

A DEEP DIVE INTO OMNI-CHANNEL INFLUENCE: UNDERSTANDING ITS IMPACT ON SHOPPERS' BUYING BEHAVIOR

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ABSTRACT

Purpose: This study investigates the influence of psychographic factors and omni-channel environments on shoppers' purchasing behavior. It aims to examine how key dimensions of omni-channel effectiveness—Channel Integration, Seamless Experience, and Ease of Use—interact with psychographic variables such as Expected Benefits, Required Effort, Social Influence, Behavioral Habits, and Security Perceptions to shape consumer preferences and behavior.

Methodology: A cross-sectional quantitative research design was utilized, involving a sample of 140 shoppers who engage with omni-channel environments. Data was collected through a structured questionnaire and analyzed using discriminant analysis and Structural Equation Modeling (SEM). These methods facilitated the exploration of relationships between omni-channel effectiveness dimensions, psychographic factors, and shoppers' purchasing behavior.

Findings: The study found that ease of use, social validation, and security are crucial drivers of consumer engagement in omni-channel settings. Significant correlations were observed between easier transactions and shopper preferences, as well as between minimal required effort and user satisfaction. Social media endorsements were found to have a substantial impact on shopper behavior. Channel Integration and Ease of Use were important, but the Seamless Experience had the most significant influence on purchasing decisions.

Conclusion: The research highlights the need for retailers to develop a unified, seamless shopping environment that effectively integrates multiple channels. Enhancing user-friendly interfaces, leveraging social media influence, and implementing robust security measures are essential strategies for improving shopper satisfaction and driving purchase behavior. By addressing these aspects, businesses can optimize the omni-channel experience and gain a competitive edge in the retail market.

INTRODUCTION

In the evolving landscape of retail and consumer behavior, the concept of omnichannel has emerged as a pivotal strategy for meeting the diverse and dynamic needs of modern shoppers. Omnichannel retailing represents a holistic approach to delivering a seamless customer experience across multiple touchpoints, integrating both physical and digital interactions (Hickman et al., 2020)¹. This strategy

¹ Hickman, E., Kharouf, H., & Sekhon, H. (2020). An omnichannel approach to retailing: Demystifying and identifying the factors influencing an omnichannel experience. *The International Review of Retail, Distribution and Consumer Research*, 30(3), 266–288. <https://doi.org/10.1080/09593969.2019.1694562>

aims to provide consumers with a cohesive and personalized shopping journey, regardless of the channels they choose to engage with. The integration of various channels—ranging from brick-and-mortar stores and branded websites to mobile apps, social media, and online marketplaces—has become essential for businesses seeking to remain competitive and responsive in today's fast-paced market environment (**Juaneda-Ayensa et al., 2016**)². Omnichannel is characterized by its focus on creating a unified customer experience. This involves ensuring that every touchpoint, whether it is a physical store, a phone call, a website visit, or an interaction through social media, offers consistent functionality and service quality. By bridging the gaps between different channels, businesses can cater to the evolving preferences and behaviors of shoppers who increasingly demand convenience and flexibility (**Verhoef et al., 2015**)³. According to recent research, 95% of customers use at least three different channels during their interactions with a company, and 62% of them switch devices midstream (**Bagozzi, 2000**)⁴. This underscores the need for a comprehensive omnichannel strategy that allows consumers to move seamlessly between platforms without disruption (**Shi et al., 2020**)⁵. The omnichannel approach addresses several critical aspects of customer engagement. Completeness of data is a core element, involving the integration of all customer interactions and purchase history from various sources, including website cookies, social media, and Internet of Things (IoT) data. This data is utilized to create personalized marketing content, product recommendations, and real-time customer service, enhancing the overall shopping experience (**Shi et al., 2020**). Automation further supports this strategy by leveraging data to manage inventory, generate marketing materials, and provide customer support efficiently. This results in a more responsive and adaptive business model that aligns with the expectations of today's consumers (**Juaneda-Ayensa et al., 2016**).

The impact of omnichannel strategies extends beyond customer experience. Companies adopting this approach often see tangible benefits in various operational areas. For instance, customer expectations have shifted significantly, with a substantial portion of consumers prioritizing the quality of their shopping experience over the price of products (**Hickman et al., 2020**). A McKinsey & Co.⁶ survey highlights that 41% of leaders regard e-commerce as the most effective sales channel,

² Juaneda-Ayensa, E., Mosquera, A., & Murillo, Y. S. (2016). Omnichannel customer behavior: Key drivers of technology acceptance and use and their effects on purchase intention. *Frontiers in Psychology*, 7, Article 1117. <https://doi.org/10.3389/fpsyg.2016.01117>

³ Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omnichannel 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>

⁴ Bagozzi, R. P. (2000). On the concept of intentional social action in consumer behavior. *Journal of Consumer Research*, 27(3), 388–396. <https://doi.org/10.1086/317593>

⁵ Shi et al., (2020) Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach, *International Journal of Information Management* 50:325-336, DOI:10.1016/j.ijinfomgt.2019.09.001

⁶ McKinsey & Company. (2019). How to win in omnichannel retail. Retrieved from <https://www.mckinsey.com/industries/retail/our-insights/how-to-win-in-omnichannel-retail>

surpassing traditional in-person interactions (**Juaneda-Ayensa et al., 2016**). This trend emphasizes the growing importance of online engagement and the need for businesses to refine their digital strategies.

