

**THE INTERPLAY OF CULTURAL AND DIGITAL CUSTOMER EXPERIENCE ON  
CUSTOMER LOYALTY IN GROCERY RETAILING: EVIDENCE FROM THE  
SAUDI FOOD RETAIL SECTOR****OsuolaleSunday**[osuolalesunday578@gmail.com](mailto:osuolalesunday578@gmail.com)**ABSTRACT**

This study examines the interplay between cultural influences and digital customer experience in shaping customer loyalty within the grocery retail sector, with a specific focus on the Saudi food retail market. The research is motivated by the rapid transformation of retail environments driven by digitalization, alongside the persistent relevance of cultural values in consumer behavior. While digital platforms have enhanced convenience, personalization, and service efficiency, cultural expectations continue to significantly shape how customers perceive service quality and develop loyalty toward retail brands.

The study integrates insights from customer experience theory and omnichannel retailing perspectives to explore how cultural dimensions and digital interactions jointly influence loyalty formation. It further considers how technological service interfaces, self-service systems, and omnichannel integration contribute to customer satisfaction and retention in modern grocery retailing. The Saudi retail context provides a relevant environment due to its unique cultural structure and rapidly evolving digital economy.

Findings from the synthesis of existing literature suggest that digital customer experience positively influences customer loyalty, particularly when aligned with culturally consistent service expectations. The interaction between cultural values and digital engagement is shown to be a critical determinant of sustained loyalty outcomes in grocery retailing. The study contributes to retail marketing literature by offering an integrated perspective on cultural-digital dynamics and provides practical implications for retailers seeking to enhance loyalty through culturally adaptive digital strategies.

**Keywords**

Customer experience, digital customer experience, cultural influence, customer loyalty, grocery retailing, omnichannel retailing, Saudi Arabia, retail digitalization, service quality, consumer behavior.

**1. INTRODUCTION**

The retail industry has undergone substantial transformation in recent years, driven by rapid advancements in digital technologies and evolving consumer expectations. In particular, grocery retailing has shifted from traditional in-store transactions toward integrated omnichannel ecosystems where digital platforms, mobile applications, and in-store experiences converge to shape customer interactions. Within this evolving environment, customer experience has emerged as a central determinant of competitive advantage, influencing not only satisfaction but also long-term customer loyalty. Contemporary retail research emphasizes that customer experience is no longer limited to service quality alone but extends to emotional, cognitive, and contextual interactions across multiple touchpoints (Lemon & Verhoef, 2016; Verhoef et al., 2015).

Digital customer experience has become especially significant in retail environments where convenience, personalization, and speed of service are critical. Self-service technologies, online grocery platforms, and mobile-enabled shopping systems have reshaped how consumers engage with retailers, thereby influencing loyalty formation processes (Hwang & Kim, 2021; Fernandes & Oliveira, 2021). However, while digital transformation enhances efficiency and accessibility, it does not operate in isolation from socio-cultural contexts. Cultural values continue to play a defining role in shaping consumer expectations, perceptions of trust, and service evaluation, particularly in markets with strong cultural identity structures (Dikćius et al., 2023). This suggests that customer loyalty in retail environments is the outcome of a complex interaction between digital experience and cultural conditioning.

In the Saudi Arabian grocery retail sector, this interaction is particularly pronounced due to the coexistence of rapid digital adoption and deeply rooted cultural consumption patterns. The Saudi retail environment represents a unique context where traditional values intersect with modern digital retail infrastructure, making it an ideal setting for examining how cultural and digital dimensions jointly influence customer loyalty. Recent empirical evidence highlights that cultural norms significantly shape customer experience perceptions in grocery retailing, influencing satisfaction and repeat purchase behavior (Jarrar, 2026a). At the same time, digital customer experience has been shown to directly affect customer loyalty through enhanced engagement, service personalization, and seamless omnichannel integration (Jarrar, 2026b).

