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# The Path to Brand Love: How Omnichannel Integration Shapes Gen Z Consumer Engagement

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**ABSTRACT**

Omnichannel retail is the new retail norm, combining seamless interactions between online and offline for both retailers and consumers. While the impact of omnichannel retail on business is increasingly recognized, there remains a significant gap between customer expectations and what retailers offer in terms of omnichannel capabilities. Based on the Stimulus-Organism-Response (S-O-R) model, this study explores the brand love behavior of Generation Z in quality and integrated omnichannel retail. A quantitative approach was adopted through a self-administered questionnaire. A total of 301 consumers were sampled, and the data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings show that omnichannel integrated quality, including elements such as integrated interaction quality, fulfillment, efficiency, and responsiveness, positively influences customer engagement, while customer engagement (CE) positively affects brand love (BL) among Generation Z. This study thus confirms the mediating effect of CE (O) between OIQ (S) and BL (R). This underscores the importance of quality omnichannel integration in engaging consumers, which in turn enhances brand love among Generation Z.

**Keywords:** Omnichannel Integrated Quality, Customer Engagement, Brand Love
**JEL Classifications:** M31, L81, D12

## 1. INTRODUCTION

Digital technology has revolutionized the shopping experience, enabling consumers to seamlessly transition across various channels. This shift has prompted stakeholders to reevaluate their competitive strategies and integrate these diverse channels into a unified approach (Brynjolfsson et al., 2013). In recent years, retailers have focused on delivering a unique and cohesive shopping experience that caters to the varied preferences of modern consumers. One potential solution to this challenge is the integration of offline and online platforms, known as an omnichannel strategy, which leverages technology to streamline the customer journey. Retailers are increasingly recognizing the importance of consolidating information and services across multiple channels to provide a smooth and consistent customer experience. This shift has driven a transition from traditional multichannel strategies to more integrated omnichannel approaches (Herhausen et al., 2015; Shen et al., 2018).

To establish a strong market presence, companies must create and nurture a powerful brand identity that resonates with consumers, leaving a lasting impression and fostering trust. This trust plays a pivotal role in driving consumer purchases and, once satisfaction is achieved, contributes to the development of brand love. When consumers experience emotional attachment to a brand, going beyond mere preference, their loyalty and willingness to share positive word-of-mouth significantly increase (Carroll and Ahuvia, 2006).

Generation Z, typically defined as individuals born between 1997 and 2012, presents unique challenges to brand loyalty due to their distinct consumer behavior and preferences. A significant factor contributing to Gen Z's hesitance toward long-term brand loyalty

is their strong inclination toward personalization and a desire for uniqueness in product offerings.

Members of Gen Z are prone to switching between brands that reflect their evolving identities and ethical values, making it increasingly difficult for any single brand to achieve their unwavering loyalty. Omnichannel strategies, which merge the online shopping experience through social media with offline interactions, are anticipated to foster brand love among Generation Z. While retailers are becoming increasingly aware of the importance of adopting an omnichannel approach, a considerable gap remains between what customers expect and what retailers can deliver in terms of omnichannel capabilities (Hansen and Sia, 2015). Many consumers feel underserved, as companies fail to adequately address their specific needs with existing channel setups (Hoogveld and Koster, 2016).

The quality of omnichannel integration has a direct impact on customer engagement and the acceptance of loyalty programs, which in turn mediates the relationship between channel integration quality and customer loyalty in omnichannel retail (Gao and Huang, 2021). By providing a seamless and authentic brand experience across all touchpoints, the quality of omnichannel integration significantly influences customer engagement and loyalty, ultimately contributing to the development of brand love among Gen Z.

Therefore, the research questions guiding this study are as follows:
RQ1: How is omnichannel integrated quality conceptualized for Generation Z, and to what extent does it influence customer engagement and brand love?
RQ2: How is customer engagement conceptualized within the context of omnichannel integrated quality provided by retailers?
RQ3: Does customer engagement mediate the relationship between omnichannel integrated quality and brand love?

## 2. LITERATURE REVIEW

This study utilizes the S-O-R Model to explore the influence of environmental factors on consumer behavior (Mehrabian and Russell, 1974). The S-O-R Model illustrates how various environmental stimuli affect the internal organism of the individual, which in turn influences behavioral responses. Building on this paradigm, the model suggests that the quality of integrated omnichannel channels serves as critical cues that act as stimuli to influence internal reactions and behaviors. Consumer interactions across omnichannel platforms trigger a psychological engagement process, which ultimately impacts behavioral responses, particularly the development of brand love.

### 2.1. Omnichannel Integrated Quality

A synthesis of the literature on omnichannel integrated quality is measured through several key dimensions, including integrated interaction quality (Hossain et al., 2020), fulfillment, efficiency (Zhang et al., 2019), and responsiveness (Raza et al., 2020). Integrated interaction quality refers to the alignment between an organization's service design and customer expectations. Misalignment between these elements can negatively affect the overall integration quality within omnichannel services. To enhance service delivery, organizations must understand customer perceptions (Banerjee, 2014). This quality is crucial because the foundational elements of service channel configuration play a significant role in determining overall integration quality (Lin et al., 2023). The perceived smoothness of service usage is influenced by both internal and external experiences, which impact integration quality across channels (Shen et al., 2018). Integrated interaction quality includes content consistency, ensuring that the information provided to customers remains uniform and free from contradictions across all channels. Additionally, process consistency involves the smooth execution of processes across different channels, allowing customers to seamlessly transition from one channel to another without disruption (Banerjee, 2014).

