 31-40 years was the most interactive with 27.7%, followed by the age group between 26-30 years old. Respondents experienced with offline shopping at Matahari

⁽Source: Diaa & Abelwahab, 2023)

store were 98.1%, while respondent experienced shopping at Matahari online were 93.7% and respondent which have experience shopping both of online and offline in Matahari were 92% with total 428 respondent. The monthly average spending of 49.9% of the respondents ranged from Rp.2.500.000 to Rp.5.000.000. the average of respondents spend at Matahari store were 52% with range Rp.250.000-500.000, while average respondent spends at Matahari online were 28.8% range Rp.250.000-500.000. the respondent prefers to buy product or categories at Matahari store 19.78% prefers to buy shoes and sandal and same with respondent on online with highest preference for shoes and sandal with 28.6%.

5.2 Indicator Reliability

The data were analysed using few steps. In the first step, the author examined the reliability and convergent validity of the proposed model. The indicator of reliability was as curtained through the indicator of outer loading, whereas convergent validity was examined through the average variance extracted.

Variable Construct	Indicators	Outer Loading	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
Omnichannel	OI1	0.797	0.953	0.959	0.702
Integration	OI2	0.802			002
0	OI3	0.860			
	OI4	0.870			
	OI5	0.810			
	OI6	0.839			
	OI7	0.836			
	OI8	0.848			
	OI9	0.863			
	OI10	0.852			
Omnichannel	nichannel OF1 0.890 0.929	0.950	0.826		
Fulfilment	OF2	0.923	-		
	OF3	0.929			
	OF4	0.892			
Omnichannel	OS1	0.963	0.920	0.961	0.926
Seamlessness	OS2	0.961			
Shopping	SE1	0.939	0.938	0.961	0.890
Experience	SE2	0.945			
	SE3	0.946			
Customer	CR1	0.890	0.940	0.954	0.806
Retention	CR2	0.891			
	CR3	0.917			
	CR4	0.913			
	CR5	0.878			

 Table 1 Indicator Reliability and Convergent Validity

From the Table 1 examined that "Variable Omnichannel Integration" were the level of acceptable variable reliability shown by Cronbach's alpha and composite reliability above 0.70 (reliable), the level of convergent validity indicated by the AVE value of 0.702 >0.50 has met the requirements of good convergent validity, overall the variation of measurement items contained by the variable reaches 0.702 or 70.2%, while for "Variable Omnichannel Fulfilment" measured by 4 (four) measurement items is valid, the level of acceptable variable reliability is shown by Cronbach's alpha and composite reliability above 0.70 (reliable), the level of convergent validity indicated by AVE values of 0.826 >0.50 has met the requirements of good convergent validity, overall the variation of measurement items contained by variables is 0.826 or 82.6%. The variable "Omnichannel Seamlessness" is measured by 2 (two) measurement items "valid" the level of variable reliability is acceptable indicated by Cronbach's alpha and composite reliability above 0.70 (reliable), the level of convergent validity is good, overall variation in measurement items contained by the variable reaches 0.926 or 92.6%. "Shopping Experience variable", measured by 3 (three) valid measurement items the level of reliability of the variable is acceptable indicated by the value of Cronbach's alpha and composite reliability above 0.70 (reliable, the level of convergent validity indicated by the AVE value of 0.890 >0.50 has met the requirements of good convergent validity, overall the variation of measuring items contained by the variable reaches 0.809 or 80.9%. "Customer retention" variables are measured using 5 (five) valid measurement items The level of reliability of the variable is acceptable indicated by the value of Cronbach's alpha and composite reliability above 0.70 (reliable), the level of convergent validity indicated by the AVE value of 0.806>0.50 has met the requirements of good convergent validity, overall the variation of measuring items contained by the variable reaches 0.806 or 80.6%.

5.3 Discriminant Validity

Discriminant validity measures the degree to which construct are different from another construct in the mode. evaluation of discriminant validity needs to be done by looking at fornell and lacker criteria, Heterotrait-Monotrait Ratio (HTMT), and Cross Loading. Discriminant validity is a form of evaluation to ensure that variables are theoretically different and empirically proven / statistical testing.

a. Fornell and Lacker Criterion

The Fornell and Lacker criterion is that the root AVE variable is greater than the correlation between variables. Accoring to Table 2 The Customer Retention variable has a greater AVE root correlation with omnichannel fulfilment (0.702), greater with omnichannel integration (0.705), greater than omnichannel seamlessness (0.676) and greater correlation with shopping experience (0.734). This result shows that the validity of the customer retention variable discrimination is met. Thus with the validity of omnichannel fulfilment, omnichannel integration, omnichannel seamlessness and shopping experience where the root of AVE is greater than the correlation between variables.

