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*A Study on the Mediating Role of Brand Trust in the Impact of Omnichannel Integration Quality on Brand Loyalty**

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Abstract

Omnichannel retailing has transformed consumer journeys by enabling seamless transitions across multiple touchpoints, making integration quality a critical determinant of relationship outcomes. Grounded in the Stimulus–Organism–Response framework and Commitment–Trust Theory, this study investigates the effect of perceived omnichannel integration quality on brand trust and, through trust, on brand loyalty. In this model, integration quality functions as an external stimulus, brand trust as an organismic psychological response, and brand loyalty as the resulting behavioral outcome. Data were collected from 318 consumers in Yalova, Türkiye, with experience with omnichannel technology retailers, via an online survey administered between April and May 2025. The hypotheses were tested using PLS-SEM (SmartPLS 4). The results show that content consistency, process consistency, and assurance quality have significant positive effects on brand trust, while channel-service configuration does not. Additionally, brand trust significantly and positively affects brand loyalty. Moreover, channel-service configuration does not exert any significant indirect effect on loyalty through trust. The findings suggest that merely increasing the number of channels is insufficient for fostering consumer trust and loyalty. Instead, information consistency, seamless process synchronization, and robust privacy and security safeguards emerge as key drivers of sustainable customer relationships in omnichannel environments. This study contributes to the literature by empirically demonstrating the psychological mechanism linking integration quality to loyalty. It highlights the strategic need for retailers to prioritize robust integration and assurance mechanisms rather than channel proliferation.

Keywords: omnichannel retailing, omnichannel integration quality, brand trust, brand loyalty

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Bütünleşik Kanal Entegrasyon Kalitesinin Marka Sadakati Üzerindeki Etkisinde Marka Güveninin Aracılık Rolü Üzerine Bir Araştırma

Öz

Bu çalışma, bütünleşik kanallı perakendecilikte algılanan entegrasyon kalitesinin marka güveni ve marka sadakati üzerindeki etkilerini Güven–Bağlılık Teorisi ve Uyarıcı–Organizma–Tepki Modeli çerçevesinde incelemektedir. Bu yaklaşıma göre entegrasyon kalitesi tüketici için bir uyarıcı, marka güveni psikolojik bir tepki ve marka sadakati ise davranışsal bir çıktı olarak konumlandırılmıştır. Çalışma, teknoloji perakendeciliği bağlamında Yalova'da bütünleşik kanal deneyimi bulunan tüketicilerle yürütülmüş; Nisan–Mayıs 2025 döneminde çevrimiçi anket yöntemiyle 318 geçerli yanıt toplanmıştır. Veriler PLS-SEM (SmartPLS 4) yöntemiyle analiz edilmiştir. Bulgular, entegrasyon kalitesi boyutlarından içerik tutarlılığı, süreç tutarlılığı ve güvence kalitesinin marka güvenini anlamlı ve pozitif etkilediğini; buna karşılık kanal hizmet yapılandırmasının etkisinin istatistiksel olarak anlamlı olmadığını göstermektedir. Ayrıca marka güveninin marka sadakati üzerinde anlamlı ve pozitif bir etkisi bulunmuştur. Dolayısıyla kanal hizmet yapılandırması, marka güveni aracılığıyla marka sadakatini de dolaylı biçimde etkilememektedir. Sonuçlar, perakendecilerin yalnızca çok sayıda kanal sunmasının güven ve sadakat yaratmak için yeterli olmadığını; bunun yerine kanallar arası bilgi ve süreç bütünlüğü ile gizlilik, güvenlik ve hizmet kurtarma güvencelerinin güven ve sadakatin temel belirleyicileri olduğunu ortaya koymaktadır. Çalışma, entegrasyon kalitesinin psikolojik bir çıktı olan güven ve onun aracılığıyla oluşan sadakatle doğrudan ilişkisini ampirik olarak göstererek literatürdeki boşluğa katkı sağlamaktadır. Yönetsel olarak, yeni kanal açmaktan ziyade içerik ve süreç senkronizasyonu ile güvence mekanizmalarına yatırımın önceliklendirilmesi önerilmektedir.

Anahtar Kelimeler: bütünleşik kanallı perakendecilik, bütünleşik kanal entegrasyon kalitesi, marka güveni, marka sadakati

1. INTRODUCTION

The marketing discipline has undergone a significant transformation since the beginning of the twentieth century, with the concept of "channel" at its core. Initially considered a physical distribution pipeline regulating the flow of goods and services from producer to consumer, channels have evolved into multidimensional structures encompassing the spatial structuring of markets, value creation processes, and customer experience (Shaw and Jones, 2005). The shift from single-channel to multichannel systems in the retail landscape, and then to an integrated channel structure that enables crosschannel coordination and full integration (omni-channel), has radically altered both businesses' operational designs and the consumer shopping journey (Verhoef et al., 2007). This evolution is considered a strategic response to the diversification of touchpoints and the increasing complexity of the customer journey (Verhoef et al., 2015).

In this context, approaches focusing on the individual performance of channels have given way to integrated structures requiring consistency, coordination, and fluidity among channels (Neslin and Shankar, 2009). While the basic conceptual framework that meets this need is defined as integration quality in the literature (Sousa and Voss, 2006), studies that address the relationship between integration quality and psychological outcomes from a consumer perspective are limited (Nguyen et al., 2022; Hamouda, 2019; Kazancoglu and Aydin, 2018). Most current studies have focused on behavioral outcomes such as satisfaction (Anderson and Srinivasan, 2003), purchase intention (Ponte et al., 2015), or perceived value (Hsieh et al., 2012; Kabadayi et al., 2017) in multichannel structures. In contrast, the role of relational variables such as trust and loyalty in the context of integration quality has not been sufficiently clarified in omnichannel structures. Nguyen et al. (2022) and Hamouda (2019) call for testing the mediating role of psychological processes, particularly trust, in the omnichannel context. Similarly, Cui et al. (2021) demonstrated that uncertainties regarding information management and data privacy undermine trust, emphasizing the need for a more comprehensive examination of this relationship.

This study does not aim to redefine established conceptual frameworks regarding integration quality based on the aforementioned discussion; rather, it tests the integrated channel integration quality framework developed by Hossain et al. (2020) by relating it to brand trust and brand loyalty in the context of consumers purchasing technology products. The research is structured within the framework of Commitment-Trust Theory and the Stimulus-Organism-Response (S-O-R) Model; the mediating role of trust in the effect of integration quality on brand loyalty is examined. In this respect, the study offers a contextual and consumer-centered empirical contribution to the omnichannel retail literature by addressing the integration quality-trust-loyalty relationship in the context of a specific product and consumer.

2. BACKGROUND

2.1. Omnichannel Integration Quality

The conceptualization of integration quality has expanded in the literature from operationally focused definitions to multidimensional structures. Saeed et al. (2003) explained integration in the context of content, information, and logistics integration; Sousa and Voss (2006, p.359-360) strengthened the conceptual foundation by defining integration quality as the third dimension of service quality. Banerjee (2014) stated that elements such as price, inventory, and promotion integration play a critical role in retailers' successful omnichannel implementation. Oh and Teo (2010, p.35-40) related integration quality to crosschannel consistency in product, price, promotion, transaction, and customer service. Wu and Chang (2016, p.1235) emphasized transparency of service configuration in addition to information and process consistency in the supply chain context. Empirical research following this conceptual development has confirmed the effects of integration on customer attitudes (Oh and Teo 2010; Herhausen et al., 2015; Shen et al., 2018).