Responsiveness refers to the timeliness and efficiency with which service providers address customer inquiries, requests, or issues (Raza et al., 2020). This dimension encompasses how quickly and effectively omnichannel platforms respond to customer complaints, such as answering questions, resolving problems, or providing product information. Fulfillment in an omnichannel context involves the process of delivering products to customers after a purchase. Key elements of fulfillment include order processing, which is critical for customer satisfaction since delays can lead to frustration; inventory management, ensuring the right products are in stock and that inventory levels are updated in real-time across all channels; shipping and delivery, where timely and reliable delivery is essential; order accuracy, which is vital to avoid returns and customer dissatisfaction; and return management, where straightforward return policies enhance the overall shopping experience (Zhang et al., 2019). Lastly, efficiency refers to the speed of access and ease of use of a retailer's virtual channels (Parasuraman et al., 2005). Customers are drawn to services that are intuitive and easy to navigate (Van Dolen et al., 2007). User-friendly technology fosters customer comfort, thereby improving their perception of virtual retail channels (Han and Kim, 2019). In online shopping, the presentation of information and navigation of the site are crucial factors influencing trust in e-commerce transactions. Well-organized and easily accessible information is also a key driver in motivating customers to complete purchases on a retailer's website (Wolfinbarger and Gilly, 2003).

### 2.2. Customer Engagement

Customer engagement is measured using two key dimensions: Enthused participation and social connection (Vivek et al., 2012). Enthused participation refers to the enthusiastic reactions and emotions individuals experience when using or interacting with the focus of engagement. It captures the excitement and positive involvement a person feels in their engagement. On the other hand, social connection pertains to the enhancement of interactions through the involvement of others. It emphasizes the reciprocal actions toward others, where engagement is not just one-sided but involves mutual interactions that foster a sense of connectedness among individuals.

### 2.3. Brand Love

Brand love is conceptualized across three dimensions, as outlined by Prentice et al. (2019). Self-Brand Integration occurs when a brand becomes integrated into the consumer's self-identity. This

dimension refers to the extent to which an individual incorporates a brand into their self-concept, with the integration being driven by the connection between the consumer's unique identity and the symbolic meaning the brand holds. Passion-Driven Behaviors are behaviors fueled by an intense emotional connection with a brand. These behaviors reflect how consumer actions toward a particular brand are motivated by a deep passion and attachment. Lastly, Positive Emotional Connection refers to the positive emotional outcomes that result from a strong, enduring relationship between the consumer and the brand. This emotional bond develops over time, strengthening the consumer's affection and loyalty toward the brand.

### 2.4. Hypotheses Development

Research consistently suggests that the quality of integrated channels plays a critical role in fostering customer engagement within omnichannel retail environments (Le and Nguyen Le, 2020; Lee et al., 2019). This enhanced engagement, in turn, contributes significantly to increased brand loyalty. In this regard, Xie et al. (2023) underscore the importance of integrated omnichannel systems in improving the overall customer experience, emphasizing that a seamless experience across multiple channels encourages deeper customer involvement. Furthermore, Li et al. (2023) highlight the mediating role of consumers' perceptions of personal preference alignment and social connection in driving word-of-mouth behavior, a key indicator of customer engagement, through omnichannel integration. Together, these studies collectively illustrate the positive influence that integrated omnichannel quality has on both customer engagement and reciprocal behavior in omnichannel retail.

However, the evidence regarding the effect of omnichannel integrated quality on customer engagement is not entirely conclusive. For instance, Lee et al. (2019) found that integrated channel quality did not have a significant impact on customer engagement with omnichannel retailers, suggesting that other factors may play a more prominent role in driving engagement. Similarly, Huang et al. (2019) showed that the quality of omnichannel integration had no significant effect on relationship commitment, further complicating the understanding of this dynamic. Despite these mixed findings, the existing literature collectively points to the critical role of omnichannel integration in shaping customer engagement, leading to the formulation of the following hypothesis:

$H_1$: Omnichannel integration quality has a positive and significant effect on customer engagement.

While some studies suggest a positive impact on brand love through enhanced customer engagement and loyalty, other research indicates that its direct effect may not be statistically significant. Furthermore, Huang et al. (2019) highlight the importance of channel integration quality in managing customer relationships and providing a cohesive shopping experience. However, Mainardes et al. (2020) found no significant influence of perceived smoothness on loyalty or relationship commitment. These mixed findings suggest that further research is needed to fully understand this relationship. Based on these insights, the following hypothesis is proposed:

$H_2$: Omnichannel integration quality has a positive and significant effect on brand love.