Variable	Customer	Omnichannel	Omnichannel	Omnichannel	Shopping
	Retention	Fulfilment	Integration	Seamlessness	Experience
Customer Retention	0.898				
Omnichannel Fulfilment	0.702	0.909			
Omnichannel Integration	0.705	0.846	0.838		
Omnichannel Seamlessness	0.676	0.765	0.732	0.962	
Shopping Experience	0.734	0.738	0.778	0.643	0.944

Table 2 Discriminant Validity (Fornell-Larcker Criterion)

b. Heterotrait-Monotrait Ratio (HTMT)

Table 3 Heterotrait-Monotrait ration (HTMT)

Variable	Customer	Omnichannel	Omnichannel	Omnichannel	Shopping
	Retention	Fulfilment	Integration	Seamlessness	Experience
Customer Retention					
Omnichannel	0.750				
Fulfilment					
Omnichannel	0.742	0.897			
Integration					
Omnichannel	0.726	0.827	0.783		
Seamlessness					
Shopping Experience	0.779	0.790	0.818	0.691	

The table 3 above displays the Heterotrait-Monotrait correlation ratio (HTMT), a criterion for assessing discriminant validity in the context of confirmatory factor analysis or structural equation modelling. Discriminant validity tests whether supposedly unrelated concepts or measurements are unrelated. All these HTMT values are below 0.90, indicating that discriminant validity is achieved for this pair of constructions. This shows that these constructs are different from each other, and that the scale items used to measure these different constructs do not overlap significantly in measurement.

c. Cross Loading

Cross loading shows how much each item correlates with each construct in factor analysis or structural equation modelling. This helps in evaluating the convergent and discriminant validity of the construction measured by the item. To support discriminant validity, these items must contain a much higher construct than other constructs. Ideally, the difference should be significant, usually indicating that cross-loading on non-target construction should be lower by at least 0.2 or more. For good convergent validity, items must have a high charge on their respective constructs (usually above 0.7), indicating that they are good indicators of that construct.

		Table	e 4 Cross Loading		
VARIABLE	CUSTOMER RETENTION	OMNICHANNEL FULFILNESS	OMNICHANNEL INTEGRATION	OMNICHANNEL SEAMLESNESS	SHOPPING EXPERIENCE
CR1	0,890	0,667	0,657	0,596	0,710
CR2	0,891	0,630	0,594	0,616	0,601
CR3	0,917	0,614	0,626	0,588	0,637
CR4	0,913	0,614	0,636	0,596	0,651
CR5	0,878	0,623	0,645	0,635	0,687
OF1	0,640	0,890	0,757	0,688	0,643
OF2	0,612	0,923	0,779	0,667	0,698
OF3	0,651	0,929	0,751	0,703	0,654
OF4	0,648	0,892	0,785	0,720	0,687
011	0,540	0,658	0,797	0,550	0,645
0110	0,623	0,751	0,852	0,593	0,719
012	0,521	0,647	0,802	0,563	0,598
013	0,587	0,690	0,860	0,628	0,589
014	0,599	0,756	0,870	0,656	0,631
015	0,554	0,662	0,810	0,636	0,572
016	0,591	0,715	0,839	0,635	0,624
017	0,644	0,728	0,836	0,662	0,637
018	0,605	0,717	0,848	0,599	0,712
019	0,624	0,747	0,863	0,618	0,758
OS1	0,660	0,750	0,706	0,963	0,627
OS2	0,640	0,721	0,703	0,961	0,609
SE1	0,665	0,681	0,729	0,588	0,939
SE2	0,700	0,691	0,725	0,590	0,945
SE3	0,711	0,718	0,747	0,639	0,946

The table 4 above shows the cross loading of various items (indicators) on different constructions. Cross loading shows how much each item correlates with each construct in factor analysis or structural equation modelling. This helps in evaluating the convergent and discriminant validity of the construction measured by the item. To support discriminant validity, these items must contain a much higher construct than other constructs. Ideally, the difference should be significant, usually indicating that cross-loading on non-target construction should be lower by at least 0.2 or more. For good convergent validity, items must have a high charge on their respective constructs (usually above 0.7), indicating that they are good indicators of that construct. It is explained in the table that the cross loading value of the relationship of each variable of the same has a higher value when compared to the relationship with other variables.