With the rise of the omnichannel approach, integration quality has been positioned not only as an operational quality component but also as a perceptual and experiential one (Qi and Yao 2020; Gao and Huang 2021; Mainardes et al., 2020; Kopot and Cude, 2021). This trend in the literature shows that while integration quality is primarily considered a technical compliance process in multichannel environments, it transforms into a strategic customer experience management approach in omnichannel structures. The most comprehensive classification of integration quality in the current literature is presented by Hossain et al. (2020); integration quality is defined under four basic dimensions: channel service configuration, content consistency, process consistency, and assurance quality. In this study, this four-dimensional structure has been preferred because this classification holistically encompasses both the operational dimensions of integration and the perceptual and psychological evaluations of consumers, and shows a high level of theoretical agreement with the omnichannel context.

2.1.1. Channel-Service Configuration

Channel service configuration is a fundamental integration dimension that describes the extent to which retailers organize different touchpoints in a functional, transparent, and integrated manner. The concept was first defined by Sousa and Voss (2006, p.360-361) in their multichannel service quality model, emphasizing channel breadth and transparency. Subsequent studies have argued that channel diversity alone is not sufficient (Banerjee, 2014, p.466-467); channels must be truly usable, clearly defined, and aligned with customer needs (Hsieh et al., 2012, p.328). Hossain et al. (2020, p.229-230) revisit the concept of omnichannel and suggest that it has three sub-characteristics: (I) channel breadth (offering a wide range of channel options to meet customers' diverse needs), (II) channel transparency (clearly stating the functions and terms of use of channels), and (III) channel suitability (providing truly functional channels and align with expectations). These characteristics strengthen the perception of an

omni-experience in crosschannel transitions and form the basis of integration quality. However, simply offering a multitude of channels is not sufficient (Lin et al., 2023, p.1132-1133); diversity must be supported by content and process consistency (Salem et al., 2022, p.52)

2.1.2. Content Consistency

Content consistency refers to the coordinated and harmonious management of information and transaction flows offered by a company through all channels (Sousa and Voss, 2006; Lee et al., 2019). According to Zhang et al. (2018), this dimension refers to the consistent provision of content such as product, price, promotion, and inventory information across virtual and physical channels. In other words, consumers should be able to obtain the same information regardless of the channel they use (Shen et al., 2018, p.65; Chen et al., 2023, p.154-155). Kabadayi et al. (2017, p.5) emphasize that the consistency of information consumers receive from different channels is critical for ensuring experience continuity and reducing perceived complexity. This consistency reduces the risk of information gaps and indecision among omnichannel customers, thus holistically integrating the brand experience. Hsieh et al. (2012, p.328) showed that information consistency and personal data integration have significant effects on perceived multichannel service quality and channel switching difficulties. Zhang et al. (2018) emphasize that integrated transaction data management enables customers to be identified under a single identity, which increases satisfaction by providing personalized services. Studies show that content consistency fosters trust (Wu and Chang, 2016; Xie et al., 2023, p.1113) and loyalty (Xuan et al., 2023, p.4-5).

2.1.3. Process Consistency

Process consistency is a fundamental dimension of integration quality that refers to the integration of service processes across different channels to provide a harmonious, seamless, and similar experience (Mukhopadhyay et al., 2024). The concept describes the extent to which the process steps and service procedures that customers encounter during channel transitions are consistent. In other words, process consistency requires that customers experience the same service steps at similar speeds and with comparable accuracy when moving from one channel to another (Sousa and Voss, 2006, p.366). Chen et al. (2023, p.154-155) define process consistency as the similarity of process elements such as process steps, brand image, perceived service quality, and outcomes across different channels. Oh and Teo (2010) describe the coordinated operation of steps such as ordering, payment, and delivery across all channels; Wu and Chang (2016, p.1237) describe the similarity of service feel, waiting times, and customer support. Kabadayi et al. (2017, p.5) emphasize the importance of transferring personal data without loss, preserving transaction history, and ensuring an uninterrupted service flow. Mukhopadhyay et al. (2024) emphasize that consistent processes reduce friction and perceived risk, strengthening the experience and the relationship with retailers. Empirical findings confirm the criticality of this dimension for customer experience. Hsieh et al. (2012, p.328-330) demonstrated the impact of process integration on perceived service quality; Herhausen et al.

(2015, p.309) showed the effect of hybrid processes on satisfaction and sales performance; and Lee et al. (2019, p.92) demonstrated the impact of customer engagement and repurchase intention.

2.1.4. Assurance Quality

Assurance quality in an omnichannel marketing environment relates to the extent to which consumers perceive fundamental trust elements such as data privacy, system reliability, and transaction consistency during channel transitions (Hossain et al., 2020). In this context, assurance quality is a multidimensional construct that addresses not only the technical infrastructure but also the customer's cognitive perception of security. In empirical studies, Hsieh et al. (2012, p.328-330) found that assurance elements have an impact on multichannel service quality and channel switching difficulties; Herhausen et al. (2015, p.309) found that security and transparent processes increase satisfaction in virtual-physical channel integration; Quach et al. (2022, p.1) found that lack of security damages the customer-brand relationship; Tran Xuan et al. (2023, p.664) found that assurance quality is the key element that increases brand trust and loyalty; and Mainardes et al. (2020, p.802) found a strong connection between security and privacy and loyalty in banking. Industry reports also support the importance of assurance quality. According to Forrester Consulting (2023, p.10), 68% of consumers are concerned about their personal data being shared across channels. However, 54% of these same consumers are willing to share their data if they believe it will provide more personalized service. Similarly, Thaichon et al. (2023, p.167) emphasize that addressing privacy and security concerns in omnichannel retailing is critical to brand trust.

2.2. Brand Trust

Trust is the consumer's belief that a retailer is honest, trustworthy, and able to fulfill its promises (Lin, et al., 2023, p.1136). Delgado-Ballester and Munuera-Alemán (2001, p.1239) define brand trust as a consumer's belief that a brand will fulfill its promises and avoid harm. Chaudhuri and Holbrook (2001, p.82) defined brand trust as a mechanism that guides consumers' purchase decisions under uncertainty and demonstrated that trust is an antecedent of both attitudinal and behavioral loyalty. Brand trust is also considered a central element in the omnichannel literature. Kazancoglu and Aydin (2018, p.970-971) argued that trust is the key factor that reduces consumers' perceptions of risk in both physical and virtual shopping. Akter et al. (2021, p.570) emphasized that channel consistency builds trust among consumers, which in turn leads to long-term relationships.

2.3. Brand Loyalty

The concept of loyalty can manifest not only toward the brand but also toward the seller, service provider, or retailer (Dick and Basu, 1994, p.99). In sectors where customer acquisition costs are high and competition is intense, loyalty toward the retailer can be a strategic advantage. Wallace et al. (2004, p.249) argue that loyalty to the retailer is a critical element even before

repeat purchases occur. This demonstrates that the customer must trust not only the product brand but also the retailer that offers it. This trust relationship is particularly decisive in retailers that sell products from different brands and do not have their own production, such as technology retailers. This is because such retailers create competitive advantage not through product variety but through integration quality, service consistency, and trust-based relationship management (e.g., Amazon Assurance). Therefore, this study examines loyalty beyond the brand level, focusing on loyalty toward the retailer brand; the consumer's perception of the retailer as an integrated service provider is central.