Despite the growing body of research on either digital transformation or cultural influences in retail, there remains a conceptual gap in understanding how these two dimensions interact to influence customer loyalty in a unified framework. Most studies tend to treat digital customer experience and cultural factors as separate constructs, rather than examining their combined effect on loyalty outcomes. This fragmentation limits the ability of retailers to design integrated strategies that address both technological efficiency and cultural alignment simultaneously.

Furthermore, emerging retail technologies, including automated service systems and edge-based digital infrastructures, continue to reshape operational resilience and customer engagement models in retail ecosystems. While such technological developments enhance service continuity and responsiveness, their implications for customer loyalty remain underexplored in culturally sensitive markets (Qazi, 2025). This further reinforces the need for an integrated analytical approach that considers both technological and cultural dimensions in shaping retail loyalty outcomes.

Therefore, this study aims to explore the interplay between cultural influences and digital customer experience in shaping customer loyalty within the Saudi grocery retail sector. By synthesizing existing theoretical and empirical insights, the study contributes to a more comprehensive understanding of how loyalty is formed in modern retail environments where cultural expectations and digital innovations intersect.

## 2. BACKGROUND OF THE STUDY

The grocery retail sector has experienced a structural transformation driven by the convergence of digital innovation and changing consumer behavior patterns. Traditionally, grocery retailing relied heavily on physical store interactions, where customer experience was shaped by in-store service quality, product availability, and interpersonal engagement. However, the rise of digital technologies has introduced new channels of interaction, including mobile applications, online ordering systems, and integrated omnichannel platforms. These developments have significantly altered how customers evaluate retail services and develop loyalty toward brands (Verhoef et al., 2015; Lemon & Verhoef, 2016).

In modern retail environments, customer experience is increasingly understood as a multidimensional construct that encompasses cognitive, emotional, behavioral, and sensory responses throughout the customer journey. This expanded view emphasizes that customer loyalty is not only driven by transactional satisfaction but also by the cumulative experience across multiple touchpoints. Retailers that successfully integrate physical and digital channels are more likely to enhance customer engagement and long-term loyalty outcomes (Klaus & Maklan, 2013). The emergence of omnichannel retailing has further reinforced this trend by enabling seamless transitions between online and offline shopping environments.

In the context of Saudi Arabia, grocery retailing presents a particularly interesting case due to the coexistence of rapid technological adoption and strong cultural foundations. Consumer behavior in this market is strongly influenced by cultural norms, social expectations, and trust-based purchasing patterns. Cultural values play a critical role in shaping how customers interpret service quality and respond to retail offerings. Empirical evidence suggests that cultural influences significantly affect customer experience formation in grocery retail environments, particularly in relation to satisfaction and loyalty development (Jarrar, 2026a).

At the same time, digital transformation in the Saudi food retail sector has accelerated significantly, with retailers investing in e-commerce platforms, mobile applications, and automated service systems. These digital enhancements aim to improve convenience, accessibility, and personalization of services. Research indicates that digital customer experience is a key determinant of customer loyalty, particularly when digital interactions are seamless and aligned with customer expectations (Jarrar, 2026b). This highlights the growing importance of integrating digital capabilities with culturally sensitive service design.

Furthermore, technological advancements in service automation and system resilience also contribute to the stability and efficiency of retail operations. Emerging digital infrastructures, including intelligent systems and distributed computing environments, enhance service continuity and responsiveness, indirectly influencing

customer satisfaction and trust in digital platforms (Qazi, 2025). Although such technological systems are often discussed in operational terms, their implications for customer loyalty in retail environments are increasingly relevant.

Overall, the background of this study demonstrates that grocery retailing in Saudi Arabia is shaped by a dual force: cultural conditioning and digital transformation. Understanding how these forces interact is essential for explaining modern customer loyalty formation and for guiding retailers in designing effective customer experience strategies.

### 3. LITERATURE REVIEW

Customer experience has become a central construct in contemporary retail and marketing research, evolving from a narrow focus on service quality to a broader multidimensional concept that includes cognitive, emotional, sensory, and behavioral responses across the entire customer journey. Early conceptualizations emphasize that customer experience is cumulative and shaped by every interaction a customer has with a brand across multiple channels and touchpoints (Lemon & Verhoef, 2016). Building on this foundation, customer experience measurement frameworks highlight that perceived value and experiential quality are critical predictors of satisfaction and loyalty formation in competitive retail environments (Klaus & Maklan, 2013).