Previous studies have shown a positive correlation between customer engagement and brand love. Wallace et al. (2014) state that increased engagement leads to a stronger emotional connection and deeper brand love. Sarkar and Sreejesh (2014) further define customer engagement as the level of involvement, interaction, and emotional connection with a brand. Additionally, Tsou and Putra (2023) and Junaid et al. (2019) suggest that brand love alone can predict customer engagement. Fostering brand love is crucial to encouraging engagement and strengthening the relationship between customers and the brand. Joshi and Garg (2021) found that brand engagement acts as a mediator between brand love and customer loyalty. However, Ahluwalia et al. (2000) argue that customer engagement may not always significantly affect brand affection, as customer commitment—while related to engagement—does not always moderate the relationship between negative publicity and brand affection.

$H_3$: Customer engagement has a positive and significant effect on brand love.

Batra et al. (2012) argue that integrating customers into the consumer's identity is a key aspect of trust, contributing to the development of an emotional connection between consumers and brands. Riani and Gayatri (2023) show that customer engagement has a significant impact on brand love, aligning with the findings of Hamzah et al. (2021). To attract customers, businesses can target potential customers through social media. Consumers respond positively to interactive or new posts, which influence all aspects of the customer-brand relationship, including brand love and brand identification. Additionally, the use of online social media can increase exposure. Customer engagement mediates the relationship between integrated omnichannel quality and brand love, as it plays a critical role in fostering brand affection. Therefore, the following hypothesis is proposed:

$H_4$: Customer engagement mediates the relationship between omnichannel integrated quality and brand love.

## 3. RESEARCH METHODOLOGY

This study employed a quantitative research design to examine the impact of omnichannel integration quality on customer engagement and brand love among Generation Z. A cross-sectional survey method was utilized to collect data from respondents, allowing for the analysis of relationships between the constructs. The target population consisted of Generation Z consumers who had engaged with brands through omnichannel platforms (e.g., online, mobile, and physical stores), specifically focusing on Generation Z women in Indonesia who purchased beauty and skincare products from omnichannel retailers such as Sociolla.

The study focused on three primary constructs: Omnichannel Integration Quality, Customer Engagement, and Brand Love, which were measured through specific dimensions informed by the literature. Omnichannel Integration Quality (OIQ) was assessed through four dimensions: Responsiveness (Raza et al.,

2020), which referred to how quickly and effectively omnichannel platforms responded to customer complaints or inquiries; Integrated Interaction Quality (Banerjee et al., 2021), which involved channel-service configuration (offering multiple interaction channels) and integrated interactions (ensuring consistent messaging and seamless switching across channels); Fulfillment (Zhang et al., 2019), which included key elements like order processing, inventory management, shipping, delivery, order accuracy, and return management; and efficiency (Parasuraman et al., 2005; Van Dolen et al., 2007), which measured the ease of access and use of a retailer's virtual channels. Customer Engagement was measured using two reflective dimensions: Enthused Participation (Vivek et al., 2014), which captured enthusiastic reactions and emotional responses toward the brand, and Social Connection (Vivek et al., 2014), which involved reciprocal interactions such as sharing, commenting, or participating in social brand activities. Brand love was assessed through three reflective dimensions: Self-Brand Integration (Prentice et al., 2019), which referred to the integration of the brand into the consumer's self-identity; Passion-Driven Behaviors (Prentice et al., 2019), which were behaviors fueled by a deep emotional attachment to the brand; and Positive Emotional Connection (Prentice et al., 2019), which reflected the positive emotional outcomes of a strong relationship with the brand.

Data were collected through face-to-face surveys, where respondents interacted with researchers during in-person visits to retail stores, events, or other relevant settings. Respondents were recruited through in-person interactions at beauty retail locations and events popular among Generation Z. A pilot test was conducted beforehand to validate the clarity and reliability of the measurement items. Respondents were selected using a purposive sampling approach (Calvo-Porral and Levy-Mangín, 2018; Sarstedt et al., 2018), with the study focusing on Generation Z consumers born between 1997 and 2012, who are considered digital natives and have experience with omnichannel shopping (Lim et al., 2022; Baykal et al., 2020).

A total of 301 respondents participated in the study. Among them, 46.2% were late teens (aged 15-19 years), while 53.8% were young adults (aged 20-27 years). In terms of occupation, the majority of respondents were university students, making up 57.5% of the sample, while 28.2% identified as students in other categories, and 14.3% fell into various other roles. Regarding media consumption, social media was the most common source of advertising for both age groups. For late teens, 36.2% reported that they had been exposed to media advertisements through social media, while 3.0% were reached through TV and 7.0% via YouTube. Among young adults, 43.2% cited social media as their primary source of advertising, followed by 5.6% who were exposed via TV and 5.0% through YouTube.

The data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM), which is suitable for exploring complex models involving multiple constructs. This technique was chosen for three main reasons: First, the study aimed to explain or predict the modeled constructs and their related connections, making PLS-SEM an appropriate choice (Hair et al., 2021). Second, the proposed model structure, which includes complex elements such as direct effects, mediation, and moderation, aligns well with PLS-SEM (Hair et al., 2021). Third, PLS-SEM is preferred for estimating higher-order models, both reflective-formative and reflective-reflective (Hair et al., 2021). This study specifically verified the reflective-formative and reflective-reflective measurement models that include higher-order dimensions, using the embedded two-stage approach as proposed by Hair et al. (2017). In this two-stage approach, latent variable (LV) scores for the first-order dimensions were estimated, and in the second stage, these LV values were used as reflective indicators for the second-order constructs. The analysis included structural model assessment (evaluating path coefficients, $R^2$ values, and $Q^2$), as well as bootstrapping to derive significance levels for path coefficients.

