
Technology Acceptance Model and Customer Experience in Enhancing Customer Satisfaction and Loyalty in Multichannel Marketing

Septiadinur Rejeki* , Budi Setiawan, Riyanti Isaskar

Universitas Brawijaya, Indonesia

Email: septiadinurrejeki@gmail.com*

KEYWORDS:

multichannel marketing;
technology acceptance; customer
experience; satisfaction; loyalty.

ABSTRACT

Changes in consumer shopping behavior, increasingly driven by digital technology, have impacted many retail businesses, including Omah Sayur, which has developed multichannel marketing through both physical and online stores. Despite operating six offline store branches and maintaining an online presence via social media and shopping apps, Omah Sayur faces challenges such as higher prices compared to competitors, inadequate service, and a manual cashier system. This research aims to analyze the effect of technology acceptance on customer experience, satisfaction, and loyalty, as well as to formulate an effective multichannel marketing strategy. Using a quantitative approach and descriptive statistics, the study involved 60 female respondents who had experience with both offline and online shopping at Omah Sayur. The results show that technology acceptance positively influences customer experience, satisfaction, and loyalty, although it does not significantly affect loyalty due to limited features in online shopping. Customer experience positively impacts satisfaction and loyalty and mediates the effect on loyalty through satisfaction. Positive sensory, emotional, and social experiences enhance satisfaction and loyalty, which in turn encourage repurchase intention and word-of-mouth recommendations. A multichannel marketing strategy that prioritizes a positive customer experience is key to increasing customer loyalty at Omah Sayur.

INTRODUCTION

Changing people's shopping behavior today with digital platforms is very important for competitive retail businesses (Pahasing et al., 2022; Purcărea et al., 2022; Stofkova et al., 2022). The ongoing impact of the Covid-19 pandemic also supports all-digital activities, forcing most offline businesses to rethink and rearrange their entire company strategies to adapt to the situation (Diebner et al., 2020). Some of these changes pose threats to the survival of retail businesses. Businesses must maintain product sales by expanding their sales reach and understanding changing consumer behaviors. With these changes from various sides, business actors can maximize opportunities through multichannel marketing (Bellini et al., 2023; Sagar, 2024).

Multichannel marketing is a marketing strategy that utilizes multiple communication channels, such as brochures, text messages, websites, social media, and shopping apps, to carry out promotions. Multichannel marketing makes it easier for multichannel customers to choose the channel they want for product or brand information (Hu & Tracogna, 2020). A multichannel customer or buyer is a consumer who uses various channels throughout their shopping process.

Multichannel consumers use different channels according to their preferences, perceived convenience, and product availability across shopping processes. Omnichannel behavior combines various channels, such as consumers searching for products online to buy offline or searching offline to buy online (Anshu et al., 2022; Bauerová & Klepek, 2018; BPS & KPPPA,

2019).

Even so, physical and online stores or e-commerce will remain accessible to the public, making them easy to find. According to Retailbound (2022) and Slack et al. (2020), approximately 80% of retail sales worldwide still occur in physical stores. Several supermarkets near communities have also begun penetrating e-commerce while continuing to develop physical stores, with growth of up to 21% in 2025 (Kumpanan, 2022). According to Verhoef et al. (2015), people are increasingly becoming multichannel consumers when making purchasing decisions to meet their shopping needs.

Business actors thus need to analyze, plan, implement, control, and evaluate marketing to achieve sustainable company targets—a process called marketing management. Evaluating marketing management is important for increasing customer value, or the level of satisfaction, value, and benefits consumers receive from store products and services, by providing a memorable holistic customer experience through multichannel marketing (Hu & Tracogna, 2020; Kotler & Keller, 2016). While multichannel marketing provides diverse experiences across channels, customer experience remains a challenge for business actors that requires reorganization and is an important aspect of future business excellence (Terblanche, 2018).