The shift toward digital retailing has further expanded the importance of customer experience, particularly through the emergence of omnichannel strategies. Omnichannel retailing integrates physical and digital channels into a unified system that allows customers to move seamlessly across platforms while maintaining consistency in service quality and brand engagement. This transformation has been shown to significantly influence customer loyalty, as customers increasingly expect integrated and frictionless experiences across all touchpoints (Verhoef et al., 2015). In grocery retailing specifically, omnichannel strategies enhance convenience and accessibility, which are key drivers of repeat purchase behavior.

Digital customer experience has also become a major area of research focus, particularly in relation to self-service technologies, mobile commerce, and online shopping platforms. Studies indicate that digital interfaces influence customer satisfaction through usability, personalization, and perceived control over the shopping process (Hwang & Kim, 2021). Additionally, consumers' acceptance of automated service technologies in retail environments is shaped by perceived ease of use, trust, and perceived usefulness, all of which contribute to long-term loyalty outcomes (Fernandes & Oliveira, 2021). These findings suggest that digital customer experience is not merely functional but also psychological and behavioral in nature.

Customer loyalty in digital environments is further influenced by generational behavior patterns and online shopping preferences. Research on Gen Y consumers shows that digital engagement, convenience, and interactive experiences are significant predictors of loyalty in online retail contexts (Bilgihan, 2016). Similarly, return policies and post-purchase service quality also play a critical role in shaping trust and repeat purchase intentions, reinforcing the importance of end-to-end customer experience design in retail systems (Oghazi et al., 2020). These findings collectively demonstrate that digital retail loyalty is a function of both pre-purchase and post-purchase experiences.

Cultural factors remain a fundamental determinant of consumer behavior, particularly in grocery retailing where purchasing decisions are often influenced by social norms, traditions, and trust-based relationships. Cultural dimensions shape how customers perceive service quality, interpret brand messaging, and evaluate retail experiences. Evidence from grocery retail contexts shows that national culture and industry structure significantly influence customer loyalty formation, particularly through their impact on expectations and satisfaction levels (De Silva Kanakaratne et al., 2020). Similarly, cross-cultural studies indicate that cultural dimensions play a significant role in shaping online store loyalty, highlighting the importance of aligning digital strategies with local cultural contexts (Dikcius et al., 2023).

In the Saudi Arabian retail environment, cultural influences are particularly pronounced due to strong social values and consumption traditions. Recent research demonstrates that cultural factors significantly shape customer experience in modern grocery retailing, influencing both satisfaction and loyalty outcomes (Jarrar, 2026a). This suggests that cultural alignment is not optional but essential for retail success in this context. At the same time, digital transformation in the Saudi food retail sector has significantly enhanced customer engagement and loyalty through improved accessibility, personalization, and service efficiency (Jarrar, 2026b). This dual influence highlights the need to integrate cultural and digital perspectives into a unified analytical framework.

Emerging technological infrastructures also contribute indirectly to customer experience by improving service reliability and operational efficiency. Advanced digital systems, including distributed and edge-based

architectures, enhance system resilience and ensure uninterrupted service delivery in retail environments (Qazi, 2025). Although primarily technical in nature, such systems ultimately influence customer satisfaction by reducing service disruptions and improving platform performance, thereby supporting loyalty formation in digital retail ecosystems.

Despite the growing body of literature on customer experience, digital retailing, and cultural influences, there remains a conceptual gap in integrating these perspectives into a single framework. Most studies tend to examine digital customer experience and cultural factors independently, without fully exploring their interaction effects on customer loyalty. This fragmentation limits theoretical development and practical application, particularly in culturally complex and digitally evolving markets such as Saudi Arabia.

Therefore, this study positions itself at the intersection of cultural and digital customer experience research, aiming to address this gap by exploring how these dimensions jointly influence customer loyalty in grocery retailing. The integration of these perspectives provides a more comprehensive understanding of loyalty formation mechanisms in modern retail environments.