Jacoby and Kyner (1973) defined brand loyalty as a form of psychological attachment that occurs when a consumer consistently chooses a particular brand, even when alternative brands are available. Oliver (1999) explained loyalty as the degree to which a consumer maintains the intention to repurchase or reuse a brand, supported by an intrinsic sense of satisfaction and commitment. Chaudhuri and Holbrook (2001) expanded this definition, stating that brand loyalty includes both behavioral (willingness to repurchase) and attitudinal (emotional attachment to the brand) components. From a behavioral perspective, loyalty refers to a consumer's tendency to repurchase a particular brand. At the same time, the attitudinal dimension encompasses psychological elements such as positive feelings toward the brand, commitment, and trust.

In the context of omnichannel retailing, brand loyalty is not limited to repeat purchases but also encompasses consumers' consistent choice of the same brand/retailer across all channels. In this respect, loyalty is considered as a form of commitment to the brand/retailer in an omnichannel environment; it is emphasized that consistency across channel experiences strengthens the relationship of trust and loyalty (Herhausen et al., 2015; Gao and Huang, 2021). According to Mukhopadhyay et al. (2024), the omnichannel environment provides a safe and seamless shopping experience by eliminating the information contradictions customers encounter when switching channels. This reduces uncertainty in consumers' brand perceptions, enhances the quality of experience, and provides a basis for behavioral outcomes such as purchase intention and loyalty. Gao and Huang (2021) noted that integration quality supports loyalty through customer loyalty, and that in the banking sector, perceived value through integration quality increases satisfaction and attitudinal loyalty (Hamouda 2019); integrated interaction quality positively affects loyalty (Mainardes et al., 2020).

2.4. Stimulus–Organism–Response Model and Commitment-Trust Theory

The Stimulus–Organism–Response (S-O-R) model, developed by Mehrabian and Russell (1974), is a fundamental approach that explains the cognitive and emotional responses of individuals to environmental stimuli. In the model, stimulus (S) represents environmental factors, organism (O) represents the individual's internal evaluation processes, and response (R) represents behavioral consequences. In marketing literature, the S-O-R model has been widely adapted to explain consumer behavior; Donovan and Rossiter (1982) demonstrated the effect

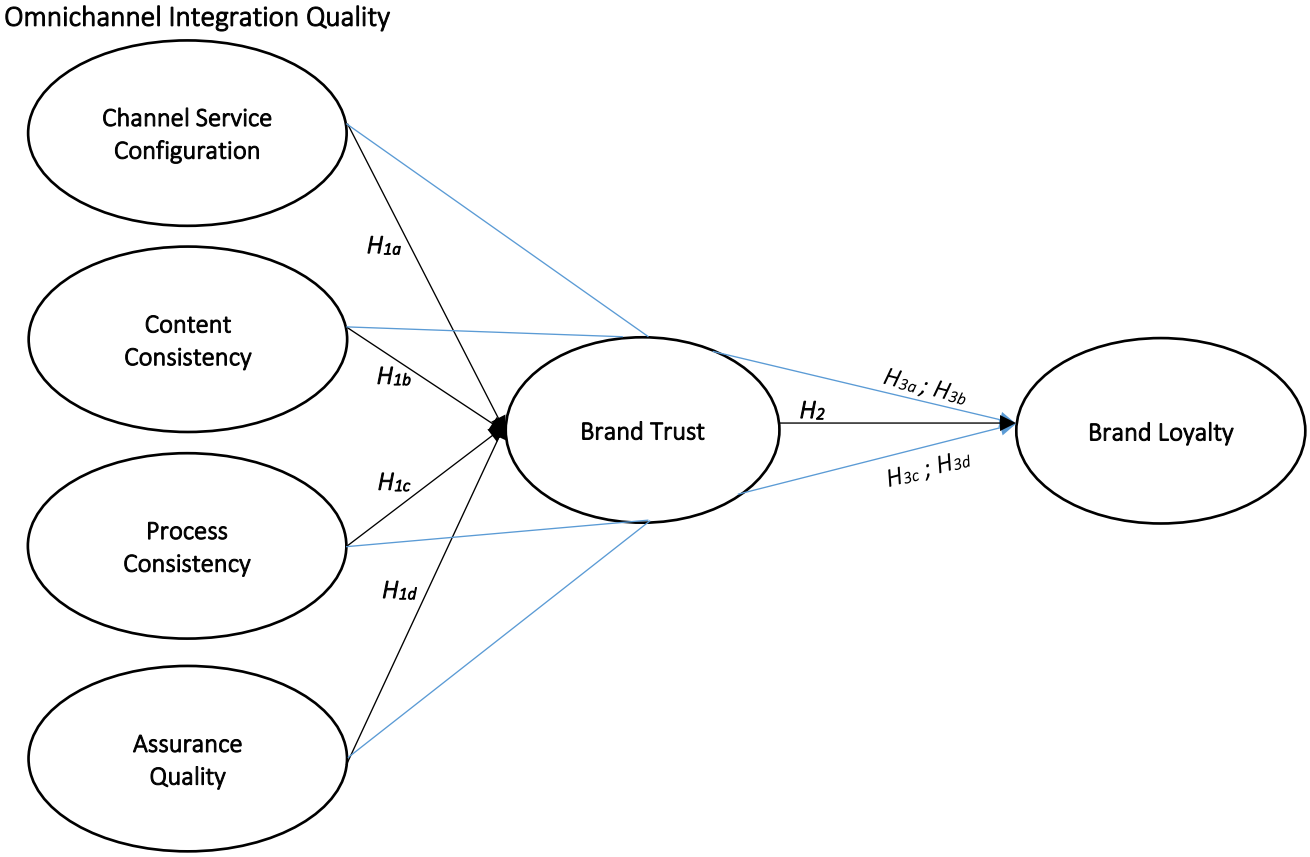
of store atmosphere on emotions and approach-avoidance behaviors, while Eroglu et al. (2001) showed how web interface features shape consumer responses in the digital environment. In the context of omnichannel retailing, the model offers a strong framework for explaining the perceptual effects of complex retail environments consisting of multiple touchpoints on consumers. Indeed, Xu and Jackson (2019) showed that integration elements such as channel transparency and ease of use affect consumers' risk assessments and perceived levels of control; Gao et al. (2021) empirically demonstrated that channel integration shapes customer experience and translates it into behavioral outcomes.

In this study, integrated channel integration quality is considered as an environmental stimulus (S) to which the consumer is exposed, in line with the S-O-R model; it is assumed that the effect of this stimulus on brand loyalty (R) arises not directly, but through the consumer's internal evaluation processes (O). Therefore, the direct effect of integration quality on brand loyalty was not included in the research model; it was assumed that this relationship is shaped through a psychological mechanism. This approach, consistent with the basic assumption of the S-O-R model, is based on the idea that behavioral responses can only be explained through the individual's internal cognitive and emotional evaluations (as seen Figure 1).