5.4 Structure Model Evaluation

Structural model evaluation is related to testing the hypothesis of influence between research variables. The structural model evaluation examination is carried out in three stages, namely **first** checking the absence of multicollination between variables with the size of the Inner VIF (Variance Inflated Factor), the value of Inner VIF below 5 shows that there is no multicollination between variables, [54], **Second**, is testing the hypothesis between variables by looking at the statistical t value or p-value. If the statistical t of the calculation result is greater than 1.96 (t table) or the p-value of the test result is smaller than 0.05, there is a significant influence between variables. In addition, it is necessary to submit the results and the interval of confidence of 95% of the estimated parameters of the path coefficient. **Third**, the value of f square is the influence of direct variables at the structural level with criteria (f square 0.02 low, 0.16 moderate, and 0.35 high). [54] and f square mediation effect called upsilon v statistic obtained by squaring the mediation coefficient, lachowics et al (2018) interpreted in Ogbeibu et al (2022) is a low mediation effect (0.02), medium mediation effect (0.075) and high mediation effect (0.175) consisting of:

		Table 5 M	luiticollinear Test		
Variable	Customer	Omnichannel	Omnichannel	Omnichannel	Omnichannel
	Retention	Fulfillment	Integration	Seamlessness	Experience
Customer					
Retention					
Omnichannel	4.334				4.175
Fulfillment					
Omnichannel	4.445				3.741
Integration					
Omnichannel	2.585				2.567
Seamlessness					
Omnichannel	2.706				
Experience					

a. Multicollinear Test (Inner VIF<5)

Before testing the structural model hypothesis, it is necessary to see whether there is a multicollinear
between variables, namely with the statistical size of inner VIF. Table 5 indicate that the estimation results show
an inner value of VIF<5, hence the multicollinear level between variables is low. This result corroborates the
results of parameter estimation in SEM PLS is robust (unbiased).

IF<0) Table 5 Multicollinear Test

Hypothesis	Path Coefficient	P-value	1	fidence interval ficient	F square
			Lower Limit	Upper Limit	
H1. OMNICHANNEL INTEGRATION - > CUSTOMER RETENTION	0,103	0,292	-0,067	0,318	0,006
H2. OMNICHANNEL SEAMLESNESS - > CUSTOMER RETENTION	0,238	0,000	0,125	0,354	0,058
H3. OMNICHANNEL FULFILNESS -> CUSTOMER RETENTION	0,139	0,087	-0,026	0,293	0,012
H4. SHOPPING EXPERIENCE -> CUSTOMER RETENTION	0,398	0,000	0,267	0,517	0,155
H5. OMNICHANNEL INTEGRATION - > SHOPPING EXPERIENCE	0,513	0,000	0,285	0,755	0,191
H6. OMNICHANNEL SEAMLESNESS - > SHOPPING EXPERIENCE	0,081	0,301	-0,080	0,224	0,007
H7. OMNICHANNEL FULFILNESS -> SHOPPING EXPERIENCE	0,242	0,008	0,066	0,418	0,038

b. Table Hypothesis Testing (Direct effect) Significance Test path coefficient (P Value <0.05 sig) Table 6 Hypothesis Testing and Significance Test Path Coefficient

Based on result of the table 6 above hypothesis testing, explain that hypothesis H1, hypothesis H3 is not accepted (insignificant) that there is no effect of omnichannel integration, omnichannel fulfilness significance on customer retention with path coefficient and P value for each result of hypothesis H1:0.292, H3:0.087, greater than 0.05 or (0.292 and 0.087 >0.05). and for hypothesis H6 with Path coefficient and P value also greater than 0.05 (0.301 >0.05) mean that is not accepted (insignificant) that there is no effect on shopping experience

c. Size F Square effect (indirect influence and mediation) Table 7 Size F Square effect