#### 4. METHODOLOGY

This study adopts a conceptual and qualitative synthesis methodology designed to examine the interplay between cultural influences and digital customer experience in shaping customer loyalty within the grocery retail sector. The approach is grounded in structured literature integration, where existing empirical and theoretical studies are systematically analyzed to develop a unified explanatory framework. Given the complexity of customer experience as a multidimensional construct, a purely quantitative approach would not sufficiently capture the interaction between cultural and technological factors. Therefore, this study prioritizes interpretive synthesis to generate deeper theoretical insight into loyalty formation mechanisms.

The research design is based on secondary data analysis, drawing from peer-reviewed journal articles, academic books, and validated industry research focusing on retail customer experience, digital transformation, and cultural consumer behavior. The selected literature spans global retail environments with a particular emphasis on grocery and food retailing contexts. Special attention is given to studies conducted in digitally transforming markets and culturally structured economies, with Saudi Arabia serving as a focal contextual reference. This ensures that the analysis remains both theoretically grounded and contextually relevant.

Customer experience is operationalized in this study as a composite construct consisting of digital interaction quality, service accessibility, emotional engagement, and cultural alignment. Digital customer experience is examined through dimensions such as usability of retail platforms, self-service technology adoption, omnichannel integration, and system reliability (Hwang & Kim, 2021; Verhoef et al., 2015). Cultural influence is conceptualized as the impact of shared values, norms, and behavioral expectations on customer perceptions of retail service quality and trust formation (De Silva Kanakaratne et al., 2020; Dikćius et al., 2023). Customer loyalty is defined as the behavioral and attitudinal intention to continue engaging with a retail brand over time.

The analytical framework is constructed through thematic synthesis, identifying recurring patterns across the literature related to how digital and cultural factors interact to influence loyalty outcomes. This process involves comparing findings across multiple studies, identifying convergences and divergences, and organizing them into conceptual themes. In this process, particular attention is given to empirical evidence from the Saudi grocery retail sector, where cultural and digital dynamics are strongly intertwined (Jarrar, 2026a; Jarrar, 2026b).

Although not a primary empirical study, the methodology also incorporates insights from technological systems literature to understand how digital infrastructure supports customer experience delivery. For instance, resilient digital architectures and automated systems enhance service continuity and indirectly influence customer satisfaction by reducing operational disruptions (Qazi, 2025). These considerations are integrated into the conceptual model to reflect the broader technological environment shaping modern retail experiences.

The validity of the study is ensured through the inclusion of peer-reviewed and high-impact academic sources, while reliability is achieved by maintaining consistency in thematic coding across the literature. This methodological approach enables the development of a coherent theoretical understanding of how cultural and digital dimensions jointly influence customer loyalty in grocery retailing.

#### 5. RESULTS

The synthesis of the reviewed literature reveals that customer loyalty in grocery retailing is strongly shaped by an interaction between digital customer experience and cultural influences rather than by either factor independently. Across the analyzed studies, digital customer experience consistently emerges as a primary driver of satisfaction and repeat purchase intention, particularly through enhanced accessibility, personalization, and

seamless omnichannel integration (Verhoef et al., 2015; Hwang & Kim, 2021). However, the strength of this relationship is significantly moderated by cultural context, which determines how customers interpret and evaluate digital retail interactions.

In the Saudi grocery retail environment, cultural alignment plays a decisive role in shaping customer trust and emotional attachment to retail brands. Findings indicate that culturally congruent service delivery enhances perceived reliability and strengthens loyalty intentions. In particular, culturally sensitive communication, trust-based service expectations, and socially aligned retail practices contribute to higher satisfaction levels (Jarrar, 2026a). This suggests that digital systems alone are insufficient unless they are embedded within culturally compatible service frameworks.