To explain which psychological structure shapes this internal evaluation process, which constitutes the organism component of the research model, the Commitment-Trust Theory developed by Morgan and Hunt (1994) has been included in the theoretical framework. Initially developed to explain inter-business relationships (Friman et al., 2002; Cote and Latham, 2003), this theory has been reliably applied in later studies to e-commerce (Li et al., 2006) and multi-channel/omnichannel retail contexts (Lin et al., 2023). According to the theory, trust is a prerequisite for commitment and relationship continuity in exchange relationships involving uncertainty and risk; in the absence of trust, it is impossible to develop loyalty and long-term relationships (Morgan and Hunt, 1994).

In the context of omnichannel retailing, integration quality reduces consumer risk perception and lays the groundwork for brand trust by providing consistent information flow between channels, a seamless process experience, and a secure transaction infrastructure (Xu and Jackson, 2019; Qi and Yao, 2020). The development of trust, as predicted by Commitment-Trust Theory, strengthens brand loyalty by reducing the search for alternatives, maintaining a positive attitude, and increasing the desire to repurchase. In this framework, trust is positioned as a central psychological mechanism explaining the relationship between integration quality and brand loyalty.

Figure 1: Conceptual model of the research



2.5. Hypothesis Development

Omnichannel retailing deepens the relationship with the brand and reinforces consumers' trust by offering a seamless experience across physical and digital touchpoints (Qi and Yao, 2020). Omnichannel service delivery across channels increases trust in the retailer (Hossain et al., 2020). In this context, channel service structuring contributes to trust formation by strengthening the perception of control and predictability (Quach et al., 2022, p.6-7) through the functional organization of channels and the clear presentation of terms of use to the consumer (Kazancoglu and Aydin, 2018). Merely having a large number of channels is not enough to build trust; consumers need to be able to see clearly how these channels work together (Gao and Huang, 2021). Furthermore, integration elements such as channel transparency, ease of use, and consistency support trust formation by influencing consumers' perceived behavioral control and risk assessments (Xu and Jackson, 2019). Qi and Yao (2020) demonstrate that crosschannel integration directly and positively impacts consumers' brand trust and indirectly shapes purchase intention through brand experience and brand trust. Therefore, channel service configuration is considered a decisive integration dimension in the formation of brand trust by enabling consumers to structure their shopping process across different channels freely.

Content consistency refers to the consistent presentation of all content, such as product, price, delivery, and campaign information, across channels (Banerjee, 2014) and strengthens brand trust by reducing information-related uncertainty (Oh and Teo, 2010; Lee et al., 2019). The integration of information and processes has been shown to increase consumer trust in a brand significantly; personalized and consistent content, in particular, supports the development of trust-based relationships with consumers (Wu and Chang, 2016). Consistency in information flow across channels also strengthens positive experiences and fosters behavioral outcomes (Xuan et al., 2023, p.4-5). Ensuring transparency and speed in after-sales service processes is considered a complementary element that prevents loss of trust in the face of potential errors (Xie et al., 2023, p.1113). Additionally, reports from the retail industry indicate that consumer trust levels can rapidly decline when transparency regarding inventory and product information is lacking (Forrester Consulting, 2023). Therefore, content consistency is considered a decisive integration dimension in building brand trust in an omnichannel environment.

Process consistency refers to the seamless flow of services across channels at technical, operational, and visual levels (Sousa and Voss, 2006). The consistency and predictability of processes strengthen trust perceptions by reducing the risk that consumers encounter unfamiliar procedures when switching channels (Lin et al., 2023). While the perception of "fluidity" created by order and delivery consistency supports consumers' trust and positive attitudes toward the brand (Gao et al., 2021, p.15-16), discontinuities, particularly in returns and support processes, can result in a loss of trust and weakened loyalty (Xie et al., 2023, p.1113-1114). Failure to ensure process and content consistency can undermine trustworthiness perceptions by increasing uncertainty during channel transitions (Van Nguyen et al., 2022). Therefore, process consistency is considered a decisive integration dimension in the formation of brand trust in an omnichannel environment.

Finally, assurance quality is considered one of the key determinants of brand trust by providing a holistic perception of security encompassing privacy, security, and customer control (Hossain et al., 2020). The functionality of security systems in omnichannel shopping directly supports trust formation by reducing consumers' risk perceptions (Kazancoglu and Aydin, 2018). Privacy policies, encryption technologies, and third-party certificates play a critical role in establishing online trust (Belanger et al., 2002); uncertainties in data management, in turn, lead to a loss of trust (Cui et al., 2021). Strengthening transparency and audit mechanisms to protect personal data positively impacts brand trust by increasing consumer control (Gao and Huang, 2021; Nguyen et al., 2022). Therefore, assurance quality is considered a decisive integration dimension in building brand trust in an omnichannel environment.

All these findings suggest that channel service configuration, content consistency, process consistency, and assurance quality are integral elements that shape consumer trust in a retail brand. Based on these findings, the following hypotheses were developed:

H_1: Omnichannel integration quality has a statistically significant and positive effect on consumer trust in the retail brand.

H_{1a}: Channel service configuration has a statistically significant and positive effect on consumer trust in the retail brand.

H_{1b}: Content consistency has a statistically significant and positive effect on consumer trust in the retail brand.

H_{1c}: Process consistency has a statistically significant and positive effect on consumer trust in the retail brand.

H_{1d}: Assurance quality has a statistically significant and positive effect on consumer trust in the retail brand.

Trust is the fundamental condition for sustainable customer relationships and is among the strongest cognitive determinants of loyalty (Chaudhuri and Holbrook, 2001; Delgado-Ballester and Munuera-Alemán, 2005). When trust levels increase, consumers reduce their perception of brand risk, their tendency to evaluate alternatives weakens, and their repurchase intentions strengthen (Garbarino and Johnson, 1999). Consistent service experiences offered in omnichannel environments allow consumers to perceive the brand as a unified whole (Akter et al., 2021) and support the transfer of trust across all touchpoints (Wallace et al., 2004). Commitment–Trust Theory, one of the fundamental approaches in relationship marketing literature, emphasizes that trust is a necessary prerequisite for long-term relationship continuity and serves as a psychological bridge for the emergence of loyalty behavior (Morgan and Hunt, 1994). Therefore, in the omnichannel context, trust emerges as a key determinant in the formation and maintenance of brand loyalty:

H_2: Consumers' trust in the retail brand has a statistically significant and positive effect on retail brand loyalty.

Brand trust is recognized as a critical prerequisite for relationship continuity under conditions of uncertainty (Morgan and Hunt, 1994) and for the sustainability of loyalty (Chaudhuri and Holbrook, 2001). Consistent service experiences offered in omnichannel retailing allow consumers to perceive the brand as a unified whole; this perception fosters the transfer of trust across all touchpoints, strengthening long-term relationships (Akter et al., 2021; Qi and Yao, 2020). It has been noted that in highly competitive markets, channel diversity can negatively impact loyalty by increasing price transparency; however, this effect can be offset by trust (Wallace et al., 2004).