	1 able	e / Size F Squai	e effect		
Hypothesis	Path Coefficient	p-value	95% Confidence	ce interval path	Upsilon v
			Coeff	icient	
			Lower Limit	Upper Limit	
OMNICHANNEL	0,096	0,015	0,025	0,179	0,0093
FULFILNESS -> SHOPPING					
EXPERIENCE ->					
CUSTOMER RETENTION					
OMNICHANNEL	0,204	0,000	0,110	0,330	0,0417
INTEGRATION ->					
SHOPPING EXPERIENCE -					
> CUSTOMER RETENTION					
OMNICHANNEL	0,032	0,326	-0,029	0,100	0,0010
SEAMLESNESS ->					
SHOPPING EXPERIENCE -					
> CUSTOMER RETENTION					

Based on the results of the table 7, describes the indirect relationship between variable fulfilness, variable integration and variable seamlessness with variable mediation of shopping experience to customer retention, where omnichannel fulfilness and shopping experience as variables of mediation and customer retention accepted where shopping experience acts as a mediating variable, namely mediating the indirect effect of omnichannel fulfilness on customer retention with a mediation path coefficient of 0.096 and p-value (0.015 < 0.0150.05). However, at the structural level, the role of shopping experience mediation is still classified as a low mediation effect (upsilon v = 0.0093) provided that Haier at al. (2021) and f square mediation effect is called the upsilon v statistic obtained by squaring the mediation coefficient. omnichannel integration>>shopping experience>>Customer retention, accepted where shopping experience acts as a mediating variable, namely mediating the indirect effect of omnichannel integration on customer retention with a path coefficient of mediation of 0.204 and p-value (0.000 < 0.05). However, at the structural level, the role of mediation shopping experience is still relatively low (upsilon v = 0.0417) provided that [54] and f square mediation effect is called statistical upsilon v obtained by squaring the mediation coefficient, [55] interpreted in Ogbeibu et al (2022) is a low mediation effect (0.02), medium mediation effect (0.075) and high mediation effect (0.175). Within a 95% confidence interval, by improving the shopping experience, this mediating role is expected to increase to 0.330. omnichannel seamlessness>>shopping experience>>customer retention, is not accepted where shopping experience does not play a role as a mediating variable, namely when mediating the indirect influence of omnichannel integration on customer retention with a mediation coefficient path of 0.032 and p-value (0.326>0.05), similarly in the structural level the role of shopping experience mediation is still relatively low (upsilon v = 0.0010) provided that the effect of mediation is low (0.02), The effect of mediation is moderate

(0.075) and the effect of mediation is high (0.175). Within a 95% confidence interval by improving the shopping experience, this mediation role is expected to increase to 0.100.

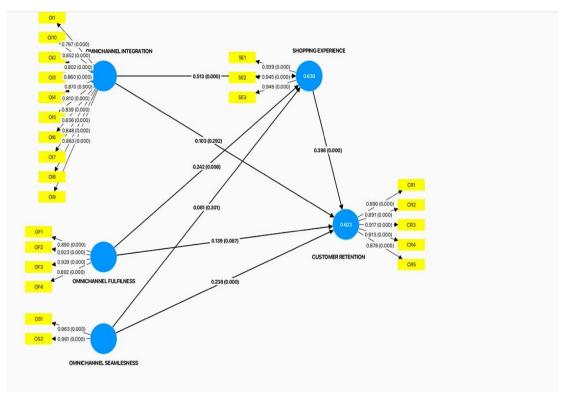


Figure 2 Diagram path Coefficient and P-Value

According to Figure 2, Omnichannel Integration has a weak and non-significant direct impact on Customer Retention. This suggests that integration might affect retention indirectly through other factors such as shopping experience. Omnichannel Fulfilment has a very weak and non-significant direct impact on Customer Retention. Omnichannel Seamlessness has a moderate, significant positive impact on Customer Retention, indicating that seamlessness directly influences customer loyalty. These results show that any change in omnichannel seamlessness will more powerfully increase customer retention.