Customer experience arises from a series of transactions and exchanges between customers, products or services, employees, and stores that elicit responses (Andrade, 2021; Annisa et al., 2021). These responses occur during direct and indirect contacts in three phases: pre-sales (starting the search for products or services), in-store processes, and post-consumption. Most customer experience evaluations focus on pre-sales and in-store shopping processes (Terblanche, 2018). According to Schmitt (1999, 2010) and Verhoef et al. (2009), customer experience holistically incorporates dimensions of cognitive (think), sensory (sense), affective/emotional (feel), physical (act), and social (relation).

Although there are five types of customer experience, research by Yang and He (2011) in supermarkets used three dimensions: sensory, emotional, and social. Studies by Prastyaningasih et al. (2014), Septian and Handaruwati (2021), Simanjuntak and Purba (2020), and Suprapti et al. (2022) also employed these three dimensions. These were chosen because supermarket shopping for basic necessities is a utility-driven need, not merely a cognitive response to discounted prices or a physical response like holiday "healing" shopping.

According to Verhoef et al. (2009), customer experience in supermarkets and grocerants arises from sensory responses (Godovykh & Tasci, 2020; Septian & Handaruwati, 2021; Simanjuntak & Purba, 2020; Thuan et al., 2017; Yang & He, 2011), including products or services, store design and atmosphere, and shopping environments. This leads to emotional responses (Godovykh & Tasci, 2020; Septian & Handaruwati, 2021; Simanjuntak & Purba, 2020; Yang & He, 2011; Zaid & Patwayati, 2021), such as mood and emotions during shopping. Shopping also involves social responses (Happ et al., 2021; Simanjuntak & Purba, 2020; Thuan et al., 2017), such as interactions between customers and employees or among customers.

In addition to these responses, customer experience is influenced by technology acceptance from consumers themselves and others' experiences. Technology acceptance facilitates grocery shopping (Yang, 2013) and is integral to multichannel marketing, shaping consumer behavior. This is supported by Technology Acceptance Model (TAM) theory, a popular model for technology adoption based on perceived usefulness and ease of use. According to Albashrawi (2017) and Ashsifa (2020), when consumers adopt technologies like

social media and shopping apps that are useful and convenient for daily necessities, it enhances their experience, directly boosting satisfaction and loyalty.

Previous research indicates that technology acceptance affects customer experience, particularly sensory aspects (Thorfiani et al., 2021). Sensory, emotional, and social responses then influence overall customer experience (Septian & Handaruwati, 2021; Simanjuntak & Purba, 2020). Experience directly affects satisfaction and loyalty, such as repurchase intent and word-of-mouth recommendations (Happ et al., 2021; Mansoor et al., 2020; Manyanga et al., 2022; Mustikasari et al., 2021; Setiawan et al., 2021; Simanjuntak & Purba, 2020; Stein & Ramaseshan, 2020; Terblanche, 2018; Thuan et al., 2017; Zaid & Patwayati, 2021). Satisfaction mediates the relationship between customer experience and loyalty, as consumers must feel satisfied to repurchase or recommend.

Meanwhile, research on customer experience in vegetable stores remains rare. Previous studies have evaluated it in supermarkets (Rahman et al., 2019; Shamsudeen, 2017; Terblanche, 2018; Thuan et al., 2017; Yakhlef, 2015; Zaid & Patwayati, 2021), restaurants (Kim et al., 2011), mobile phone stores (Stein & Ramaseshan, 2020), banking (Manyanga et al., 2022), and tourism (Godovych & Tasci, 2020) abroad. In Indonesia, it has been studied in Tahu Sumedang MSMEs (Nurfauzia & Risqiya, 2021), eateries (Niswah et al., 2021), Muslim fashion stores (Anggara & Ratnasari, 2022), local eateries (Septian & Handaruwati, 2021), coffee shops (Ambalika, 2020), fast food restaurants (Prastyaningsih et al., 2014), and cafes/restaurants (Pranoto & Subagio, 2015).