Additionally, price flexibility has become a crucial consideration. Research indicates that consumers are willing to pay a premium for exceptional service, allowing businesses to focus on delivering superior customer experiences without being overly constrained by cost concerns (**Verhoef et al., 2015**). Less stagnant inventory is another advantage of omnichannel systems, which facilitate the sharing of stock data across channels (**Agudo-Peregrina et al., 2015**)⁷. This minimizes the risk of unsold inventory and reduces storage costs, as evidenced by the “endless aisle” concept employed by leading retailers. By enabling in-store customers to access online inventory and arrange for delivery or pickup, companies can optimize their stock management and enhance customer satisfaction (**Lemon & Verhoef, in press**)⁸.

Increased profits and upsell and cross-sell opportunities are further benefits associated with effective omnichannel strategies. Investment in customer experience has been shown to drive significant revenue growth, with companies focusing on customer satisfaction seeing substantial increases in profitability (**Hickman et al., 2020**). The data-driven nature of omnichannel approaches enables businesses to identify opportunities for upselling and cross-selling, leveraging targeted communications to recommend complementary products and services (**Agudo-Peregrina et al., 2015**).

REVIEW OF LITERATURE

Park, S., & Lee, D. (2017), investigate the impact of smart devices on consumer behavior in an omnichannel retail environment, with a focus on the mobile channel's role in Customer Relationship Management (CRM). The study utilizes a four-year dataset from an online home-shopping provider that expanded its services to include mobile platforms, examining consumer channel choice behavior through sociodemographic information, consumer behavior, and corporate communication strategies. Employing a multivariate probit model, the analysis reveals that age and gender significantly influence channel choice, with communication strategies like SMS and app push notifications also playing a crucial role. Additionally, mobile channel users exhibit unique purchasing behaviors, often shopping without time constraints, and products requiring detailed information, such as experience or credence goods, are more likely to be bought via mobile or Internet channels. The study concludes that there is a substitution effect between most channels, except for Internet and telephone, offering valuable insights for online retailers on consumer preferences and cross-channel effects in an omnichannel environment.

Heitz-Spahn, S., Yildiz, H., & Belaud, L. (2018), aimed to develop a typology of consumers based on their choice of channels and the number of retailers visited during the decision-making phases of information search and purchase. Utilizing the Person-Object-Situation paradigm, the researchers analyzed shopping motives and sociodemographic characteristics for each group, linking these profiles to the product categories purchased. The study employed an online survey to collect data on respondents' behavior regarding non-food goods purchased within six months prior to the survey. The structural equation model revealed that product categories significantly influence consumer

⁷ Agudo-Peregrina, Á. F., Chaparro-Peláez, J., & Pascual-Miguel, F. J. (2015). Influences of gender and product type on online purchasing. *Journal of Business Research*, 68(7), 1550–1556. <https://doi.org/10.1016/j.jbusres.2015.01.050>

⁸ Lemon, K. N., & Verhoef, P. C. (in press). Understanding customer experience throughout the customer journey. *Journal of Marketing*. <https://doi.org/10.1509/jm.15.0420>

behaviors, while shopping motives and sociodemographic variables have minimal impact. The multinomial logit analysis indicated that consumers' channel and retailer choices are often dependent on product categories. The study concludes that understanding the influence of product categories on consumer profiles can help retailers predict which channels consumers are likely to use for information search and purchase, thereby enhancing customer segmentation strategies.

Xu, X., & Jackson, J. E. (2019). aimed to investigate the factors influencing customer channel selection intention in an omni-channel retail setting. The study conducted empirical analyses through surveys of customers in the United States and United Kingdom, focusing on channel transparency, convenience, and uniformity. Findings indicated that these factors positively influence customer perceived behavioral control and reduce perceived risk, with channel transparency and uniformity being more impactful than convenience. The study also revealed that higher product prices enhance the effect of these factors on reducing perceived risk. Additionally, perceived behavioral control and channel price advantage positively, while perceived risk negatively, affect customer channel selection intention. The research offers insights for omni-channel retailers to better understand customer perceptions and improve their supply chain management to attract more demand.

Swan, E. L., Dahl, A. J., & Peltier, J. W. (2019). aimed to investigate attitudinal factors influencing the adoption and usage of telemedicine (TM) within consumers' omni-channel decision-making environment. The study analyzed surveys from 869 patients using multiple linear regression to examine the relationships between health decision-making, TM access benefits, and omni-channel touchpoints on TM usage likelihood. The findings indicated that attitudinal constructs related to TM's benefits, including access and health decision-making, have the strongest impact on future TM usage, and there is a significant link between consumers' omni-channel information seeking and TM usage. The research suggests that increasing consumers' involvement across omni-channel touchpoints enhances perceived benefits and encourages TM usage. This study integrates shared decision-making, technology acceptance, and omni-channel marketing literature to explore TM acceptance and usage within the context of consumers' omni-channel decision process.