In this study, the mediation effect is constructed based on the Stimulus–Organism–Response Model and Commitment–Trust Theory. The Stimulus–Organism–Response approach proposes that external stimuli in the marketing environment influence consumers' internal cognitive evaluations, leading to behavioral outcomes (Mehrabian and Russell, 1974; Eroglu et al., 2001). In this context, omnichannel channel integration quality is positioned as a stimulus for the consumer, brand trust as the resulting cognitive response, and brand loyalty as the ultimate behavioral response. Conversely, Commitment–Trust Theory posits that trust is a necessary

prerequisite for long-term commitment and serves as a psychological bridge guiding loyalty behavior (Morgan and Hunt, 1994). Therefore, in the context of omnichannel, trust is considered the primary mediating variable in the formation and maintenance of brand loyalty. Based on these findings, the following hypotheses are proposed:

H_3: Retail brand trust mediates the effect of omnichannel integration quality on retail brand loyalty.

H_{3a}: Retail brand trust mediates the effect of channel service configuration on retail brand loyalty.

H_{3b}: Retail brand trust mediates the effect of content consistency on retail brand loyalty.

H_{3c}: Retail brand trust mediates the effect of process consistency on retail brand loyalty.

H_{3d}: Retail brand trust mediates the effect of assurance quality on retail brand loyalty.

3. RESEARCH METHOD

3.1. Purpose and Scope of the Research

The primary objective of this research is to examine the impact of perceived omnichannel integration quality on consumer trust in a retail brand and the mediating role of this trust on brand loyalty. The research was limited to the technology retail sector, which effectively implements omnichannel strategies and has a multi-brand structure. This sector was selected because consumers frequently shop through both physical stores and digital channels such as websites and mobile apps, thus providing a suitable context for measuring omnichannel perception. Therefore, the study addresses the following research questions: (1) How does omnichannel integration quality affect consumer trust in a retail brand? (2) Does brand trust play a mediating role in the relationship between omnichannel integration quality and retail brand loyalty?

3.2. The Main Population and Sample of the Research

The study population consists of consumers with omnichannel experience. Due to the difficulty of reaching the entire population, the study was limited to consumers living in Yalova province who have an omnichannel experience. The ethics committee approval for this study was obtained from the Ethics Committees Coordination Unit of Yalova University on March 28, 2025 (Decision No: 2025/126). Data collection was conducted from April 1 to May 22, 2025, and a total of 386 responses were collected. After checking the data, duplicate or invalid responses were removed, leaving 318 valid surveys for analysis. The convenience sampling technique, which ensures accessibility and reduces time and cost constraints in field research, was used as the sampling method (Gegez, 2021). The resulting sample of 318 participants meets the minimum recommended sample size for structural equation modeling (SEM). In SEM

applications, a minimum of 5–10 participants per variable, or a total sample size of over 200, is considered sufficient (Hair et al., 2022). Therefore, the current sample was deemed sufficient for the research model.

3.3. Measurements

In this study, scales with previously established validity and reliability were used to measure the model's variables. Omnichannel integration quality was measured using a scale developed by Hossain et al. (2020), and Cronbach's alpha ranged from 0.87 to 0.95. In this study, the five-item version of the scale, adapted to Turkish by Tutan (2022), was used, and the Turkish form's reliability coefficient was found to be acceptable. Brand trust and brand loyalty variables were measured with scales developed by Chaudhuri and Holbrook (2001). In the original study, the Cronbach's alpha value of the brand trust scale was 0.81, and brand loyalty was reported with two sub-dimensions: behavioral loyalty ($\alpha = 0.90$) and attitudinal loyalty ($\alpha = 0.83$).

4. FINDINGS/RESULTS

An online survey form was created to collect research data. The survey was prepared using Google Forms and distributed to participants via email, social media, and WhatsApp. The form included questions measuring participants' shopping habits, perceived omnichannel integration quality, brand trust, and brand loyalty levels, as well as demographic questions. The obtained data were analyzed using quantitative analysis methods. The SmartPLS 4 program was used to test the hypotheses. Unlike covariance-based statistical approaches (e.g., AMOS, LISREL), SmartPLS uses a variance-based structural equation modeling approach, which offers the advantage of producing reliable results even when the normal distribution assumption is not met and the sample size is limited (Hair et al., 2022). Furthermore, SmartPLS has been widely preferred in the marketing literature in recent years (Cavdar-Aksoy and Yazıcı, 2023; 2025).

4.1. Structural Validity of the Research Model

A multistage analysis process was implemented to assess the structural validity of the scales used in the study. First, all questionnaire statements were submitted to field experts for evaluation, and it was determined that they adequately represented the concepts; this supports the content validity of the scales. Convergent and discriminant validity was then examined using confirmatory factor analysis (CFA). Factor loadings, composite reliability (CR), and average variance explained (AVE) values were used to assess convergent validity. Discriminant validity was tested using the Heterotrait–Monotrait ratio (HTMT) using the Fornell and Larcker (1981) criterion. In this context, it was confirmed that the model variables were sufficiently distinct and that the statements collected under each construct measured a familiar concept.

4.2. Convergent Validity

Convergent validity refers to the degree to which items constituting the same construct meaningfully and consistently represent a whole (Hair et al., 2022). To determine whether the

scales used in this study possessed convergent validity, a confirmatory factor analysis (CFA) was conducted on a model containing the variables channel service configuration, content consistency, process consistency, assurance quality, brand trust, and brand loyalty. The evaluation was based on criteria recommended in the literature: factor loadings, Cronbach's alpha, composite reliability (CR), and average variance explained (AVE) (Nunnally, 1978; Fornell and Larcker, 1981).

The measurement model includes the following constructs: channel service configuration (CSC1–CSC8), content consistency (CC1–CC8), process consistency (PC1–PC6), assurance quality (AQ1–AQ8), brand trust (BT1–BT4), and brand loyalty (BL1–BL4), each represented by its own observed variables. These constructs in the model were tested through confirmatory factor analysis (CFA).

When the CFA results were examined, it was observed that the factor loadings for some statements were below the recommended threshold in the literature. According to Hair et al. (2022), factor loadings above 0.60 are an acceptable threshold for convergent validity. In this study, the factor loadings of the statements "All of the retailer's channels are easy to use," "All of the retailer's channels have a flexible system that meets my needs," and "The service experience is consistent across all of this retailer's channels" were below this threshold. Therefore, to ensure convergent validity, these statements were removed from the model, and the analysis was repeated.

The analysis revealed that the channel service configuration (CSC1–CSC8), content consistency (CC2–CC8), process consistency (PC4–PC6), and assurance quality (AQ1–AQ8) dimensions representing omnichannel integration quality, as well as the expressions for the brand trust (BT1–BT4) and brand loyalty (BL1–BL4) constructs, were above equal. The final results obtained accordingly are presented in Table 1.

As shown in Table 1, the standardized factor loadings range from 0.63 to 0.93. In addition, the t-values of all factor loadings are statistically significant ($p < 0.001$). These results indicate that the scale items adequately explain the constructs they represent and are compatible with the threshold values suggested by Hair et al. (2022). As seen in Table 1, Cronbach's alpha values for the variables were found to be between 0.76 and 0.94, which was above the 0.70 threshold recommended by Nunnally (1978). This finding reveals that the internal consistency of the scales was adequate. Similarly, the composite reliability (CR) values ranged between 0.84 and 0.96 and were above the acceptable limit (Bagozzi and Yi, 1988). Finally, the average explained variance (AVE) values were found to be between 0.58 and 0.85. All of these values are above the recommended threshold of 0.50, confirming that each construct is adequately explained by its own indicators (Fornell and Larcker, 1981). Finally, it was determined that all of the VIF values, which indicate a multicollinearity problem (variance inflation factor (VIF), were less than 5, as reported in the literature (Salmerón et al., 2018). When these results are evaluated together, it can be said that the scales used in the study meet the criteria for convergent validity.