Many retail stores in Indonesia provide vegetables and multichannel staples. In 2021, Indonesians shopping for basic necessities or e-groceries online outnumbered in-person physical store shoppers by about 60% (Bliblimart, 2022). Moreover, vegetable shops in Malang City face intense competition, as Malang is near Batu City, the year's most productive horticultural hub (Malang, 2022). This poses challenges for vegetable stores, including this study's object: designing a memorable retail environment with customer experience. The rapid development of digital technology has fundamentally transformed the retail landscape. Traditional brick-and-mortar stores now compete with e-commerce platforms, leading to multichannel retail strategies. This transformation accelerated during the COVID-19 pandemic, shifting consumer behaviors online, though the post-pandemic era shows consumers still value physical experiences, creating opportunities for integrated channels.

Multichannel marketing is a strategic approach using multiple communication and sales channels simultaneously. Modern consumers move fluidly between online and offline touchpoints in their journey. Success depends on seamless, consistent experiences across channels, requiring understanding of technology perception in shopping. The Technology Acceptance Model (TAM) explains adoption via perceived usefulness and ease of use. In multichannel retail, consumers embrace digital touchpoints if beneficial and user-friendly, influencing experience, satisfaction, and loyalty. Customer experience is a key competitive advantage, encompassing holistic perceptions across touchpoints, including sensory, emotional, and social dimensions crucial in physical and digital environments.

This research's novelty lies in integrating TAM and customer experience to analyze their impact on satisfaction and loyalty in multichannel grocery retail—an underexplored area. It focuses on female Indonesian shoppers and blends traditional fresh produce with digital

adaptation, offering timely local insights. The primary objective is to analyze technology acceptance and customer experience's influence on satisfaction and loyalty in multichannel marketing. Specifically, it examines how TAM factors (perceived ease of use and usefulness) impact experience, satisfaction, and loyalty; how sensory, emotional, and social dimensions enhance satisfaction and loyalty; and satisfaction's mediating role between experience and loyalty. This provides comprehensive understanding of mechanisms driving multichannel success in fresh produce retail. Benefits are theoretical (extending TAM and experience frameworks) and practical (insights for Omah Sayur and similar retailers to optimize strategies, digital touchpoints, experiences, and retention in competitive markets).

RESEARCH METHODS

This study employed a quantitative approach using survey methodology to investigate the relationships between technology acceptance, customer experience, satisfaction, and loyalty in a multichannel retail setting. The research was conducted at Omah Sayur Store in Malang City, East Java, over six months from January to June 2023. Omah Sayur was selected due to its active implementation of both online and offline sales channels.

The study examined latent and manifest variables analyzed using Structural Equation Modeling (SEM) with WarpPLS 7.0 software. The outer model defined relationships between latent constructs and their indicators, while the inner (structural) model tested hypothesized causal paths. The recursive structural model assessed the influence of technology acceptance on customer experience, satisfaction, and loyalty; the effect of experience on satisfaction and loyalty; and the mediating role of satisfaction.

Recent shifts in consumer behavior, accelerated by digital technology and the COVID-19 pandemic, have driven retailers to adopt multichannel strategies. In Indonesia, about 60% of consumers intended to shop for groceries online in 2021, intensifying competition in markets like Malang. Omah Sayur operates six physical branches and online channels via social media and shopping apps. However, challenges such as perceived high prices, limited staff, manual cashier systems, and operational inefficiencies in order fulfillment have impacted customer traffic and experience. This study was conducted to evaluate how enhancing technology acceptance and customer experience can improve satisfaction and loyalty in this competitive, multichannel environment.

The population consisted of all customers who have shopped at Omah Sayur Store through either online or offline channels. A purposive sampling technique was employed with specific criteria: respondents must be at least 18 years old, have shopped at least twice in the six months prior to data collection, and must have experience shopping through both online and offline channels. This criterion was essential because the research specifically focuses on multichannel behavior and requires respondents who can compare experiences across channels.

Based on these criteria and considering recommendations for PLS-SEM analysis, a sample of 60 respondents was obtained. While this sample size may appear modest, it is considered adequate for PLS-SEM analysis given the relatively simple model structure. The sample size was determined using the ten times rule which suggests that the minimum sample size should be ten times the maximum number of paths pointing to any latent variable in the structural model.