Cai, Y. J., & Lo, C. K. (2020). aimed to reveal established knowledge in omni-channel retailing literature and generate managerial implications for firms while providing guidelines for future research. This review paper employed citation network analysis (CNA) to systematically analyze the literature, identifying seven independent and interdependent research domains that constitute a comprehensive view of "omnichannel management." The main path analysis indicated ongoing studies in each identified domain, but highlighted a lack of focus on the roles of new technologies and the absence of research on supply chain and inventory management in the omni-channel environment. The proposed framework for "omnichannel management" (PFOM) contributes to the literature and offers practical applications for retail firms planning to implement an omni-channel strategy.

Bijmolt, Sousa, & Zhu, S. X. et.al., (2021). aimed to develop a framework for integrating marketing and operations perspectives in omni-channel retailing to enhance coordination across channels and stages of the customer journey and product flow. They identified three key decision areas: assortment and inventory, distribution and delivery, and returns. The study explored the interdependencies between these areas and the associated marketing and operational goals, highlighting the tensions that arise when goals are misaligned. Opportunities for mitigating these tensions were discussed, and directions for future research were presented to address these challenges. The framework provides a comprehensive approach to improving omni-channel design decisions by integrating demand-side and supply-side perspectives.

Schrotenboer, et.al., (2022). aimed to determine the effects of omni-channel retailing on promotional strategies to enhance the adaptation of these strategies to customers' evolving needs for a seamless experience. Utilizing a critical systematic literature review of articles on omni-channel retailing and promotional strategies, the study identified a focus on understanding omni-channel

retailing, consumer behaviors within this context, and adapting promotional strategies related to merchandising, sales promotion, selling, and word of mouth. The findings revealed that past research is fragmented and lacks a holistic view of omni-channel retailing's implications for promotional strategies. The study concluded by offering general guidelines for researchers and practitioners on effective promotional strategies in omni-channel retailing.

Halibas, et.al., (2023). aimed to explore the dynamics of customer shopping behaviors in the context of omnichannel, showrooming, and webrooming, with a focus on research trends from 1998 to 2022, including the Covid-19 era. The study conducted a bibliometric review of 500 papers from the Scopus database, revealing an annual growth rate of approximately 16% and an average of 44 citations per document, indicating growing research interest. The science mapping identified five key themes: showrooming and webrooming in multi- and omni-channel contexts; consumer behavior in online retail; customer satisfaction and trust in multi-channel retailing; mobile commerce; and the interplay between online shopping and supply chain management. The study concluded that topics such as customer experience, channel choice, and omnichannel strategy are increasingly significant, particularly during the pandemic, and should guide future research directions in the RCSB domain.

Hasan, D. G. (2023). investigated the impact of the COVID-19 pandemic on millennial consumer behavior and the adoption of omnichannel strategies. Using data collected from September 2019 (pre-pandemic) and December 2020 (during the pandemic), the study assessed changes in omnichannel interaction and millennial purchase behavior. The findings indicated that the pandemic did not significantly enhance the omnichannel experience or adoption among millennials compared to the pre-pandemic period. The research highlighted that lockdowns and social distancing accelerated digital transformation, influencing millennials' purchasing decisions through the quality and credibility of information. The study contributes to the literature by identifying factors affecting omnichannel adoption and suggests that future research should include post-pandemic data to address limitations.

Wolf, L., & Steul-Fischer, M. (2023). conducted a systematic literature review to identify and synthesize the factors influencing customer channel choice in the context of omnichannel management. Analyzing 128 papers from EBSCO Host, Scopus, and Web of Science, the study applied qualitative thematic analysis to extract 66 distinct factors, categorized into five broader categories. The findings revealed that perceived channel characteristics, customer needs, and situational factors directly impact channel choice, while customer and product characteristics have an indirect effect. The study presents an integrated conceptual framework and outlines a comprehensive research agenda, advancing the academic understanding of channel choice behavior and offering valuable insights for both researchers and practitioners in omnichannel management.

Nagy, et.al., (2024). investigated factors influencing omni-channel consumer attitudes towards virtual shopping channels by developing a new conceptual model. Using a quantitative approach, the study surveyed 307 Millennials and Generation Z members in an emerging market, applying structural equation modeling with SmartPLS. The findings indicate that channel and consumer characteristics, as well as media contexts, significantly affect attitudes and willingness to engage with retail channels. The study underscores the need for companies to continuously analyze market trends and adapt strategies to meet evolving consumer needs. This research contributes to the UTAUT2 model-based literature by enhancing understanding of technology users' behavior.

Ahmad (2024) examined factors influencing consumer intention to purchase via omni-channel fashion retail in Malaysia, focusing on integrating online and offline practices to enhance the shopping experience. A cross-sectional study with 415 consumers was conducted, assessing perceived value of webrooming, showrooming, perceived compatibility, perceived risk, and purchasing intention. The results identified perceived compatibility as the most significant factor influencing purchase intention, followed by the perceived value of webrooming and showrooming.