## 4. RESULTS

### 4.1. Evaluation of Measurement Model at the Dimension Level

In order to evaluate the reliability and validity of the measurement model, the reflective indicator loadings and dimension consistency were assessed based on the non-normal data distribution (Hair et al., 2021). As a result, the measurement model for omnichannel integrated quality, customer engagement, and brand love at the dimension level was found to be reflective. The details of this evaluation, including factor loadings, composite reliability (CR), and average variance extracted (AVE), are presented in Table 1.

Table 1 provides an evaluation of the reliability and validity of the measurement model used in this study. Construct reliability was assessed using Cronbach's Alpha (CA), rho_A, and composite reliability (CR), while convergent validity was evaluated using average variance extracted (AVE).

Several dimensions demonstrate strong reliability with CA values exceeding 0.7, such as responsiveness (CA: 0.802, CR: 0.884, AVE: 0.718) and Efficiency (CA: 0.776, CR: 0.870, AVE: 0.690). However, some dimensions exhibit CA values below 0.7, including Social Connection (CA: 0.606), passion driver behavior (CA: 0.663), enthused participation (CA: 0.690), and Fulfillment (CA: 0.696). These values, while not meeting the ideal threshold, fall within the acceptable range for exploratory research or newly developed scales, as noted by Hair et al. (2014) and Nunnally and Bernstein (1994). These authors suggest that CA values between 0.5 and 0.7 are permissible during the early stages of scale validation.

Composite reliability (CR), which considers the contribution of individual factor loadings, consistently exceeds the threshold of 0.7 across all dimensions. For example, enthused participation (CR: 0.865) and fulfillment (CR: 0.868) demonstrate high CR values, indicating strong internal consistency despite their CA values being slightly below 0.7. Similarly, social connection (CR: 0.835) and passion driver behavior (CR: 0.856) meet the standard threshold for CR, further supporting the reliability of these dimensions. According to Fornell and Larcker (1981), CR is considered a more robust measure of reliability, especially in structural equation modeling (SEM).

**Table 1: Measurement model evaluation for reliability and validity**

| Constructs | Dimensions (first order) | | Loading |
|---|---|---|---|
| Omnichannel integrated quality | Responsiveness (α: 0.802, rho_A: 0.824, CR: 0.884, AVE: 0.718) | | |
| | RES1 | The customer service center is easy to contact in case of any issues. | 0.797 |
| | RES2 | Provides quick responses to inquiries. | 0.920 |
| | RES3 | Offers quick solutions when encountering problems. | 0.821 |
| | Integrated interaction quality (α: 0.721, rho_A: 0.737, CR: 0.842, AVE: 0.641) | | |
| | IIQ2 | Product descriptions in content and actual conditions are consistent. | 0.829 |
| | IIQ3 | Service performance is consistent both online and offline. | 0.842 |
| | Fulfillment (α: 0.696, rho_A: 0.696, CR: 0.868, AVE: 0.767) | | |
| | FUL1 | Orders are shipped quickly by the retailer. | 0.816 |
| | FUL3 | Orders are delivered on time as promised by the retailer. | 0.856 |
| | Efficiency (α: 0.776, rho_A: 0.783, CR: 0.870, AVE: 0.690) | | |
| | EFF1 | The operation of the retailer's online channels is very simple and easy to learn. | 0.821 |
| | EFF2 | The retailer's online channel has a good and attractive webpage layout. | 0.824 |
| | EFF3 | The retailer's online channel makes the checkout process easy. | 0.847 |
| Customer engagement | Enthused participation (α: 0.690, rho_A: 0.701, CR: 0.865, AVE: 0.767) | | |
| | ENT1 | The omnichannel experience makes me want to spend time in the store (offline) as well as online. | 0.852 |
| | ENT2 | Promotions conducted both online and offline (physical store) make me schedule a visit to the retailer. | 0.894 |
| | Social connection (α: 0. 606, rho_A: 0.607, CR: 0.835, AVE: 0.717) | | |
| | SC1 | Sharing shopping experiences with close people. | 0.838 |
| | SC2 | Writing product reviews after purchasing. | 0.856 |
| Brand love | Self Brand Integration - α: 0.507 rho_A: 0.509, CR: 0.793, AVE: 0.660 | | |
| | SBI | This brand represents my identity. | 0.905 |
| | Passion Driver Behavior (α: 0.663, rho_A: 0.664, CR: 0.856, AVE: 0.748) | | |
| | PDB1 | Loyal to this brand to the point of ignoring other brands. | 0.870 |
| | PDB2 | Willing to make material sacrifices to continue using the brand. | 0.860 |
| | Positive emotional connection (α: 0.576, rho_A: 0.587, CR: 0.824, AVE: 0.701) | | |
| | PEC1 | Having a unique feeling towards the brand. | 0.868 |
| | PEC2 | Having an emotional attachment to the brand. | 0.805 |

Convergent validity, assessed through AVE, is consistently achieved, with all dimensions exceeding the standard threshold of ≥0.5. For instance, Fulfillment and Enthused Participation both achieve AVE values of 0.767, indicating that these dimensions explain a substantial portion of the variance in their indicators. Similarly, social connection and passion driver behavior have AVE values of 0.717 and 0.748, respectively, supporting their inclusion in the model.