Digital customer experience, on the other hand, contributes directly to loyalty through functional and experiential improvements in the shopping journey. Features such as mobile app usability, online ordering convenience, and integrated payment systems significantly enhance perceived value and reduce customer effort (Fernandes & Oliveira, 2021; Klaus & Maklan, 2013). Moreover, omnichannel integration ensures continuity between physical and digital shopping experiences, reinforcing consistency in service delivery and strengthening loyalty outcomes (Verhoef et al., 2015).

The interaction effect between cultural and digital dimensions is particularly significant. Evidence suggests that even highly advanced digital retail systems may fail to generate strong loyalty if they are not aligned with cultural expectations. Conversely, culturally aligned experiences amplify the effectiveness of digital systems, leading to stronger emotional attachment and long-term customer retention (Dikćius et al., 2023; De Silva Kanakarathne et al., 2020). This reinforces the need for an integrated approach to customer experience management in retail environments.

The following table summarizes the key relationship between cultural influence, digital customer experience, and customer loyalty outcomes.

**Table 1: Relationship Between Key Constructs in Grocery Retail Loyalty Formation**

Construct	Key Dimensions	Impact on Customer Loyalty	Supporting Evidence
Digital Customer Experience	Omnichannel integration, usability, personalization	Direct positive effect on loyalty through convenience and satisfaction	Verhoef et al. (2015); Hwang & Kim (2021)
Cultural Influence	Trust norms, social values, behavioral expectations	Indirect and moderating effect on loyalty through perception shaping	Jarrar (2026a); De Silva Kanakarathne et al. (2020)
Customer Loyalty	Repeat purchase, brand attachment, commitment	Outcome of combined digital and cultural experience	Lemon & Verhoef (2016); Klaus & Maklan (2013)

Further analysis highlights that technological infrastructure also plays a supportive role in enhancing digital customer experience. While not directly influencing loyalty, system resilience and operational efficiency contribute to stable service delivery, which indirectly strengthens customer satisfaction and trust (Qazi, 2025). This indicates that backend technological systems are foundational enablers of customer-facing experiences.

**Table 2: Moderating Effect of Culture on Digital Customer Experience**

Digital Experience Level	Cultural Alignment	Loyalty Outcome
High digital quality	High cultural alignment	Very strong loyalty formation
High digital quality	Low cultural alignment	Moderate loyalty due to mismatch
Low digital quality	High cultural alignment	Moderate loyalty based on trust
Low digital quality	Low cultural alignment	Weak loyalty and high churn

Overall, the results indicate that customer loyalty in grocery retailing is not solely a function of technological advancement but rather the combined effect of digital efficiency and cultural compatibility. The strongest loyalty outcomes occur when both dimensions are aligned and mutually reinforcing.

## 6. DISCUSSION

The findings of this study reinforce the growing consensus in retail and marketing literature that customer loyalty is a multidimensional outcome shaped by both experiential and contextual factors. In particular, the results demonstrate that digital customer experience and cultural influences do not operate independently; instead, they interact dynamically to shape how customers perceive value, trust, and satisfaction in grocery retail

environments. This interaction is especially evident in digitally transforming markets where traditional consumer norms coexist with rapidly evolving retail technologies.

The strong positive role of digital customer experience in driving loyalty aligns with established omnichannel retail theory, which emphasizes seamless integration of physical and digital touchpoints as a key determinant of customer retention (Verhoef et al., 2015). Digital platforms enhance convenience, reduce transaction costs, and improve personalization, all of which contribute to stronger customer engagement. This is consistent with findings that highlight the importance of usability, perceived control, and service efficiency in shaping loyalty intentions in digital retail environments (Hwang & Kim, 2021; Fernandes & Oliveira, 2021). Furthermore, customer experience theory suggests that loyalty is built cumulatively through repeated positive interactions across the customer journey, reinforcing the importance of consistent digital service delivery (Lemon & Verhoef, 2016).

However, the findings also confirm that digital effectiveness alone is insufficient in ensuring strong loyalty outcomes. Cultural alignment emerges as a critical moderating factor that influences how digital experiences are interpreted and valued by customers. In the Saudi grocery retail context, cultural expectations related to trust, communication, and service interaction significantly shape customer perceptions of retail brands. This supports prior research indicating that cultural dimensions strongly influence consumer behavior and loyalty formation in retail environments (De Silva Kanakarathne et al., 2020). Similarly, cultural congruence in online retail experiences enhances perceived authenticity and strengthens emotional attachment to brands (Dikćius et al., 2023).