5.5 Model Fitness

a. Table R Square

	Table 8 Table R So	quare
Variable	R-Square	R-Square Adjusted
Customer Retention	0.623	0.619
Shopping Experience	0.630	0.628

Table 8 of R-Square state that the statistical size of R Square describes the magnitude of variation in endogenous variables that can be explained by other exogenous variables in the model. According to [56] the value of R Square interpretation qualitatively be 0.19 (low influence), 0.33 (moderate influence), and 0.66 (high influence). Based on the results of the processing above, it can be said that the magnitude of the joint influence of omnichannel integration, omnichannel fulfilness and omnichannel seamlessness on customer retention is 62.3% (the influence is close to high). The magnitude of the co-influence of omnichannel integration, omnichannel seamlessness on Shopping Experience is 63% (influence is close to high).

b. Table SRMR

Table 9 Table Standardized Root mean Square Residual

	,	1
Items	Saturated Model	Estimated Model
SRMR	0.042	0.042
D_ULS	0.529	0.529
D_G	0.571	0.571

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Chi-Square	1453.788	1453.788
NFI	0.870	0.870

SRMR stated on table 9 mentioning is about standardized Root Mean Square Residual. In [57], this value is a measure of model fit, which is the difference between the data correlation matrix and the model estimate correlation matrix. In [54] [1], an SMSR value below 0.08 indicates a fit model.

VI. CONCLUSION

The study on omnichannel retailing and customer retention at Matahari Department Store, Utilizing a mixed-methods approach, the research employed both quantitative data from surveys and sales records, and qualitative insights from observations. The research addressed the primary question: "What is the effect of omnichannel retailing dimensions (integration, seamlessness, fulfilment) on customer retention?" and explored the mediating role of shopping experience in this relationship. The results revealed that while omnichannel integration and fulfilment had limited direct effects on customer retention, omnichannel seamlessness significantly enhanced customer loyalty. Additionally, the shopping experience was found to play a crucial mediating role, linking the effectiveness of omnichannel strategies to increased customer retention. The shopping experience emerged as a critical mediator, enhancing the positive effects of omnichannel strategies on customer loyaltyThese findings suggest that for Matahari to enhance customer retention, a focus on improving fulfillment processes and ensuring a seamless and integrated shopping experience across all platforms is crucial.

6.1 Implication for Fashion Industri

The results of this study align with the theoretical principles of omnichannel retailing and propose practical methods for developing a completely unified shopping experience and effective omnichannel strategies. First, Enhanced Customer Experience fashion retailers should prioritize creating a seamless and integrated shopping experience across all channels to meet evolving consumer expectations. This includes synchronizing online and offline platforms to provide a consistent customer journey. Second, Focus on Fulfillment efficient and reliable fulfillment processes are essential. Retailers should invest in technologies and logistics solutions that ensure timely and accurate delivery, as this significantly impacts customer retention. Third, Omnichannel Strategy developing a robust omnichannel strategy that includes integration and seamlessness will help retailers remain competitive. This strategy should encompass various touchpoints, including physical stores, e-commerce platforms, and mobile applications, to provide a holistic shopping experience. Finally, Fashion Retailer need more focus on Customer Data Utilization leveraging customer data from various channels can help retailers understand consumer behavior and preferences better, enabling personalized marketing and improved customer service.

6.2 Limitation and Future Research

This research has several limitations that also present opportunities for future investigation. The study utilized various omnichannel constructs to evaluate their impact on the omnichannel customer experience. Future research could explore additional dimensions (e.g., connectivity, personalization, consistency) and develop alternative models to gain deeper insights into omnichannel customer experiences. From a research design perspective, our study primarily relied on survey methods for data collection. Additionally, our sample consisted only of Indonesian customers in few city where Matahari Dept Store established, which may raise concerns about the generalizability of the findings. Therefore, future studies should collect data from diverse geographic locations to enhance external validity. The current study gathered data based on users' past omnichannel experiences, with some participants recalling their shopping experiences from memory. Such data may not accurately reflect Matahari Department Store's current strategies for delivering a seamless omnichannel experience. We recommend future research to employ a mixed-method approach or field experiments to critically examine the causal relationships described in the study model. Furthermore, the criteria for selecting survey respondents who have used more than one sales channel at least once may not fully represent the target population. Future studies should compare the omnichannel experiences of one-time users with repeat buyers to provide a more comprehensive analysis.

REFERENCES

- [1]. https://medium.com/with-bright-indonesia/indonesian-market-insight-for-global-fashion-companies-61b34b06a873
- Rigby, D.; Kirby, J. Delivering on customer expectations. In Omnichannel Retail; Harvard Business Review: New York, NY, USA, 2011; pp. 1–4

[3]. Riaz, Hadiqa & Baig, Umair & Meidute-Kavaliauskiene, Ieva & Ahmed, Hassaan. (2021). Factors Effecting Omnichannel Customer Experience: Evidence from Fashion Retail. Information. 13. 10.3390/info13010012.