The study highlights the need for further qualitative research and regional analysis to enhance generalizability and understanding of omni-channel purchasing behavior in Malaysia. This research contributes valuable insights into consumer behavior and omni-channel strategy in the Malaysian fashion retail sector.

RESEARCH GAP

Despite the extensive research on omnichannel retailing, several key gaps remain in understanding its impact on shoppers' buying behavior. Current studies often focus narrowly on aspects like channel choice or consumer preferences without examining how the seamless integration of multiple channels influences the entire shopping experience and decision-making process (**Verhoef, Kannan, & Inman, 2015**). There is a lack of empirical research exploring how demographic factors, such as age and technology adoption, interact with omnichannel strategies to shape consumer behavior (**Mosquera, Olarte-Pascual, Ayensa, & Murillo, 2017**). Additionally, while some research addresses the impact of external factors like the COVID-19 pandemic (**Sheth, 2020**), there is no comprehensive analysis synthesizing these diverse influences. This study aims to address these gaps by providing a deeper understanding of the complex relationship between omnichannel environments and consumer purchasing behavior.

RESEARCH QUESTIONS

1. What role do shoppers' psychographic factors play in their preference for an omnichannel environment?
2. How does the omnichannel environment affect shoppers' purchasing behavior?

HYPOTHESIS OF THE STUDY

Based on the research question of Omnichannel environment effect on the purchase behaviour the study has framed the following hypothesis.

H0: There is no significant effect of the omni-channel environment on shoppers' purchasing behavior.

H1: There is a significant effect of the omni-channel environment on shoppers' purchasing behavior.

OBJECTIVES OF THE STUDY

1. To investigate the role of shoppers' psychographic factors in their preference in an omni-channel environment.
2. To evaluate the effect of the omni-channel environment on shoppers' purchasing behavior.

SCOPE OF THE STDUY

The scope of this study encompasses a detailed examination of how psychographic factors influence shopper preferences in an omni-channel environment and assesses the impact of such environments on purchasing behavior. It will analyze four key dimensions of omni-channel effectiveness—Channel Integration, Seamless Experience, and Ease of Use—while also considering the psychographic factors of Expected Benefits, Required Effort, Social Influence, Behavioral Habits and Security Perceptions. By integrating these dimensions, the study aims to provide a comprehensive understanding of how these elements interact to shape consumer behavior in contemporary retail settings.

RESEARCH METHODOLOGY

Research Design: The study employs a cross-sectional research design to analyze the impact of omni-channel effectiveness and psychographic factors on shoppers' buying behavior. This design allows for the examination of relationships between the independent variables (omni-channel effectiveness dimensions and psychographic factors) and the dependent variable (shoppers' purchasing behavior) at a single point in time.

Research Approach: A quantitative research approach is utilized, involving the collection and statistical analysis of numerical data to test hypotheses and validate the relationships between

variables. This approach facilitates objective measurement and analysis of the effects of omni-channel dimensions and psychographic factors on consumer behavior.

Sample Size: The study samples 140 shoppers who utilize omni-channel environments. This sample size is deemed adequate to ensure statistical power and reliability of the findings, providing a representative subset of the target population.

Variables: The research examines four key dimensions of omni-channel effectiveness— Channel Integration, Seamless Experience and Ease of Use—as independent variables. Psychographic factors, including Expected Benefits, Required Effort, Social Influence, Behavioral Habits and Security Perceptions, are also considered as independent variables. The dependent variable is shoppers' purchasing behavior, reflecting the impact of the omni-channel environment on consumer decision-making.

Data Collection: Data is collected through a structured questionnaire, which is designed to capture information related to the dimensions of omni-channel effectiveness and psychographic factors. The questionnaire includes items to measure respondents' perceptions and attitudes towards omni-channel features and their subsequent impact on purchasing behavior.

Statistical Tools -

Discriminant Score - This statistical tool will help identify and classify different shopper segments based on psychographic variables such as Expected Benefits, Required Effort, Social Influence, Behavioral Habits and Security Perceptions. By analyzing how these factors differentiate shopper preferences, discriminant analysis will provide insights into the psychographic profiles that are most influential in shaping preferences within an omni-channel setting.

SEM - SEM will enable the examination of complex relationships between omni-channel effectiveness dimensions (Channel Integration, Seamless Experience and Ease of Use) and purchasing behavior. This tool will facilitate the assessment of effects, offering a comprehensive understanding of how various aspects of the omni-channel environment impact consumer purchasing decisions.

DATA ANALYSIS

Objective 1 - To investigate the role of shoppers' psychographic factors in their preference in an omni-channel environment.

Table – 1
Eigenvalues of shoppers' psychographic factors

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.457 ^a	92.9	92.9	.770
2	.111 ^a	7.1	100.0	.316
a. First 2 canonical discriminant functions were used in the analysis.				