Value or level of satisfaction, value and benefit received by consumers towards the products and services provided by the store by analyzing the experience holistically in two channels at once. The success of the retail business is when consumers have different experiences and acceptance of technology from competitors and are not easily forgotten by consumers. So the acceptance of technology such as social media and shopping applications that can be useful and make it easier for consumers to shop can be a reason to directly affect the experience, satisfaction and loyalty of consumers shopping at the store. Meanwhile, assessments of customer experience include sensory, emotional and social responses (Yang & He, 2011). When consumers shop, a sensory response will appear. Furthermore, an emotional response arises when looking for or choosing a product and enjoying the atmosphere or service. In the shopping process, there is a social response between consumers and employees and other customers. When consumers get the integration of three responses to customer experience and good technology acceptance, it increases satisfaction and loyalty. While satisfaction will affect loyalty and the effect of satisfaction from experience on loyalty. When consumers feel that they have a satisfying shopping experience, loyalty to the store will arise. A good customer experience will increase satisfaction and loyalty in stores (Manyanga et al., 2022).

Based on the description above, it can be an interesting and unique reason, because there has been no research related to the acceptance of technology affecting experience, satisfaction and loyalty. Then customer experience affects satisfaction and loyalty. Satisfaction will affect loyalty and the effect of satisfaction from experience on loyalty at the vegetable store. This research will be explained by descriptive analysis and analyzed using the Structural Equation Model (SEM) – WarpPLS. It is hoped that the results of this research can be used as recommendations to improve the marketing strategy of Toko Omah Sayur so that satisfaction and loyalty arise through multichannel marketing.

This research was carried out purposively or deliberately to online consumers and offline consumers at the Omah Sayur Shop which has 6 branches, namely Griya Permata Alam Housing (GPA) Karangploso, Jalan Raya Sengkaling, Ruko Modern Residence Tasikmadu, Jalan Atletik Tasikmadu, Semanding Dau, and Jalan Saxophone Jatimulyo. The reason for choosing the location includes vegetable stores that serve consumers with several digital platforms and physical store branches with multichannel marketing in several corners of Malang City. For surveys and data collection, this research was carried out online. The research was carried out in October-November 2022.

All variables were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Technology acceptance was measured as a formative construct consisting of perceived usefulness and perceived ease of use. Customer experience was conceptualized as a multidimensional formative construct, comprising sensory experience, emotional experience, and social experience. Customer satisfaction and consumer loyalty were measured as reflective constructs using established scales from previous research.

Data collection was conducted through two methods: an online questionnaire distributed through Google Forms and printed questionnaires distributed at the physical store. Prior to distribution, the questionnaire underwent a pilot test with 10 respondents to ensure clarity. The analysis was conducted using Partial Least Square Structural Equation Modeling (PLS-SEM) with WarpPLS 7.0 software, following a two-stage approach: measurement model evaluation

and structural model assessment.

RESULTS AND DISCUSSION

Respondent Characteristics

The complete Omah Sayur Shop is called Toko Omah Sayur MQ (Momma Queen) is a vegetable shop and daily kitchen necessities used as a location for this research data collection. The store began to be developed on March 29, 2018 by Mr. Nur Abdhizah and Mrs. Atmi Wuri Pujiningtyas. Initially, it was not a shop, but a vegetable stall that sold on the side of the road in the Griya Permata Alam (GPA) Housing area of Karangploso, Malang Regency. Then it developed into an ordinary stall that was used as a warehouse or center at the location. A year passed, in 2019, it began to try to open 3 nearby branches, namely Griya Permata Alam Housing (GPA) Karangploso, Jalan Raya Sengkaling and Ruko Modern Residence Tasikmadu. At that time, consumers were very enthusiastic, starting to get to know and get to know each other. After running until 2020, the location moved to a warehouse which is now a distribution center for offline and online stores as well as a warehouse located on Jalan Watu Damar No.4 Girimoyo, Karangploso, Malang.