[4]. Nagar, Komal & Gandotra, Payal. (2016). Exploring Choice Overload, Internet Shopping Anxiety, Variety Seeking and Online Shopping Adoption Relationship: Evidence from Online Fashion Stores. Global Business Review. 17. 10.1177/0972150916645682.

- [5]. Shi, Si & Wang, Yi & Chen, Xuanzhu & Zhang, Qian. (2020). Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach. International Journal of Information Management. 50. 325-336. 10.1016/j.ijinfomgt.2019.09.001.
- [6]. Salvietti, G., Ziliani, C., Teller, C., Ieva, M., & Ranfagni, S. (2022). Omnichannel retailing and post-pandemic recovery: building a research agenda. International Journal of Retail & Distribution Management, 50(8/9), 1156-1181.
- [7]. Chua, Bee-Lia & Lee, Sanghyeop. (2017). Consequences of cruise line involvement: a comparison of first-time and repeat passengers. International Journal of Contemporary Hospitality Management. 29. 10.1108/IJCHM-09-2015-0452.
- [8]. Norbert, Beck & Rygl, David. (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. 10.1016/j.jretconser.2015.08.001.
- [9]. Yan, B., Yan-Ru, C., Xiao-Tai, Z., & Fang, J. (2019). Consumer behavior in the omni-channel supply chain under social networking services. [Omni-channel supply chain under SNSs] *Industrial Management & Data Systems*, 119(8), 1785-1801. https://doi.org/10.1108/IMDS-03-2019-0111
- [10]. Shen, Xiao-Liang & Li, Yang-Jun & Sun, Yongqiang & Wang, Nan. (2018). Channel Integration Quality, Perceived Fluency and Omnichannel Service Usage: The Moderating Roles of Internal and External Usage Experience. Decision Support Systems. 10.1016/j.dss.2018.01.006.
- [11]. Huré, Elodie & Picot-Coupey, Karine & Ackermann, C.-L. (2017). Understanding omni-channel shopping value: A mixed-method study.
- [12]. Scupola, Ada & Giannakos, Michail & Pateli, Adamantia & Pappas, Ilias. (2013). Identifying the Direct Effect of Experience and the Moderating Effect of Satisfaction in the Greek Online Market. 10.4018/978-1-4666-2654-6.ch005.
- [13]. Chen, Yang & Cheung, Christy & Tan, Chee-Wee. (2018). Omnichannel business research: Opportunities and challenges. Decision Support Systems. 109. 10.1016/j.dss.2018.03.007.
- [14]. Piotrowicz, Wojciech & Cuthbertson, Richard. (2018). Exploring Omnichannel Retailing: Common Expectations and Diverse Reality: Common Expectations and Diverse Realities. 10.1007/978-3-319-98273-1_1.
- [15]. Norbert, Beck & Rygl, David. (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. 10.1016/j.jretconser.2015.08.001.
- [16]. Manser Payne, Liz & Peltier, James & Barger, Victor. (2017). Omni-channel marketing, integrated marketing communications and consumer engagement: A research agenda. Journal of Research in Interactive Marketing. 11. 185-197. 10.1108/JRIM-08-2016-0091.
- [17]. Rangaswamy, A. and Van Bruggen, G.H. (2005), Opportunities and challenges in multichannel marketing: an introduction to the special issue, Journal of Interactive Marketing, Elsevier BV, Vol. 19 No. 2, 5-11.
- [18]. Norbert, Beck & Rygl, David. (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. 10.1016/j.jretconser.2015.08.001.
- [19]. Zhang, Jie & Farris, Paul & Kushwaha, Tarun & Irvin, John & Steenburgh, Thomas & Weitz, Barton. (2009). Crafting Integrated Multichannel Retailing Strategies. Journal of Interactive Marketing. 24. 10.2139/ssrn.1389644.
- [20]. Neslin, Scott & Grewal, Dhruv & Leghorn, Robert & Shankar, Venkatesh & Teerling, Marije & Thomas, Jacquelyn & Verhoef, Peter. (2006). Challenges and Opportunities in Multichannel Customer Management. Journal of Service Research - J SERV RES. 9. 95-112. 10.1177/1094670506293559.