The slightly lower CA values observed for social connection, passion driver behavior, enthused participation, and fulfillment can be attributed to the moderate number of indicators or the exploratory nature of these dimensions. This is particularly common when scales are being developed or validated in new contexts (Bagozzi and Yi, 1988). Despite this, the strong CR and AVE values observed for these dimensions reinforce their validity and relevance within the measurement model.

Hence, while some dimensions exhibit CA values below 0.7, their CR and AVE values consistently meet or exceed the recommended thresholds. This suggests that the measurement model is reliable and valid overall, with the lower CA values being acceptable in exploratory research settings. As noted by Hair et al. (2014) and Fornell and Larcker (1981), CA values between 0.5 and 0.7 are acceptable for exploratory studies when convergent validity is achieved.

The conceptual framework of the measurement model at the dimension level is illustrated in Figure 1, which highlights the key constructs and their respective dimensions as outlined in the study.

The evaluation of discriminant validity using the Heterotrait-Monotrait (HTMT) ratio is presented in Table 2, which assesses the relationships between constructs and confirms the validity of the measurement model. Discriminant validity ensures that constructs are sufficiently distinct from one another, which is critical for establishing the validity of structural equation models (Hair et al., 2019). According to the guidelines by Hair et al. (2019), an HTMT value below 0.90 indicates acceptable discriminant validity. As shown in Table 2, all HTMT values fall below the threshold of 0.90, supporting the discriminant validity of the constructs.

## 4.2. Evaluation of Measurement Model at the Variable Level

The evaluation at the second stage includes the assessment of the measurement model, structural model, and the evaluation of model fit and goodness-of-fit at the variable level. At this level, omnichannel integrated quality is reflective-formative, while customer engagement is reflective-reflective, requiring different evaluation approaches. PLS-SEM is the preferred approach when formative constructs are included in the structural model (Hair et al., 2019). The formative measurement model is evaluated based on the following: Convergent validity, indicator collinearity, statistical significance, and indicator weight relevance. The conceptual framework of the measurement model at the variable level is illustrated in Figure 2.

The omnichannel integrated quality (OIQ) variable in this study is modeled as a formative construct, where its dimensions collectively form the construct, making it essential to evaluate collinearity among the indicators. The collinearity was assessed using the