Table 1. Factor loadings, cronbach's alpha, CR and AVE values for variables

Dimensions	Factor Loadings	Cronbach's alpha	CR	AVE	VIF
Quality Assurance (AQ)		.91	.92	.61	
AQ1	.79				2.90
AQ2	.78				3.47
AQ3	.82				3.75
AQ4	.83				3.99
AQ5	.84				3.27
AQ6	.73				2.27
AQ7	.75				2.91
AQ8	.70				2.32
Process Consistency (PC)		.88	.92	.82	
PC4	.87				2.28
PC5	.91				2.82
PC6	.91				2.54
Channel Service Configuration (CSC)		.89	.91	.58	
CSC1	.79				2.75
CSC2	.80				2.74
CSC3	.77				2.25
CSC4	.75				2.40
CSC5	.80				2.63
CSC6	.69				1.86
CSC7	.66				1.60
CSC8	.82				2.57
Content Consistency (CC)		.90	.92	.59	
CC1	.80				2.35
CC2	.81				3.13
CC3	.79				2.86
CC4	.85				3.08
CC5	.79				2.07
CC6	.67				1.89
CC7	.66				1.91
CC8	.71				2.13
Brand Trust (BP)		.94	.96	.85	
BP1	.91				3.82
BP2	.92				4.29
BP3	.93				4.62
BP4	.93				4.35
Brand Loyalty (BL)		.76	.84	.58	
BI1	.68				1.58
BI2	.63				1.60
BI3	.85				2.01
BI4	.85				1.91

4.3. Discriminant Validity

Discriminant validity indicates the extent to which a scale can be distinguished from other scales measuring different constructs (Hair et al., 2022). In this study, discriminant validity was tested using the Heterotrait–Monotrait ratio (HTMT) criterion proposed by Fornell and Larcker (1rion, as widely used in the marketing literature (e.g., Cavdar-Aksoy and Yazıcı, 2023; 2025).

According to the Fornell and Larcker (1981) criterion, discriminant validity is assessed by each construct's average variance explained (AVE) being greater than its correlations with other constructs. As seen in Table 2, the square root of each construct's AVE is higher than its correlation values with other constructs. This finding demonstrates that discriminant validity was achieved according to the Fornell and Larcker criterion.

In addition, the HTMT ratio, which allows for a more precise assessment of discriminant validity, was examined. According to Hair et al. (2022), discriminant validity is considered to be achieved between constructs if HTMT values are below 0.85. As seen in Table 3, all HTMT values remained below 0.85. Therefore, this method confirmed that the conditions for discriminant validity were met. In conclusion, when the Fornell–Larcker criterion and the HTMT ratio were evaluated together, it was determined that the scales used in the study achieved discriminant validity. These findings are consistent with methodological approaches that recommend using both the Fornell–Larcker criterion and the HTMT ratio together in discriminant validity assessments (Henseler et al., 2015; Hair et al., 2022).

Table 2. Discriminant validity according to Fornell and Larcker (1981)

	Quality Assurance	Channel Service Configuration	Brand Trust	Brand Loyalty	Process Consistency	Content Consistency
Quality Assurance	(.78)					
Channel Service Configuration	.54	(.76)				
Brand Trust	.64	.47	(.92)			
Brand Loyalty	.39	.27	.47	(.76)		
Process Consistency	.64	.74	.58	.29	(.90)	
Content Consistency	.61	.73	.55	.29	.72	.77

Table 3. Discriminant validity according to HTMT

	Quality Assurance	Channel Service Configuration	Brand Trust	Brand Loyalty	Process Consistency	Content Consistency
Quality Assurance						
Channel Service Configuration	.54					
Brand Trust	.69	.50				
Brand Loyalty	.44	.30	.51			
Process Consistency	.71	.83	.63	.33		
Content Consistency	.66	.81	.59	.31	.80	

4.4. Common Method Bias

The Harman single-factor test (CMB), frequently used in the marketing literature (e.g., Cavdar-Aksoy and Yazıcı, 2023), was used to assess the potential risk of common method bias that may arise from data collection using the same method. The analysis found that the single-factor solution explained 42.6% of the variance. As reported in the literature, a variance explained by a single factor below 50% indicates that common method bias is not a serious problem (Podsakoff et al., 2003). Therefore, it was concluded that this study did not suffer from common-method bias and that the results were independent of methodological bias.

4.5. Hypothesis Testing

Following validation of the measurement model, the structural model was evaluated. R^2 (coefficient of determination) and Q^2 (Stone–Geisser test) values were examined to test the explanatory power and predictive ability of the constructs. The PLS-SEM algorithm, widely used in the marketing literature (e.g., Ürü et al., 2024), was used to test the hypotheses in the structural equation model, and the bootstrap sample size was set at 5000. Based on the analysis results, the model's explanatory power (R^2), predictive power (Q^2), and path coefficients were evaluated. The analysis revealed R^2 values of 0.48 for brand trust and 0.22 for brand loyalty. According to Falk and Miller (1992), an R^2 value above 0.10 indicates that the model has sufficient explanatory power. This result demonstrates that the independent variables have significant explanatory power on brand trust and brand loyalty. The Q^2 values, which assess the model's predictive power, were also examined. The analysis revealed Q^2 values of 0.46 for brand trust and 0.14 for brand loyalty. According to Hair et al. (2022), Q^2 values greater than 0 indicate high predictive power of the model. This finding demonstrates that the structural model possesses not only explanatory but also predictive validity.

4.6. Path Coefficients

The structural model results for the hypotheses tested in the study reveal the significance levels of the relationships among the variables (Table 4). Firstly, hypothesis H_{1a}, which examined the effect of channel service structuring on brand trust, was not supported ($\beta = -0.057$, $p > .05$). In

contrast, hypothesis H_{1b}, which tested the effect of content consistency on brand trust, was supported. It was observed that consumers' perceptions of content consistency significantly and positively affected brand trust ($\beta = 0.17$, $p < .05$). Similarly, hypothesis H_{1c}, regarding the effect of process consistency on brand trust, was also supported. It was determined that this dimension strongly increased brand trust ($\beta = 0.21$, $p < .001$). Furthermore, hypothesis H_{1d}, which tested the effect of assurance quality on brand trust, was supported, and it was found that this variable had a highly positive effect on brand trust ($\beta = 0.43$, $p < .001$). Finally, the hypothesis that brand trust affects brand loyalty was also supported; brand trust was found to have a significant, positive effect on loyalty ($\beta = 0.47$, $p < .001$).