- [21]. Carroll, D., & Guzmán, I. (2015). The new omni-channel approach to serving customers: Strategy implications for communications service providers. Accenture Communications Industry Group.
- [22]. Verhoef, Peter & Kannan, P. K. & Inman, J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing. Journal of Retailing. 91. 10.1016/j.jretai.2015.02.005.
- [23]. Huebner, A., Wollenburg, J., & Holzapfel, A. (2016). Retail logistics in the transition from multichannel to omni-channel. International Journal of Physical Distribution & Logistics Management, 46(6–7), 562–583. https://doi.org/10.1108/ IJPDLM-08-2015-0179
- [24]. Von Briel, Frederik. (2018). The future of omnichannel retail: A four-stage Delphi study. Technological Forecasting and Social Change. 132. 10.1016/j.techfore.2018.02.004.
- [25]. Alnawas, Ibrahim & Hemsley-Brown, Jane. (2018). The differential effect of cognitive and emotional elements of experience quality on the customer-service provider's relationship. International Journal of Retail & Distribution Management. 46. 10.1108/IJRDM-03-2017-0058.
- [26]. Aubrey, C. & Judge, D. (2012). Re-imagine retail: Why store innovation is key to a brand's growth in the "new normal," digitally connected and transparent world. Journal of Brand Strategy. 1. 31-39.
- [27]. Chen, Xiaoxia & Su, Xiaofeng & Li, Zhongbin & Wu, Jingjing & Zheng, Manhua & Xu, Anxin. (2022). The impact of omnichannel collaborative marketing on customer loyalty to fresh retailers: the mediating effect of the omni-channel shopping experience. Operations Management Research. 15. 10.1007/s12063-022-00319-y.
- [28]. Chang MZ, Li AH (2020) Research on the impact of multichannel integration on cross-channel retention behavior. China Bus Market 34(6):41–50.
- [29]. Sun, Yuan & Jeyaraj, Anand. (2013). Information technology adoption and continuance: A longitudinal study of individuals' behavioral intentions. Information & Management. 50. 457–465. 10.1016/j.im.2013.07.005.
- [30]. Herhausen, Dennis & Binder, Jochen & Schoegel, Marcus & Herrmann, Andreas. (2015). Integrating Bricks with Clicks: Retailer-Level and Channel-Level Outcomes of Online–Offline Channel Integration. Journal of Retailing. 91. 10.1016/j.jretai.2014.12.009.
- [31]. Saghiri, Soroosh & Wilding, Richard & Mena, Carlos & Bourlakis, Michael. (2017). Toward a three-dimensional framework for omni-channel. Journal of Business Research. 77. 10.1016/j.jbusres.2017.03.025.
- [32]. Li, Gang & Zhang, Tao & Tayi, Giri. (2019). Inroad into Omni-Channel Retailing: Physical Showroom Deployment of an Online Retailer. European Journal of Operational Research. 283. 10.1016/j.ejor.2019.11.032.
- [33]. Shen, Xiao-Liang & Li, Yang-Jun & Sun, Yongqiang & Wang, Nan. (2018). Channel Integration Quality, Perceived Fluency and Omnichannel Service Usage: The Moderating Roles of Internal and External Usage Experience. Decision Support Systems. 10.1016/j.dss.2018.01.006.
- [34]. Buldeo Rai, Heleen & Mommens, Koen & Verlinde, Sara & Macharis, Cathy. (2019). How Does Consumers' Omnichannel Shopping Behaviour Translate into Travel and Transport Impacts? Case-Study of a Footwear Retailer in Belgium. Sustainability. 11. 2534. 10.3390/su11092534.
- [35]. Park, Joonyong & Kim, Renee. (2019). The effects of integrated information & service, institutional mechanism and need for cognition (NFC) on consumer omnichannel adoption behavior. Asia Pacific Journal of Marketing and Logistics. ahead-of-print. 10.1108/APJML-06-2018-0209.