Source: Primary Data

The table eigenvalues of shoppers' psychographic factors in an omni-channel environment reveal that the first canonical discriminant function accounts for 92.9% of the variance with an eigenvalue of 1.457 and a canonical correlation of 0.770, indicating a strong relationship. The second function, contributing to 7.1% of the variance, has an eigenvalue of 0.111 and a canonical correlation of 0.316, showing a considerably weaker association. These results suggest that the first function significantly explains the variance in shoppers' psychographic preferences in an omni-channel environment.

Table – 2
Wilks' Lambda of shoppers' psychographic factors

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	.366	131.547	26	.000
2	.900	13.799	12	.314

Source: Primary Data

The table Wilks' Lambda values for shoppers' psychographic factors show that the combined discriminant functions (1 through 2) significantly distinguish between the groups, with a Wilks' Lambda of 0.366, a chi-square of 131.547, and a significance level of 0.000. However, the second function alone is not significant, as indicated by a Wilks' Lambda of 0.900, a chi-square of 13.799, and a significance level of 0.314.

Table – 3
Structure Matrix of shoppers' psychographic factors

	Function	
	1	2
Expected Benefits		
Enhances quick purchases.	.179*	
Facilitates easier transactions.		.321*
Adds value to the customer journey.		-.207*
Required Effort		
Minimal effort needed.	.296*	
Easy to learn and use.	.173*	
Intuitive navigation.	.308*	
Social Influence		
Positive reviews impact engagement.	.165*	
Influencers drive interest.	.490*	
Social media connects users.	.277*	
Behavioral Habits		
Multi-channel use is habitual.	.366*	
Common practice in shopping.		-.462*
Security Perceptions		
Safe online payments.		.412*
Secure data handling.		-.671*

Source: Primary Data

The structure matrix analysis provides critical insights into how various psychographic factors contribute to the discriminant functions that differentiate shoppers' preferences in an omni-channel environment. The analysis reveals that each factor—expected benefits, required effort, social influence, behavioral habits, and security perceptions—plays a distinct role in shaping consumer behavior.

Expected Benefits: The first discriminant function shows a positive correlation with the benefits of enhancing quick purchases (.179) and requiring minimal effort (.296). This indicates that shoppers who prioritize time efficiency and ease of use are significantly influenced by the perceived advantages of the omni-channel experience. The second function highlights the importance of facilitating easier transactions (.321) and adding value to the customer journey (-.207), suggesting that seamless transactions and overall added value are also crucial, albeit with some complexity indicated by the negative correlation.

Required Effort: High correlations with minimal effort needed (.296), ease of learning and use (.173), and intuitive navigation (.308) underscore the paramount importance of ease of use in the omni-channel environment. Shoppers prefer platforms that are user-friendly and require minimal effort to navigate, highlighting the necessity for retailers to streamline their digital interfaces.

Social Influence: The second discriminant function is strongly influenced by social factors, with significant correlations for influencers driving interest (.490), social media connecting users (.277), and positive reviews impacting engagement (.165). This demonstrates the substantial role of social influence, particularly through social media and endorsements, in shaping shoppers' preferences and engagement in the omni-channel setting.

Behavioral Habits: The habitual use of multiple channels shows a positive correlation with the first function (.366), indicating that routine multi-channel usage strongly drives omni-channel preference. Conversely, the common practice of multi-channel shopping shows a negative correlation with the second function (-.462), suggesting a more nuanced impact on shopping behavior that warrants further exploration.

Security Perceptions: Security perceptions emerge as a pivotal factor, with the second function showing positive correlations for safe online payments (.412) and negative correlations for secure data handling (-.671). While the positive correlation underscores the importance of secure transactions, the negative correlation with data handling highlights potential concerns that could deter omni-channel usage, emphasizing the need for robust security measures.

The study found that, ease of use, social validation, and security perceptions emerge as the most influential factors. The interplay of these factors points to a complex decision-making process where convenience, social influences, and security are paramount. These findings suggest that retailers should prioritize enhancing user-friendly interfaces, leveraging social media influence, and ensuring robust security measures to cater to shopper preferences in the omni-channel landscape.

Objective 2 - To evaluate the effect of the omni-channel environment on shoppers' purchasing behavior.

The study evaluates the effect of the omni-channel environment on shoppers' purchasing behavior. The study applied the structural equation model to know the impact of multiple independent variables on the dependent variable.