The integration of cultural and digital perspectives is particularly evident in the findings of Jarrar (2026a), which demonstrate that cultural influences significantly shape customer experience formation in Saudi grocery retailing. These cultural effects do not merely act as background variables but actively shape how digital interactions are evaluated. In parallel, Jarrar (2026b) highlights that digital customer experience has a direct and measurable impact on customer loyalty, especially when digital systems are aligned with user expectations and service quality standards. Together, these findings emphasize that loyalty formation in the Saudi retail sector is the result of a dual-layered process involving both technological efficiency and cultural compatibility.

Additionally, the study highlights the supporting role of technological infrastructure in enabling stable and reliable digital customer experiences. While not directly influencing loyalty, system resilience and operational continuity enhance customer trust by reducing service disruptions and ensuring consistent performance (Qazi, 2025). This suggests that backend technological systems play a foundational role in shaping front-end customer experiences, even if their effects are indirect.

The moderating role of culture observed in this study also has important theoretical implications. It suggests that existing customer experience models should be expanded to incorporate cultural sensitivity as a core dimension rather than treating it as an external factor. This is particularly relevant in markets characterized by strong cultural identity and rapid digital transformation, where misalignment between technology and culture can weaken loyalty outcomes despite high service quality.

Overall, the discussion confirms that the most effective retail strategies are those that integrate digital innovation with cultural awareness. Retailers that fail to account for cultural expectations may experience reduced effectiveness of even highly advanced digital systems. Conversely, culturally aligned digital experiences significantly enhance customer loyalty and long-term engagement.

## 7. CONCLUSION

This study examined the interplay between cultural influences and digital customer experience in shaping customer loyalty within the grocery retail sector, with specific emphasis on the Saudi food retail environment. The central argument established throughout the analysis is that customer loyalty is not driven by digital transformation alone, but by the interaction between technological experience quality and culturally grounded consumer expectations. This integrated perspective provides a more comprehensive explanation of loyalty formation in modern retail ecosystems.

The findings demonstrate that digital customer experience plays a direct and significant role in enhancing customer loyalty through improved convenience, personalization, and omnichannel integration (Verhoef et al., 2015; Hwang & Kim, 2021). However, this effect is strongly conditioned by cultural influences, which shape how customers interpret, trust, and emotionally respond to retail experiences. In the Saudi context, cultural alignment significantly strengthens customer satisfaction and reinforces loyalty behavior, confirming that cultural compatibility is a critical factor in retail success (Jarrar, 2026a).

At the same time, digital customer experience in the Saudi food retail sector has been shown to directly enhance loyalty when systems are user-friendly, reliable, and aligned with customer expectations (Jarrar, 2026b). This highlights that loyalty formation is the result of a dual mechanism in which digital efficiency and cultural relevance operate simultaneously. Supporting this interaction, technological infrastructure stability also contributes indirectly by ensuring seamless service delivery and reinforcing customer trust in digital platforms (Qazi, 2025).

From a theoretical perspective, this study contributes to customer experience and retail loyalty literature by integrating cultural and digital dimensions into a unified framework. It extends existing models by demonstrating that cultural factors should not be treated as external variables but as active moderators of digital experience outcomes. This integrated view enhances understanding of loyalty dynamics in digitally transforming and culturally distinct markets.

Practically, the study provides valuable insights for grocery retailers operating in similar environments. To achieve sustained customer loyalty, retailers must ensure that digital transformation strategies are culturally sensitive and contextually adapted. Failure to align digital systems with cultural expectations may reduce the effectiveness of even highly advanced retail technologies.

In conclusion, customer loyalty in grocery retailing emerges from the intersection of cultural alignment and digital experience quality. Retailers that successfully integrate both dimensions are more likely to achieve long-term customer engagement and competitive advantage.

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