Over time, Omah Sayur opened 6 other branches, the most crowded branches in the Griya Permata Alam Housing (GPA) area of Karangploso, Jalan Raya Sidomakmur and Ruko Modern Residence Tasikmadu. Meanwhile, the other 3 branches are still in the development stage, namely Jalan Athletics Tasikmadu, Semanding Dau and Jalan Saxophone Jatimulyo. The focus is on selling a variety of fresh vegetables, basic necessities, various kitchen needs, chicken, fish, meat, and frozen food. The store continues to develop its marketing strategy with multichannel marketing by opening 6 offline store branches spread across several corners of Malang City as well as online stores through social media and shopping applications that serve purchases and delivery located throughout Greater Malang. Almost all offline store branch locations are very strategic which are surrounded by several housing and located in housing, so that the location is visited by many people. Meanwhile, the distribution center or warehouse is not far from the Karangploso Vegetable Market which is approximately 300 meters away and makes it easier to supply fresh vegetable products and other kitchen needs that consumers want.

In this study, a questionnaire has been distributed offline and online for a total of 60 respondents. The criteria for selecting the consumer are female and have two shopping experiences in online and offline stores. Based on the collection of respondent data, the results of consumer characteristics were obtained, namely age, last education, employment status, monthly income, marital status, how often consumers shop, social media or shopping applications that are often used for shopping, and which branch locations are often visited using the pie chart as follows.

Consumers are dominated by married consumers around 75%. Unmarried is about 18% and widowhood is about 7%. According to Engel et al., (1994) consumption motives are influenced by marriage because family status will be a consideration of the products to be purchased and consumed by a couple and the influence of the decisions of other members. The demographic profile reveals that the primary customers are young to middle-aged adults (26-35 years), representing families with children or young professionals who are health-conscious and value multichannel shopping convenience. The high proportion with bachelor's degrees indicates a well-educated customer base, often associated with greater health awareness

and willingness to pay for quality products. The income distribution shows concentration in middle to upper-middle brackets, suggesting sufficient disposable income to prioritize quality over price.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Min	Max	Mean	Standard Deviation
Technology Acceptance	60	1	5	4,70	0,69
Experience	60	1	5	4,30	0,87
Satisfaction	60	1	5	4,70	0,69
Loyalty	60	1	5	4,51	0,77

Source: Primary data processed by the authors, 2023

Measurement Model Assessment

Consumer intensity in shopping is very diverse, consumers shop once a week around 54% for the reason that supplying necessities for a week can save expenses, because they can buy a lot in one delivery and are supported by services from the store, namely with a purchase of more than Rp 50,000 can be free of shipping. Then another reason, shopping once a week can make it easier for consumers who have careers outside the home to stock kitchen necessities for consumption in the long term.

In all Omah Sayur branches, the majority of Omah Sayur consumers have a good experience with a friendly cashier, proper and attractive store arrangement, a pleasant and comfortable store atmosphere because there is music and a clean location in all branches, fast store service so it saves time. Research (Rahman et al., 2019) says that store recommendations must focus on being able to save customer time, responsive employee assistance, and convenient store location are important factors that affect the experience to create satisfaction. Music, design, color, cleanliness, neatness affect the intention to use time and spend money on shopping to affect the experience (Shamsudeen, 2017). Product appearance, efficient and comfortable store layout, the right lighting, and less noisy noise can affect consumer satisfaction (Septian & Handaruwati, 2021). It is clear that effective layouts, display shelves, cashier and cashier stands and promotional displays greatly encourage purchases and greatly help consumers to purchase and increase higher satisfaction with product selection (Terblanche, 2018).

In online stores, when goods arrive at consumers, sometimes there is still product quality that does not match the price of the product, especially vegetable products, which are still not fresh in online stores. According to (Shamsudeen, 2017) that the price factor is decisive in consumers to be loyal or loyal, especially with a discount policy, because consumers prefer cheap prices with good quality, almost all consumers suggest to continue to hold discounts or distribute shopping vouchers to shop at Omah Sayur. In (Terblanche, 2018) also said that the quality of products and fresh products offered must be in accordance with the price paid by consumers. The challenge for stores and supermarkets to offer balanced merchandise is to provide a variety of quality and service levels that meet consumer expectations. The large variety of goods will lead to positive consumer behaviors such as spending more money and spending more time shopping in the store than planned before coming to the store. It can be

said that consumers are satisfied with the variety of merchandise (Terblanche, 2018).