Table No - 4
Goodness with respect to SEM model

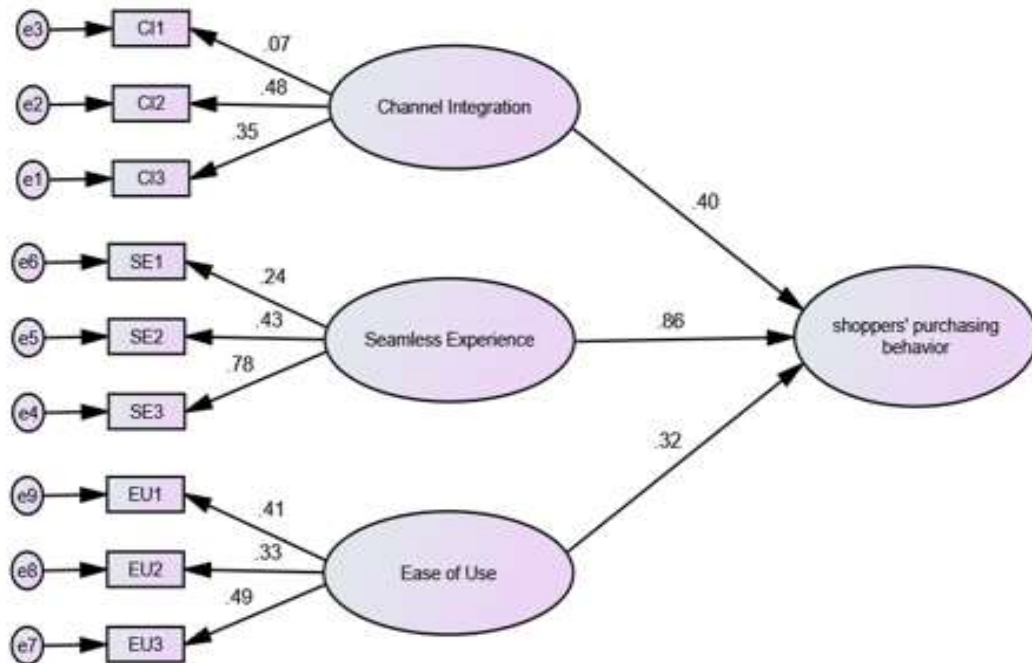
Fit statistic	Recommended Value	Obtained Value
Chi square		135.556
Df		30
Chi square significance	$p \leq 0.05$.000
Goodness Fit Index	>0.90	.938
Adj. Goodness Fit Index	>0.90	.949
Normed Fit indexes	>0.90	.911
Relative Fit Index	>0.90	.953
Comparative Fit Index	>0.90	.922
Tucker Lewis Index	>0.90	.967
RMSEA	<0.05	.040

Source: Primary Data

The SEM model's fit indices indicate a robust alignment with recommended values, confirming the model's adequacy in explaining shoppers' purchasing behavior in an omni-channel environment. The Chi-square value of 135.556 with a significance of .000 demonstrates a statistically significant fit. The Goodness Fit Index (GFI) of .938, Adjusted Goodness Fit Index (AGFI) of .949, and other indices (Normed Fit Index, Relative Fit Index, Comparative Fit Index, Tucker-Lewis Index) all

exceed the recommended thresholds, signifying strong model fit. Additionally, the RMSEA of .040 is below the .05 cut off, indicating excellent model fit and suggesting that the model effectively captures the relationships within the data.

Figure No – 1 SEM of omni-channel environment on shoppers' purchasing behavior.



Source: Primary Data

Hypothesis of the model

Null hypothesis: There is no significant effect of the omni-channel environment on shoppers' purchasing behavior.

Alternative Hypothesis: There is a significant effect of the omni-channel environment on shoppers' purchasing behavior.

Sub hypothesis

H0₁: There is no significant effect of the Channel Integration on shoppers' purchasing behavior.

H0₂: There is no significant effect of the Seamless Experience on shoppers' purchasing behavior.

H0₃: There is no significant effect of the Ease of Use on shoppers' purchasing behavior.

Table No – 5 SEM of omni-channel environment

			Estimate	S.E.	C.R.	P
Channel Integration						
Unified product info across channels.	<---	Channel Integration	0.069	0.268	2.464286	***
Smooth transitions between channels.	<---	Channel Integration	0.481	0.169	2.846154	***
Consistent promotions and discounts.	<---	Channel Integration	0.346	0.178	4.435897	***
Seamless Experience						

Smooth online-offline transitions.	<---	Seamless Experience	0.239	0.988	2.715909	0.409
Unified checkout process.	<---	Seamless Experience	0.428	0.224	3.451613	***
Coherent overall shopping experience.		Seamless Experience	0.777	0.153	5.078431	***
Ease of Use						
Intuitive website navigation.	<---	Ease of Use	0.413	0.089	4.640449	***
Value-adding in-store tech.	<---	Ease of Use	0.331	0.184	3.940476	***
User-friendly mobile app.	<---	Ease of Use	0.487	0.118	4.127119	***

Source: Primary Data

The SEM analysis provides insights into the effects of omni-channel environment factors on shoppers' purchasing behavior.

Channel Integration: The sub-factors within Channel Integration show significant impacts on shoppers' behavior. "Smooth transitions between channels" (Estimate = 0.481, C.R. = 2.846, $p < 0.001$) and "Consistent promotions and discounts" (Estimate = 0.346, C.R. = 4.436, $p < 0.001$) are particularly influential, suggesting that seamless transitions and uniform promotional strategies enhance the overall shopping experience. "Unified product info across channels" (Estimate = 0.069, C.R. = 2.464, $p < 0.001$) also contributes positively but to a lesser extent, indicating that while important, it may not be as critical as the other aspects.