- [36]. de Sousa, Paulo & Barbosa, Marcelo & Oliveira, Leise & Tarso, Paulo & Resende, Vilela & Rodrigues, Ricardo & Teixeira Moura, Myrian & Matoso, Daniel. (2021). Challenges, Opportunities, and Lessons Learned: Sustainability in Brazilian Omnichannel Retail. Sustainability. 13. 666. 10.3390/su13020666.
- [37]. Dabholkar, Pratibha & Sheng, Xiaojing. (2009). The role of perceived control and gender in consumer reactions to download delays. Journal of Business Research. 62. 756-760. 10.1016/j.jbusres.2008.06.001.
- [38]. Alexander, B.; Cano, M.B. Futurizing the physical store in the omnichannel retail environment. In Exploring Omnichannel Retailing; Springer: Cham, Switzerland, 2019; pp. 197–223.
- [39]. Perry, Patsy & Kent, Anthony & Bonetti, Francesca. (2019). The Use of Mobile Technologies in Physical Stores: The Case of Fashion Retailing: Common Expectations and Diverse Realities. 10.1007/978-3-319-98273-1_8.
- [40]. Cocco, Helen & Demoulin, Nathalie. (2022). Designing a seamless shopping journey through omnichannel retailer integration. Journal of Business Research. 150. 461-475. 10.1016/j.jbusres.2022.06.031.
- [41]. Diaa, Nagla & Abdelwahab, Heba. (2023). Omnichannel Retailing and Customer Retention: The Mediating Effect of Omnichannel Shopping Experience. دوالا تمويال الا تجارة. 10.21608/caf.2023.329148.
- [42]. Mirzabeiki, V., & Saghiri, S. S. (2020). From ambition to action: How to achieve integration in omni-channel? Journal of Business Research, 110, 1–11. doi:10.1016/j.jbusres.2019.12.028.10.1016/j.jbusres.2019.12.028 downloaded on 2020-01-08
- [43]. Sulastini, S., Fedorko, I., Bačík, R., & Fedorko, R. (2018). AN ANALYSIS OF ONLINE CONSUMER SHOPPING BEHAVIOUR. Polish Journal of Management Studies, 18(2), 338-349. doi:https://doi.org/10.17512/pjms.2018.18.2.27
- [44]. Hansen, Rina & Sia, Siew. (2015). Hummel's Digital Transformation Toward Omnichannel Retailing: Key Lessons Learned. MIS Quarterly Executive. 14. 51-66.
- [45]. Bell, David & Gallino, Santiago & Moreno, Antonio. (2014). How to Win in an Omnichannel World. MIT Sloan Management Review. 56. 45-+.
- [46]. Gao, Fei & Su, Xuanning. (2016). Omnichannel Retail Operations with Buy-Online-and-Pick-up-in-Store. Management Science. 63. 10.1287/mnsc.2016.2473.
- [47]. Malhotra, Naresh K. (2015). Essential of marketing Research: A hands of Orientation 6th ed. (6th). New Jersey: Pearson.
- [48]. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (Seven ed.). Upper Saddle River, NJ Prentice Hall: Pearson
- [49]. Uma Sekaran, Roger Bougie (2016). Research Methods for Business-a skill building approach, Seventh Edition. United Kingdom, Wiley.
- [50]. Huré, Elodie & Picot-Coupey, Karine & Ackermann, C.-L. (2017). Understanding omni-channel shopping value: A mixed-method study.
- [51]. Kim, Hyun Sik & Choi, Beomjoon. (2016). The effects of three customer-to-customer interaction quality types on customer experience quality and citizenship behavior in mass service settings. Journal of Services Marketing. 30. 384-397. 10.1108/JSM-06-2014-0194.
- [52]. Gao, Fei & Su, Xuanming. (2016). Omnichannel Retail Operations with Buy-Online-and-Pick-up-in-Store. Management Science. 63. 10.1287/mnsc.2016.2473.
- [53]. Gao, Wei & Li, Wenqian & Fan, Hua & Jia, Xingping. (2021). How customer experience incongruence affects omnichannel customer retention: The moderating role of channel characteristics. Journal of Retailing and Consumer Services. 60. 102487. 10.1016/j.jretconser.2021.102487.
- [54]. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N.P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Cham: Springer.
- [55]. Lachowicz, Mark & Preacher, Kristopher & Kelley, Ken. (2017). A Novel Measure of Effect Size for Mediation Analysis. Psychological Methods. 23. 10.1037/met0000165.
- [56]. Chin, Wynne & Marcoulides, G. (1998). The Partial Least Squares Approach to Structural Equation Modeling. Modern Methods for Business Research. 8.
- [57]. Yamin, S., & Kurniawan, H. (2021). Tutorial Statistik SPSS, LISREL, WARPPLS & JASP. PT Dewangga Energi Internasional: ISBN: 978-623-97574-7-2 (PDF)