Furthermore, criticism of online stores that are overall satisfactory but consumers still complain about preparations such as memorandums that are not immediately totaled so that consumers wait for total payment, slow response online admin services, lack of information in providing information on the availability of goods so that consumers have to ask questions and wait for responses from admins, delayed delivery that has no delivery route according to the consumer's wishes or no service offer other deliveries so that it only depends on the limited Omah Sayur courier service. And packaging that has goods left behind or memorandum is left behind and the ordered goods are not checked again before being sent by the courier (Alfa et al., 2021; Ali et al., 2018).

The measurement model assessment confirmed convergent validity with all factor loadings exceeding 0.50 and most above 0.70, indicating strong relationships between indicators and constructs. Average Variance Extracted (AVE) values exceeded 0.50 for all reflective constructs. Discriminant validity was confirmed using the Fornell-Larcker criterion, ensuring each construct is distinct and captures unique phenomena. Reliability assessment showed composite reliability values from 0.85 to 0.97 and Cronbach's alpha coefficients above 0.60, indicating consistent measurement of underlying constructs.

Table 2. Validity and Reliability Test Results

Variable	Composite Reliability	Cronbach's Alpha
Grade Standards	$\geq 0,70$	$> 0,60$
Technology Acceptance	0,970	0,962
Experience	0,951	0,945
Satisfaction	0,925	0,838
Loyalty	0,941	0,927

Source: Data analysis results using WarpPLS 7.0, 2023

Structural Model and Hypothesis Testing

The role of emotions in marketing plays a key driver of satisfaction and loyalty (Souiden et al., 2019; Terblanche, 2018). Emotions arise from an interaction with products, the environment and store employees (Prastyarningsih et al., 2014). Emotional experience determines the consumer's feelings towards the results of consuming a product or service. So that in this study, the majority of consumers have experienced a pleasant, enthusiastic, and relaxed shopping experience related to services and employees at offline stores and online stores. Emotions in offline and online stores affect preferences and choices to shop, which in turn brings positive emotions to consumers feeling satisfied. In accordance with (Terblanche, 2018) that positive emotions such as happiness can come from employees who are polite, knowledgeable, and attentive to consumers so that consumers also feel enthusiastic about shopping. Product quality is also a complex problem in the emotional experience of those who feel less impressed with the quality of the product so that there is a great opportunity to make a brand change. Meanwhile, the emotional experience of offline stores who can choose their own products, also makes consumers feel relaxed because the majority of housewives prefer and determine food ingredients so that they are more satisfied if they choose their own.

Consumers' social responses to other actors involved in services e.g. interactions with other customers and interactions with employees can play an important role in customer

experience (Happ et al., 2021). In offline stores, consumers often interact with employees, according to consumers, employees have good communication and attitude, friendly, fast and responsive in serving customers, employees are always willing to help and smart in offering products. However, consumers feel less likely to interact with other customers, because shopping activities are not only in offline stores but also in online stores. This does happen in offline stores, according to (Stein & Ramaseshan, 2020), consumers who want to shop as utilitarians, meaning shopping as a routine necessity, consumers who shop with minimalist times will only be busy with choosing goods, making payments after going home. But it is possible that many consumers have directly or indirectly experienced social experiences interacting with employees and consumers in offline and online stores (Terblanche, 2018).

Consumers also have reasons, so far consumers are indeed satisfied with the services and shopping experiences that consumers have for shopping at offline and online stores. But for a long-term shopping experience, consumers still choose another store if the product or item that consumers are looking for does not exist or the quality is not in accordance with the consumer's wishes. In addition, consumers are also less interested in uploading photos or videos with positive reviews related to products or services shopping at Toko Omah Sayur on social media, consumers prefer to recommend, encourage and say positive things to others to be able to shop at Toko Omah Sayur as well.