Seamless Experience: Within Seamless Experience, "Unified checkout process" (Estimate = 0.428, C.R. = 3.452, $p < 0.001$) and "Coherent overall shopping experience" (Estimate = 0.777, C.R. = 5.078, $p < 0.001$) significantly affect shoppers' behavior, emphasizing the importance of a cohesive shopping journey across channels. However, "Smooth online-offline transitions" (Estimate = 0.239, C.R. = 2.716, $p = 0.409$) does not show a significant impact, suggesting that while important, this factor might need further improvement to influence purchasing behavior effectively.

Ease of Use: All sub-factors under Ease of Use are statistically significant and positively affect shoppers' behavior. "User-friendly mobile app" (Estimate = 0.487, C.R. = 4.127, $p < 0.001$) and "Intuitive website navigation" (Estimate = 0.413, C.R. = 4.640, $p < 0.001$) are the most impactful, indicating that ease of navigation and a user-friendly mobile experience are crucial for a positive shopping experience. "Value-adding in-store tech" (Estimate = 0.331, C.R. = 3.940, $p < 0.001$) also contributes positively, highlighting the importance of integrating valuable technology within the shopping journey.

The SEM results indicate that each factor within the omni-channel environment significantly affects shoppers' purchasing behavior, with Channel Integration and Ease of Use showing the strongest influences. Smooth transitions and user-friendly interfaces are crucial for enhancing the shopping experience, while a cohesive overall experience across channels is also essential. Improvements in these areas can significantly enhance shopper satisfaction and drive purchasing behavior in an omni-channel context.

Figure No – 6
SEM of omni-channel environment on shoppers' purchasing behavior.

			Estimate	S.E.	C.R.	P
Channel Integration	<---	shoppers' purchasing behavior.	0.396	0.136	2.911765	***
Seamless Experience	<---	shoppers' purchasing behavior.	0.86	0.149	5.771812	***
Ease of Use	<---	shoppers' purchasing behavior.	0.321	0.059	5.440678	***

Source: Primary Data

The SEM analysis examines elements of the omni-channel environment influence shoppers' purchasing behavior, providing insights into the impact of Channel Integration, Seamless Experience, and Ease of Use.

Channel Integration: The impact of Channel Integration on shoppers' purchasing behavior is significant (Estimate = 0.396, C.R. = 2.912, $p < 0.001$). This result indicates that effective integration of channels positively influences purchasing decisions, suggesting that a unified approach to product information and promotions across channels enhances shopper satisfaction and drives purchases.

Seamless Experience: The Seamless Experience has the strongest effect on shoppers' purchasing behavior (Estimate = 0.860, C.R. = 5.772, $p < 0.001$). This substantial effect highlights the critical role of providing a coherent and uninterrupted shopping experience across different channels. Ensuring a smooth transition between online and offline interactions significantly boosts the likelihood of purchase.

Ease of Use: Ease of Use also significantly impacts purchasing behavior (Estimate = 0.321, C.R. = 5.441, $p < 0.001$). The positive correlation suggests that intuitive navigation and user-friendly technology contribute to a more satisfying shopping experience, which in turn enhances the likelihood of shoppers completing purchases.

The P values are observed to be having the significant i.e., <0.05 , which states that the Omnichannel environment having the significant effect on the shopper purchase behaviour. The SEM results underscore the Channel Integration and Ease of Use both significantly impact purchasing decisions, but the Seamless Experience shows the strongest influence. It suggests that, Ensuring a seamless, integrated, and user-friendly shopping environment is essential for driving purchasing behavior and enhancing shopper satisfaction.

FINDINGS OF THE STUDY

1. The study found that, "Facilitates easier transactions" shows a significant positive correlation with Function 2 ($r = 0.321$), indicating its importance in shaping shopper preferences in the omni-channel environment.
2. The study finds, in Required Effort "Minimal effort needed" exhibits a strong positive correlation with Function 1 ($r = 0.296$), highlighting its crucial role in the ease of use for shoppers.
3. The analysis highlights that, in Social Influence "Influencers drive interest" has the highest positive correlation with Function 2 ($r = 0.490$), emphasizing the impact of social media endorsements on shopper behavior.
4. The findings highlights that, "Multi-channel use is habitual" positively correlates with Function 1 ($r = 0.366$), underscoring the role of routine multi-channel usage in shopper preferences.
5. The study depicts that, "Secure data handling" shows a significant negative correlation with Function 2 ($r = -0.671$), pointing to concerns about data security affecting shopper behavior.

6. The study results reveal that the effect of "Channel Integration" (0.396) on shoppers' purchasing behavior is significant. This indicates that unified channel strategies enhance purchase decisions, suggesting that a cohesive integration of multiple channels can positively influence consumer behavior.
7. The study depicts that "Seamless Experience" (0.860) has the strongest impact on purchasing behavior. This highlights the importance of a coherent shopping experience across channels, inferring that providing a consistent and smooth experience can greatly improve customer satisfaction and increase purchase likelihood.
8. The study highlights that "Ease of Use" (0.321) significantly influences purchasing behavior. This demonstrates that user-friendly navigation and technology are crucial for enhancing purchase likelihood, suggesting that simplifying the shopping process can lead to higher customer engagement and sales.