Table 4. Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	f^2
Channel Service Configuration → Brand Trust	-0.05	-.04	.07	.72	.47	.00
Content Consistency → Brand Trust	.17	.17	.07	2.37	.01**	.02
Process Consistency → Brand Trust	.21	.20	.06	3.25	.00*	.02
Quality Assurance → Brand Trust	.43	.44	.05	8.36	.00*	.19
Brand Trust → Brand Loyalty	.47	.47	.05	9.40	.00*	.28

*p<.001, ** p<.01

In the structural model, the f^2 effect size was examined to assess the explanatory contributions of the variables on the dependent variable. According to the threshold values suggested by Cohen (1988), f^2 between 0.02 and 0.15 indicates a small effect, 0.15 to 0.35 indicates a medium effect, and above 0.35 indicates a significant effect. As shown in Table 4, the impact of channel service structuring on brand trust ($f^2 = 0.002$) is relatively small and does not significantly enhance the model's explanatory power. On the other hand, content consistency ($f^2 = 0.022$) and process consistency ($f^2 = 0.029$) contribute at a small effect level, meaning they play a supporting role in the formation of brand trust. The effect of the quality assurance dimension was found to be moderate ($f^2 = 0.197$), demonstrating that this dimension plays a central role in building brand trust. Finally, the effect of brand trust on brand loyalty ($f^2 = 0.288$) is moderate, suggesting that trust is a critical determinant of loyalty. These findings, as emphasized by Hair et al. (2022), suggest that f^2 values should not be used solely as statistical significance tests to determine the practical significance of independent variables. Therefore, the study's results suggest that quality assurance and brand trust variables have a greater impact on customer loyalty. At the same time, channel service configuration does not provide the expected contribution.

After examining the direct effects in the model through hypothesis testing, indirect effects were analyzed to test the mediating role of brand trust. A mediating variable is a variable that explains the relationship between the independent and dependent variables and reveals the mechanism

underlying this relationship (Baron and Kenny, 1986). In this study, brand trust was treated as a mediating variable in the relationship between the quality dimensions of omnichannel integration and brand loyalty. The mediation analysis in this study was conducted in accordance with the recommendations of Hair et al. (2022). The indirect effect coefficients, significance levels, and VAF values presented in Table 5 indicate the mediating relationships. Accordingly, hypothesis H_{3a} tested the mediating role of brand trust in the relationship between channel service configuration and brand loyalty. However, the results revealed that this relationship was not supported ($\beta = -0.027$, $p > .05$); thus, there was no significant mediating effect of channel service configuration on brand loyalty. In contrast, hypothesis H_{3b} was supported, and brand trust was found to mediate the impact of content consistency on brand loyalty ($\beta = 0.084$; $p < .05$). The direct effect was not significant, whereas the indirect effect was significant. Similarly, hypothesis H_{3c} was supported, and it was determined that the impact of process consistency on brand loyalty became significant through brand trust ($\beta = 0.101$; $p < .01$). Finally, hypothesis H_{3d} was also supported, and brand trust was found to have a strong mediating role in the effect of assurance quality on brand loyalty ($\beta = 0.207$; $p < .001$).

Table 5. Path coefficient analysis of mediator effect

Specific Indirect Effects	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Channel Service Configuration → Brand Trust → Brand Loyalty	-.02	-.02	.03	.71	.47
Content Consistency → Brand Trust → Brand Loyalty	.08	.08	.03	2.40	. 016*
Process Consistency → Brand Trust → Brand Loyalty	.10	.10	.03	3.09	.002**
Quality Assurance → Brand Trust → Brand Loyalty	.20	.21	.03	5.72	. 000**

*p<.001, ** p<.01, *** p<.05

As a result, the channel service configuration dimension did not have a significant effect on loyalty through trust. In contrast, the content consistency, process consistency, and assurance quality dimensions did not directly affect loyalty but did so through brand trust. Consequently, the channel service configuration dimension did not have a significant effect on loyalty, whereas brand trust, content consistency, process consistency, and assurance quality dimensions significantly affected loyalty, albeit not directly. In this study, direct paths between the integration quality dimensions and brand loyalty were not defined due to the model design; loyalty was assumed to be shaped solely by brand trust. The positive and significant indirect effects indicate that brand trust fully mediates the relationship between integration quality and loyalty. As noted by Zhao et al. (2010) and Nitzl et al. (2016), when the direct effect is not included in the model, mediation can be assessed only by the significance of the indirect impact, and full mediation can be concluded. In this regard, research findings clearly reveal that brand trust is a necessary psychological transition mechanism in the formation of consumer loyalty.

5. DISCUSSION

According to the research findings, channel service configuration did not have a significant effect on brand trust. The literature explains the channel portfolio's contribution to trust conditionally. Wallace et al. (2004) and Yang et al. (2008) stated that trust established in one channel can be transferred to other channels; however, this effect strengthens as process fluidity and integration levels increase. Similarly, Qi and Yao (2020) showed that the direct impact of channel service configuration on trust is weak, while Tran Xuan et al. (2023) showed that the contribution of channel diversity is limited. Hossain et al. (2020) argue that the fundamental dimension of integration quality in channel service configuration is insufficient to explain perceived value, with content and process consistency being more decisive. Beck and Rygl (2015) similarly emphasized that channel diversity alone does not create value but gains meaning in conjunction with consistency. Salem et al. (2022), Asare et al. (2022), and Quach et al. (2022) also present findings along similar lines. Consequently, channel diversity or transparency alone is not sufficient to establish trust. In this context, particularly in information-intensive and high-risk categories such as technology products, the level of consistency and integration between channels, rather than the increase in the number of channels, appears to be the decisive factor in building trust. Consequently, channel diversity or transparency alone is not sufficient for building trust.

Early findings from the omnichannel retailing era indicate that information consistency is a critical element for customer satisfaction and trust (Montoya-Weiss et al., 2003; Falk et al., 2007, p.156-157). While deviations in price, product, and campaign information erode perceptions of service quality, information consistency reduces risk perceptions and reinforces trust (Zhang et al., 2010). The findings of this research are consistent with this general trend in the literature: content consistency has a positive and significant effect on brand trust (Oh and Teo, 2010; Lee et al., 2019; Wu and Chang, 2016; Xuan et al., 2023, p.4-5). Consequently, content consistency is considered not only a technical "information management" element but also a strategic integration dimension that shapes consumer trust. Especially in categories where technical specifications, pricing information, and warranty conditions are decisive in the decision-making process, such as technology products, inconsistent content delivery across channels increases uncertainty and weakens trust. Therefore, content consistency stands out not only as a technical information management element but also as a strategic integration dimension that reduces consumer risk perception and enables trust. This finding directly addresses research gaps identified in the literature (Nguyen et al., 2022; Qi and Yao, 2020; Hamouda, 2019).

The functional, i.e., process, dimension of service quality is a decisive element in the formation of trust. In an omnichannel context, process and content consistency are fundamental conditions for customer satisfaction and trust (Ganesh, 2004). While discontinuities in ordering, delivery, and problem-solving steps erode trust (Falk et al., 2007), integrating transaction and service processes in an omnichannel environment strengthens trust (Qi and Yao, 2020). Similarly,

Quach et al. (2022, p.6-7) showed that consistent processes reduce privacy risk by improving the flow experience. In this context, process consistency strengthens the consumer's perception of control during channel transitions, reducing uncertainty and creating a functional foundation for building trust. The findings of this research, in line with the literature (Herhausen et al., 2015; Gao and Huang, 2021), reveal that process consistency has a positive and significant effect on brand trust.