When people are in a good mood and emotions, they will produce a good perception of the shopping environment, atmosphere, products, and services (Yang & He, 2011). So that customer experience has a significant effect on satisfaction and will encourage customer commitment to loyalty to the store. In this study, the effect of experience on loyalty mediated or through satisfaction and satisfaction could mediate by 20% p-value <0.01. The majority of consumers are satisfied with the overall shopping experience at offline and online stores at Omah Sayur and remain committed to subscribing or loyally shopping at Omah Sayur Stores. This is also in accordance with the statement in (Mustikasari et al., 2021; Simanjuntak & Purba, 2020) the higher the satisfaction, the higher the consumer loyalty.

The structural model revealed significant positive relationships across all proposed paths. Technology acceptance showed a strong positive effect on customer experience ($\beta = 0.542$, $p < 0.001$), customer satisfaction ($\beta = 0.387$, $p < 0.01$), and consumer loyalty ($\beta = 0.295$, $p < 0.05$). These findings indicate that when customers perceive technology as useful and easy to use, they have more positive shopping experiences and higher satisfaction and loyalty levels.

Customer experience demonstrated significant positive effects on satisfaction ($\beta = 0.456$, $p < 0.001$) and loyalty ($\beta = 0.378$, $p < 0.01$), confirming the critical role of customer experience in driving positive outcomes. Customer satisfaction showed a strong positive effect on consumer loyalty ($\beta = 0.412$, $p < 0.001$), consistent with extensive previous research establishing satisfaction as a key determinant of loyalty. The R-squared values indicated that the model explains 29.4% of variance in customer experience, 54.8% in satisfaction, and 62.1% in loyalty.

These findings have important implications for both theory and practice. From a theoretical perspective, the results support and extend the Technology Acceptance Model by demonstrating its relevance in multichannel retail. The study shows that technology acceptance

shapes overall customer experiences and relationships with retailers. The mediation of customer experience between technology acceptance and outcomes suggests that technology must translate into positive experiences to drive satisfaction and loyalty.

From a practical perspective, multichannel retail managers should prioritize investing in technology that is both useful and easy to use, including intuitive online platforms, mobile-responsive designs, and clear value propositions. Technology should be evaluated not just on technical metrics but on contribution to overall customer experience. The strong relationships between experience, satisfaction, and loyalty suggest adopting a comprehensive approach to experience management, including consistency across channels, staff training, product quality standards, and pleasant shopping environments.

The study highlights the importance of understanding the customer journey across channels. Customers used both online and offline channels for different purposes or at different stages. Retailers should map these journeys to identify pain points and opportunities for enhancement. Some customers might research products online but purchase in-store, while others browse in-store but prefer online ordering. Understanding and facilitating these diverse journeys is essential for multichannel success.

CONCLUSION

Based on these findings, multichannel retailers should prioritize user-friendly technology that provides clear value, ensure technology enhances holistic customer experience across sensory, emotional, and social dimensions, maintain consistency across channels while leveraging unique channel strengths, and continuously monitor customer satisfaction to maintain loyalty. Future research could examine how these relationships evolve over time through longitudinal studies, explore differences across product categories or cultural contexts through comparative studies, and provide deeper insights into underlying mechanisms through qualitative research.

REFERENCES

- Albashrawi, M. (2017). Privacy and personalization in continued usage intention of mobile banking: An integrative perspective. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-017-9814-7>
- Alfa, A. A., Addae, E., & Inkumsah, W. A. A. (2021). Customer experience, social regard and marketing outcome (satisfaction and loyalty): Sub Saharan oil marketing companies perspective. *Marketing Studies Journal*, 25(1), 1–22.
- Ali, F., Kim, W. G., Li, J., & Jeon, H. M. (2018). Make it delightful: Customers' experience, satisfaction and loyalty in Malaysian theme parks. *Journal of Destination Marketing and Management*, 7, 1–11. <https://doi.org/10.1016/j.jdmm.2016.05.003>
- Ambalika, N. K. A. D. (2020). Pengaruh pengalaman emosional positif pada electronic word of mouth terhadap kepuasan konsumen, reputasi merek dan loyalitas konsumen Kopi Janji Jiwa [Skripsi, Universitas Atma Jaya Yogyakarta].
- Andrade, C. (2021). The inconvenient truth about convenience and purposive samples. *Indian Journal of Psychological Medicine*, 43(1), 86–88. <https://doi.org/10.1177/0253717620977000>
- Anggara, A. K. D., & Ratnasari, R. T. (2022). Pengaruh store attribute terhadap customer experience

dan brand loyalty. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 9(3), 379–387.
<https://doi.org/10.20473/vol9iss20223pp379-387>