CONCLUSION

The study "Deep Dive into Omni-Channel Influence and Understanding Its Impact on Shoppers' Buying Behavior" provides a comprehensive examination of how omni-channel environments shape consumer preferences and purchasing decisions. The study adopted the quantitative research approach for the examination of framed objectives and collected the primary data with the convenient sampling method. The analysis reveals that key psychographic factors expected benefits, required effort, social influence, behavioral habits, and security perceptions significantly impact shopper behavior. The findings highlight that ease of use, social validation, and security are critical drivers of consumer engagement in omni-channel settings. Particularly, the perceived advantages of quick purchases and minimal effort, the influence of social media endorsements, and the importance of secure transactions were found to be pivotal in shaping shopper preferences. Additionally, the study underscores that channel integration and ease of use are essential for enhancing the shopping experience, with a seamless experience emerging as the most influential factor in driving purchase behavior.

This research emphasizes that retailers must focus on creating a unified, seamless shopping environment that integrates multiple channels effectively while ensuring user-friendly interfaces. Social media influence and robust security measures also play crucial roles in shaping shopper behavior. To optimize the omni-channel experience, retailers should prioritize simplifying transaction processes, leveraging social proof, and addressing security concerns. By adopting these strategies, businesses can enhance shopper satisfaction and increase the likelihood of purchase in the competitive omni-channel landscape.

Further Research Scope

While some research has addressed the impact of external factors like the COVID-19 pandemic, a comprehensive analysis is still lacking. Future studies can examine how other external factors, such as economic shifts, social trends, and policy changes, influence the adoption and effectiveness of omnichannel strategies. With the rapid evolution of technology, it is crucial to study how emerging technologies such as augmented reality (AR), virtual reality (VR), and artificial intelligence (AI) further enhance or modify the seamless experience and ease of use in an omnichannel environment.

REFERENCES

1. Park, S., & Lee, D. (2017). An empirical study on consumer online shopping channel choice behavior in omni-channel environment. *Telematics and Informatics*, 34(8), 1398-1407.
2. Heitz-Spahn, S., Yildiz, H., & Belaud, L. (2018). Investigating the factors driving channel choice and retailer choice in an omni-channel environment. *Projectics/ Proy  ctica/ Projectique*, (3), 43-60.
3. Xu, X., & Jackson, J. E. (2019). Examining customer channel selection intention in the omni-channel retail environment. *International Journal of Production Economics*, 208, 434-445.
4. Swan, E. L., Dahl, A. J., & Peltier, J. W. (2019). Health-care marketing in an omni-channel environment: Exploring telemedicine and other digital touchpoints. *Journal of Research in Interactive Marketing*, 13(4), 602-618.
5. Cai, Y. J., & Lo, C. K. (2020). Omni-channel management in the new retailing era: A systematic review and future research agenda. *International Journal of Production Economics*, 229, 107729.
6. Bijmolt, T. H., Broekhuis, M., De Leeuw, S., Hirche, C., Rooderkerk, R. P., Sousa, R., & Zhu, S. X. (2021). Challenges at the marketing–operations interface in omni-channel retail environments. *Journal of business research*, 122, 864-874.
7. Schrottenboer, D., Constantinides, E., Herrando, C., & de Vries, S. (2022). The effects of omni-channel retailing on promotional strategy. *Journal of theoretical and applied electronic commerce research*, 17(2), 360-374.
8. Halibas, A. S., Van Nguyen, A. T., Akbari, M., Akram, U., & Hoang, M. D. T. (2023). Developing trends in showrooming, webrooming, and omnichannel shopping behaviors: Performance analysis, conceptual mapping, and future directions. *Journal of Consumer Behaviour*, 22(5), 1237-1264.
9. Hasan, D. G. (2023). Impact of COVID-19 Pandemic on Adoption of Omni-Channel in Millennial Consumers Through Omni-Interaction. *Ultima Management: Jurnal Ilmu Manajemen*, 15(1), 147-165.
10. Wolf, L., & Steul-Fischer, M. (2023). Factors of customers' channel choice in an omnichannel environment: a systematic literature review. *Management Review Quarterly*, 73(4), 1579-1630.
11. Nagy, I. D., Dabija, D. C., Cramarenco, R. E., & Burc  -Voicu, M. I. (2024). The Use of Digital Channels in Omni-Channel Retail—An Empirical Study. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(2), 797-817.
12. Ahmad, F. (2024). Factors Influencing Consumer Intention to Purchase via Omni-Channel Fashion Retail in Malaysia. *Journal Europ  en des Syst  mes Automatis  s*, 57(1). 10.18280/jesa.570102
13. Mosquera, A., Olarte-Pascual, C., Ayensa, E. J., & Murillo, Y. S. (2017). The role of technology in an omnichannel physical store: Assessing the moderating effect of gender. *Spanish Journal of Marketing-ESIC*, 21(1), 61-76. <https://doi.org/10.1016/j.sjme>.2017.05.002
14. Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die?. *Journal of Business Research*, 117, 280-283. <https://doi.org/10.1016/j.jbusres>. 2020.05.059
15. 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