The most potent effect of the study was observed in the assurance quality dimension. Assurance quality—consisting of privacy, security, and service recovery components—is considered a core determinant of trust in omnichannel retailing (Hossain et al., 2020). Crosschannel data sharing can trigger privacy concerns; the lack of adequate assurance mechanisms erodes trust (Kazancoglu and Aydin, 2018). The literature notes that this dimension has not been sufficiently tested and that security and privacy issues are often ignored in most studies (Nguyen et al., 2022; Cui et al., 2021; Tran Xuan et al., 2023). Non-transparent data collection processes trigger perceptions of privacy violations and denial-of-service attacks (Quach et al., 2022); privacy concerns directly undermine trust (Escobar-Rodríguez and Carvajal-Trujillo, 2014; Ponte et al., 2015). In contrast, personal data protection, clear privacy policies, and third-party assurance certificates significantly increase brand trust (Ponte et al., 2015, p.288-290; Belanger et al., 2002). In the context of this research—in categories perceived as high financial, performance, and data risk, such as technology products and omnichannel structures—assurance quality functions as a necessary threshold for other integration dimensions to be effective. Content and process consistency can support trust building; however, when privacy, security, and service recovery mechanisms are not perceived as strong enough, the capacity of these dimensions to generate trust remains limited. This theoretically explains why assurance quality has a stronger impact compared to other integration dimensions. The findings of this research confirm that assurance quality has a positive and significant effect on brand trust. The results are consistent with those of Hossain et al. (2020), Cui et al. (2021), Nguyen et al. (2022), Tran Xuan et al. (2023), and Quach et al. (2022). In short, privacy, security, and service recovery mechanisms form the indispensable backbone of trust-building for omnichannel success.

Consequently, content consistency, process consistency, and assurance quality have positive and significant effects on brand trust. However, channel service configuration did not have a significant effect on brand trust. This suggests that offering multiple channels alone is not sufficient to build trust; trust is built primarily through information and process integrity, as well as privacy and security mechanisms. The study concluded that brand trust has a positive and significant effect on brand loyalty. This finding is fully consistent with the classical literature, which identifies trust as the most critical antecedent of loyalty (Chaudhuri and Holbrook, 2001; Delgado-Ballester and Munuera-Alemán, 2005; Garbarino and Johnson, 1999).

One of the study's key findings is the revelation that brand trust plays a mediating role in the relationship between integrated channel integration quality and brand loyalty. This result

indicates that the impact of integration quality on loyalty is not direct, but rather shaped through consumers' perceptions of trust in the brand. Accordingly, the research model did not aim to directly test the effect of integration quality on brand loyalty; instead, it was constructed based on the assumption that this relationship could be explained through trust. The findings support this theoretical approach and demonstrate the explanatory power of the combined Stimulus-Organism-Response (S-O-R) Model and Commitment-Trust Theory in the context of integrated channel retailing.

5.1. Theoretical Contributions

The theoretical contributions of this research deepen the existing body of knowledge by addressing the relationship between integration quality and trust in the omnichannel literature within a multidimensional and holistic framework. Firstly, the study empirically tests the four-dimensional integration quality structure (channel service configuration, content consistency, process consistency, and assurance quality) conceptualized by Hossain et al. (2020) in conjunction with brand trust, revealing that integration quality is not only an operational system characteristic but also a structure directly related to consumers' psychological evaluations. This finding strengthens the position of the perceptual and experiential aspects of integration quality in the literature.

Secondly, the study uses both the Stimulus-Organism-Response (S-O-R) Model (Mehrabian and Russell, 1974) and Commitment-Trust Theory (Morgan and Hunt, 1994) to explain the mediating mechanism underlying the relationship between integration quality and brand loyalty. Within this framework, it is shown that the effect of integration quality on brand loyalty occurs not directly, but indirectly through brand trust. Thus, trust is theoretically positioned as a central psychological bridge functioning between environmental stimuli and behavioral outcomes within the context of the omnichannel retail.

Thirdly, the research directly addresses the gaps highlighted by previous studies (Nguyen et al., 2022; Hamouda, 2019; Kazancoglu and Aydin, 2018; Frasquet and Miquel, 2017) that emphasize the insufficient treatment of trust in the integrated channel retail literature. The findings differentiate the effects of the dimensions constituting integration quality on trust, particularly highlighting the decisive role of assurance quality. In this respect, the study theoretically grounds integration quality not only as an indicator of technical and operational compliance, but also as a strategic trust-building mechanism that shapes the consumer's perception of risk and sense of control.

In conclusion, this study offers a unique contribution to the omnichannel retail literature by examining the relationship between integration quality, trust, and loyalty from both the perspective of the S-O-R model, which provides a structural framework, and the perspective of Commitment-Trust Theory, which explains the relational dynamics, thereby enhancing theoretical coherence and explanatory power.

5.2. Practical Contributions

This research offers important managerial implications for retailers implementing omnichannel strategies, focusing on the relationship between trust and loyalty. The findings demonstrate that providing multiple channels alone is not sufficient to build brand trust and loyalty; trust is built through information integrity, a fluid process experience, and a strong security infrastructure. Therefore, managerial decisions should focus on strengthening crosschannel consistency and a strong trust infrastructure, rather than simply expanding the channel portfolio.

The research results reveal that content consistency strengthens trust by reducing consumers' perception of uncertainty, and that this is a significant psychological mechanism that supports repeat purchases. Therefore, synchronizing product, price, stock, and promotion information across all touchpoints is considered a critical practice for sustaining brand trust.

Similarly, the seamless flow of delivery, returns, and service support processes across channels reinforces consumers' perception of brand reliability and encourages loyalty. Therefore, businesses must plan their process integration investments to ensure a continuous customer experience.

In addition, assurance mechanisms such as privacy, data security, encryption technologies, and rapid service recovery practices help protect consumer loyalty to the brand by preventing trust breaches. The findings demonstrate that assurance quality is a decisive strategic element in sustaining loyalty.

In conclusion, this research demonstrates that the success of omnichannel strategies depends not only on technological integration but also on experiential integration that reinforces consumer trust. Trust serves as the fundamental psychological bridge that drives loyalty in the highly competitive retail context; therefore, it should be considered a strategic investment area that supports customer retention, lifetime value, and market share sustainability.

5.3. Recommendations for Future Studies

While the model developed in this study demonstrates that integration quality influences loyalty through brand trust, there are critical dimensions that warrant further exploration in future research. First, the study data were collected cross-sectionally. Longitudinal designs or experimental studies could be preferred to draw stronger causal inferences. This would allow for more consistent observations of changes in integration quality perception over time and their impact on loyalty behavior.

Second, the study focused on a single geographic region and a sample of technology retailers. Comparative studies across sectors (e.g., fashion, food, banking) and cultural contexts would provide an opportunity to test the model's generalizability.

Third, the research model treated brand trust as the primary mediating variable. Loyalty processes can also be shaped by other relational and experiential variables such as satisfaction, perceived value, customer involvement, and emotional attachment (e.g., Gao and Huang, 2021; Asare et al., 2022). Therefore, future studies could examine multiple mediating effects by including these variables in the model. Finally, the proliferation of digital privacy and AI-based personalization applications introduces new determinants of consumer trust. In this context, the impact of data governance, algorithmic transparency, and AI-based services on consumer trust offers new research opportunities.

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