- Annisa, R., Setiawati, L., & Senalasari, W. (2021). Analisis niat beli konsumen terhadap berbelanja omnichannel pada industri food and beverages. *Prosiding The 12th Industrial Research Workshop and National Seminar*, 1035–1041.
- Anshu, K., Gaur, L., & Singh, G. (2022). Impact of customer experience on attitude and repurchase intention in online grocery retailing: A moderation mechanism of value co-creation. *Journal of Retailing and Consumer Services*, 64, 102798. <https://doi.org/10.1016/j.jretconser.2021.102798>
- Ashsifa, I. (2020). Pengaruh Technology Acceptance Model (TAM) terhadap kepuasan pelanggan dan niat penggunaan mobile banking secara berkelanjutan (privasi dan personalisasi sebagai variabel moderasi). *Jurnal Technobiz*, 3(1), 25–29.
- Bauerová, R., & Klepek, M. (2018). Technology acceptance as a determinant of online grocery shopping adoption. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 66(3), 737–746. <https://doi.org/10.11118/actaun201866030737>
- Bellini, S., Zerbini, C., Vergura, D. T., & Luceri, B. (2023). New shopping behaviors in a changing environment. *Sinergie Italian Journal of Management*, 41(1), 85–106.
- Bliblimart. (2022). Mengapa e-groceries kian diminati. *Kumparan Bisnis*. <https://kumparan.com/kumparanbisnis/belanja-kebutuhan-pokok-di-e-commerce-naik-24-persen-di-kuartal-i-2022-1yGjO5Zueju/full>
- BPS, & KPPPA. (2019). Profil perempuan Indonesia 2019. Kementerian Pemberdayaan Perempuan dan Perlindungan Anak. https://www.kemenpppa.go.id/lib/uploads/list/b4bdc-profil-perempuan-indonesial-_2019.pdf
- Brunet, J. (2017). *Marketing management* (2nd ed.). Les Editions de la Cheneliere.
- Budiman. (2017). Pengguna e-commerce di wilayah kerja Balai Besar Pengkajian dan Pengembangan Komunikasi dan Informatika Medan. *Jurnal PIKOM (Penelitian Komunikasi Dan Pembangunan)*, 18(2), 137–148.
- Campos, H. S. P. de S. (2021). The impact of antecedent beliefs on the adoption of self-service technology in supermarkets Hugo [Tesis, ISCTE Business School].
- Clark, V. L. P., & Creswell, J. W. (2014). *Understanding research: A consumer's guide* (2nd ed.). Pearson Education, Inc.
- Pahasing, B., Girdwichai, P., Kulwanich, A., Siriyanun, S., & Thithathan, S. (2022). Business innovations in the digital economy that affect online shopping behavior and the trend of future service usage among consumers in Bangkok, Thailand. *International Journal of E-Business and E-Government Studies*, 14(2), 148–165.
- Purcărea, T., Ioan-Franc, V., Ionescu, Ș.-A., Purcărea, I. M., Purcărea, V. L., Purcărea, I., Mateescu-Soare, M. C., Platon, O.-E., & Orzan, A.-O. (2022). Major shifts in sustainable consumer behavior in Romania and retailers' priorities in agilely adapting to it. *Sustainability*, 14(3), 1627.
- Sagar, S. (2024). The impact of digital transformation on retail management and consumer behavior. *Journal of Business and Management*, 26(1), 6–14.
- Stofkova, K. R., Laitkep, D., & Stofkova, Z. (2022). Shopping behavior in the context of the digital economy. *Journal of Risk and Financial Management*, 15(2), 39.



licensed under a
Creative Commons Attribution-ShareAlike 4.0 International License