**Figure 1:** Conceptual framework of the measurement model at the dimension level

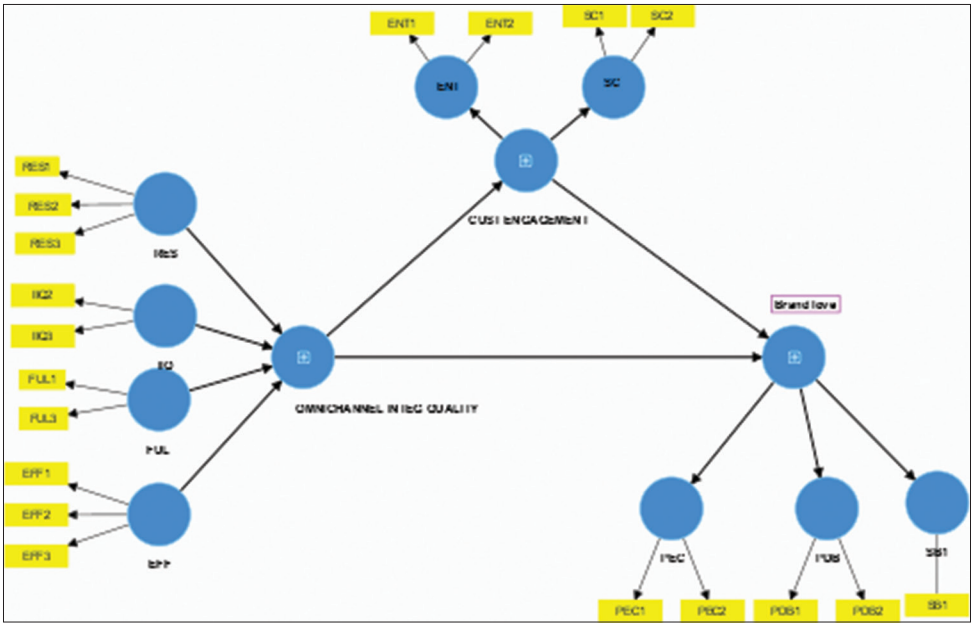


**Figure 2:** Conceptual framework of the measurement model at the variable level

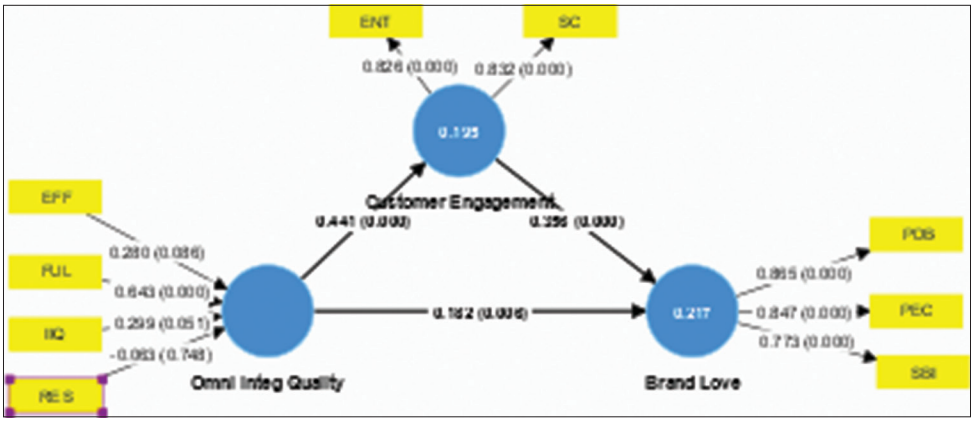


**Table 2: Discriminant validity evaluation (HTMT)**

| Construct | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EFF | | | | | | | | | |
| 2 | ENT | 0.405 | | | | | | | | |
| 3 | FUL | 0.749 | 0.465 | | | | | | | |
| 4 | IIQ | 0.607 | 0.4 | 0.859 | | | | | | |
| 5 | PDB | 0.261 | 0.356 | 0.477 | 0.39 | | | | | |
| 6 | PEC | 0.277 | 0.581 | 0.4 | 0.258 | 0.9 | | | | |
| 7 | RES | 0.743 | 0.367 | 0.866 | 0.792 | 0.251 | 0.226 | | | |
| 8 | SB1 | 0.254 | 0.335 | 0.217 | 0.35 | 0.655 | 0.597 | 0.208 | | |
| 9 | SC | 0.366 | 0.57 | 0.565 | 0.374 | 0.537 | 0.537 | 0.367 | 0.303 | |

HTMT<0.90 (Hair et al., 2019)
EFF: Efficiency, ENT: Enthused participation, FUL: Fulfillment, IIQ: Integrated interaction quality, PDB: Passion driver behavior, PEC: Positive emotional connection, RES: Responsiveness, SBI: Self Brand integration, SC: Social connection

**Table 3: Evaluation of the formative measurement model stage 2**

| High-order | Dimensions | Outer weights | P-value | Outer loading | P-value | Outer VIF | Confidence interval |
|---|---|---|---|---|---|---|---|
| OIQ | EFF | 0.283 | 0.086 | 0.736 | 0.000 | 1.674 | −0.059; 0.573 |
| | FUL | 0.643 | 0.000 | 0.940 | 0.000 | 2.102 | 0.317; 0.962 |
| | IIQ | 0.299 | 0.051 | 0.783 | 0.000 | 1.822 | 0.007; 0.607 |
| | RES | 0.269 | 0.748 | 0.701 | 0.000 | 2.200 | −0.434; 0.311 |

P<0.05
VIF: Variance inflation factor, OIQ: Omnichannel integrated quality, EFF: Efficiency, FUL: Fulfilment, IIQ: Integrated interaction quality, RES: Responsiveness

variance inflation factor (VIF), with an acceptable threshold of <5 (Hair et al., 2014). As shown in Table 3, all dimensions of OIQ meet this criterion, with VIF values ranging from 1.674 to 2.200, indicating that multicollinearity is not a concern and that each dimension contributes uniquely to the construct.

The analysis of outer weights and outer loadings further confirms the construct's validity. *Fulfillment (FUL)* emerges as the most significant dimension, with the highest outer weight (0.643, P = 0.000) and outer loading (0.940, P = 0.000), highlighting its critical role in forming OIQ. This aligns with previous studies, such as Herhausen et al. (2015), which emphasize the importance of fulfillment in omnichannel environments. Integrated interaction quality (IIQ) also demonstrates a significant contribution with an outer loading of 0.783 (P = 0.000) and an outer weight of 0.299 (P = 0.051), though the confidence interval for the weight includes zero, suggesting that its unique importance is moderate. Similarly, Efficiency (EFF) and Responsiveness (RES) show significant outer loadings (P = 0.000) but lower outer weights (0.283 and 0.269, respectively), indicating that while they are relevant, their relative importance to OIQ is less pronounced compared to FUL.

Confidence intervals for the outer weights provide further insights, particularly for Responsiveness (RES), whose confidence interval includes zero (−0.434; 0.311), suggesting that its weight is not statistically significant despite its significant loading. This indicates that RES may not uniquely differentiate OIQ but still plays a crucial role as part of the overall construct. The absence of collinearity and the significant contributions of all dimensions through their loadings validate the robustness of the formative measurement model.

The results of the evaluation for the reflective measurement model, including the key metrics such as outer loadings, composite reliability, AVE, and HTMT, are presented in Table 4. This table provides an overview of the criteria used to assess the robustness of the model at Stage 2.

The results presented in Table 4 show that the reflective measurement model demonstrates strong reliability and validity across the customer engagement and brand love constructs. All dimensions exhibit good indicator reliability, with outer loadings above 0.70, high internal consistency as indicated by composite reliability (CR), and adequate convergent validity with AVE values >0.50. The discriminant validity is confirmed, as evidenced by HTMT values below the 0.90 threshold

### 4.3. Evaluation of the Structural Measurement Model

The evaluation of the structural model involves testing the hypotheses regarding the influence between the research variables (path coefficients) and explaining the interrelationships among them. The testing was conducted using the PLS procedure with a 5,000-subsample bootstrapping technique that is bias-corrected and accelerated (BCa). This study tested the β values, standardized path coefficients, confidence intervals obtained through the bias-corrected and accelerated bootstrapping method (Bca), t-values, p-values, and effect size ($f^2$) to test the hypotheses presented in Table 5.

The results presented in Table 5 demonstrate that OIQ has a significant positive effect on CE among Generation Z in the sample (β = 0.441, t = 8.879, P < 0.05; with a large effect size $f^2$), thus supporting H1. Additionally, the findings indicate that OIQ significantly influences BL (β = 0.182, t = 2.768, P < 0.05; with a large effect size $f^2$), thereby supporting H2. Furthermore, CE was found to have a significant positive effect on BL (β = 0.356, t = 5.782, P < 0.05; with a large effect size $f^2$), thus supporting H3.

The mediation relationship was assessed based on the specific indirect effect (v). Researchers are advised to square the standardized indirect effects (v) (Lachowicz et al., 2018) and apply Cohen's (1988) recommended benchmark thresholds: Small > 0.02, medium > 0.15, and large > 0.35. However, it is rare for these measurements to meet the threshold. To address this, Ogbeibu et al. (2021) proposed adjusting Cohen's recommendations, suggesting that the squared standard indirect effect should exceed 0.175 for a large effect, 0.075 for a medium effect, and 0.01 for a small effect, making this approach more suitable for indirect effects. These findings are presented in Table 6.

**Table 4: Evaluation of the reflective measurement model stage 2**

| Variable | Dimension | Outer loading | CR | AVE | Discriminant validity | HTMT |
|---|---|---|---|---|---|---|
| CE | ENT | 0.826 | 0.868 | 0.688 | CE <-> BL | 0.666 |
| | SC | 0.832 | | | | |
| BL | PDB | 0.865 | 0.815 | 0.688 | | |
| | PEC | 0.828 | | | | |
| | SBI | 0.832 | | | | |

CE (Customer Engagement): BL (Brand Love); ENT (Enthused Participation); PDB (Passion Driver Behavior); PEC (Positive emotional connection); SBI (Self Brand Integration); SC (Social Connection)

**Table 5: Hypotheses test**

| Path | β | SD | LB | UB | P-value | t-value | f-square | Outcome |
|---|---|---|---|---|---|---|---|---|
| H1: OIQ→CE | 0.441 | 0.050 | 0.339 | 0.525 | 0.000 | 8.879 | 0.228 | Supported (large) |
| H2: OIQ→BL | 0.182 | 0.066 | 0.011 | 0.281 | 0.006 | 2.768 | 0.023 | Supported (large) |
| H3: CE→BL | 0.356 | 0.062 | 0.253 | 0.498 | 0.000 | 5.782 | 0.150 | Supported (large) |

OIQ: Omnichannel integrated quality, CE: Customer engagement, BL: Brand love

PLS-SEM values were derived using SmartPLS with a path weighting scheme and Bca bootstrapping (5,000 subsamples). A two-tailed test was applied, and latent variable scores were used for estimation. Effect sizes ($f^2$) were interpreted as follows: 0.005=Small, 0.01=Medium, 0.025=Large (Kenny, 2018)

**Table 6: Mediation Tests**

| Path | β | M | SD | t-stat | P-values | Outcome | Upsilon V | Mediation effect |
|---|---|---|---|---|---|---|---|---|
| H4: OIQ→CE→BL | 0.164 | 0.167 | 0.032 | 5.081 | 0.000 | Partial Mediation | 0.027 | Small |

OIQ: Omnichannel integrated quality, CE: Customer engagement, BL: Brand love

PLS-SEM values were derived using SmartPLS with a path weighting scheme, Bias-corrected and accelerated (Bca) bootstrapping with 5,000 subsamples, and a two-tailed test. Latent variable scores of the constructs were used for estimation.

Upsilon v size: (>0.01=small), (>0.075=moderate), (>0.175=high) (Ogbeibu et al., 2021)

Table 6 shows the results for H4: OIQ → CE → BL (β = 0.164, t = 5.081, P ≤ 0.05, v = 0.027), indicating a positive relationship between OIQ and BL through the mediation of CE. These results suggest that H4 is supported. Although the mediation effect size for CE is classified as small, Lowry and Gaskin (2014) argue that small effect sizes can still provide significant insights into our understanding of a phenomenon.

**Table 7: Model fit and quality evaluation**

| Construct | R-square | $Q^2$ predict | SRMR |
|---|---|---|---|
| BL | 0.217 | 0.097 | 0.069 |
| CE | 0.195 | 0.162 | |

CE: Customer engagement, BL: Brand love

R2 0.26 (high), 0.13 (moderate) 0.02 (weak) (Sarstedt et al., 2020), Q2 predict >0 (Sarstedt et al., 2020), SRMR <0.08 (Sarstedt et al., 2020)

### 4.4. Model Fit and Quality Evaluation

The goodness of fit of the model was assessed using SRMR (Standardized Root Mean Square Residual), which measures the model's fit quality. According to Sarstedt et al. (2020), an SRMR value below 0.08 indicates a good fit. Additionally, the predictive power and significance of the model were evaluated using $R^2$ and $Q^2$ Predict values for the endogenous variables. For $Q^2$ Predict, values >0 indicate predictive relevance. The $R^2$ values reflect the predictive accuracy of the model, with thresholds indicating substantial, moderate, or low accuracy. Table 7 presents the results of the model's fit and predictive power evaluation based on these key metrics.

Table 7 presents the model fit and quality evaluation results for customer engagement (CE) and brand love (BL) constructs, based on key indicators: $R^2$, $Q^2$ Predict, and SRMR. The $R^2$ values for BL (0.217) and CE (0.195) indicate moderate predictive accuracy for both constructs, falling within the range of 0.13 (moderate)-0.26 (substantial) as suggested by Sarstedt et al. (2020). This suggests that the model explains a meaningful portion of the variance in both Brand Love and Customer Engagement, with Brand Love showing a slightly stronger explanatory power. The $Q^2$ Predict values for BL (0.097) and CE (0.162) are both above 0, confirming the predictive relevance of the model, in line with Sarstedt et al.'s (2020) criteria. These values indicate that the model has satisfactory predictive power for both constructs, with Customer Engagement demonstrating a higher level of predictive relevance compared to Brand Love. Lastly, the SRMR value of 0.069, which is below the threshold of 0.08 recommended by Sarstedt et al. (2020), indicates a good model fit, confirming that the model's theoretical relationships are well-represented by the data.

## 5. DISCUSSION

The results of this study confirm H1, a significant positive relationship between omnichannel integration quality (OIQ) and customer engagement (CE) (β = 0.441, t = 8.879, P < 0.05), with a large effect size ($f^2$ = 0.228). This supports the hypothesis that high-quality omnichannel integration enhances customer engagement. This finding aligns with previous research that underscores the importance of seamless experiences across various customer touchpoints, which foster deeper customer involvement in the retail environment. While studies like Le and Nguyen Le (2020) and Lee et al. (2019) have pointed to the centrality of integrated channels in driving engagement, this study specifically quantifies the strength of that effect in the context of Generation Z. It confirms that when brands offer a consistent and integrated experience, customers are more likely to engage, leading to deeper brand interactions and stronger loyalty.

Moreover, the findings are consistent with those of Xie et al. (2023), who emphasize the positive impact of integrated omnichannel systems on customer engagement. The ease of transitioning between online, mobile, and in-store experiences allows customers to engage more frequently and meaningfully. This is further supported by Li et al. (2023), who highlight the mediating role of customer preferences and social connection in driving engagement. However, the positive results found here are not entirely consistent across all studies. For instance, Lee et al. (2019) did not find a significant impact of integrated channel quality on customer engagement, suggesting that other factors, such as product quality or brand trust, might also play a critical role. Similarly, Huang et al. (2019) found that omnichannel integration quality had no significant effect on relationship commitment, indicating that engagement may depend on a combination of various factors beyond just channel integration. Overall, while mixed findings exist in the literature, this study contributes to the growing body of evidence that high-quality omnichannel integration is a key driver of customer engagement. The positive and significant effect found here suggests that a seamless, integrated approach is crucial for fostering customer interaction and involvement in today's highly competitive omnichannel retail landscape.

The results of this study support $H_2$, showing a significant positive effect of omnichannel integration quality (OIQ) on brand love (BL) (β = 0.182, t = 2.768, P < 0.05), with a medium effect size ($f^2$ = 0.023). This indicates that higher omnichannel integration quality strengthens the emotional connection customers feel towards the brand, aligning with the notion that seamless and consistent customer experiences across channels foster deeper emotional attachment. This finding is consistent with research highlighting the role of channel integration quality in shaping customer perceptions and attachment. Huang et al. (2019) emphasize the importance of seamless omnichannel experiences

in managing customer relationships, and this study quantifies how OIQ directly influences brand love, showing that high-quality integration enhances emotional bonds with the brand. While some studies, such as Mainardes et al. (2020), suggest that perceived smoothness of omnichannel integration does not always significantly impact loyalty or relationship commitment, the results of this study confirm a clear and significant link between OIQ and Brand Love. This reinforces the idea that seamless transitions between channels contribute to a stronger emotional connection. In conclusion, these findings support the hypothesis that Omnichannel Integration Quality is a critical factor in fostering Brand Love. By providing a consistent and integrated experience across platforms, brands can deepen customer emotional attachment, which is crucial for building long-term loyalty.

The results of this study provide significant support for $H_3$, demonstrating that customer engagement (CE) has a positive and significant effect on brand love (BL) ($\beta = 0.356$, $t = 5.782$, $P < 0.05$, $f^2 = 0.150$). The substantial effect size (large) indicates that deeper customer engagement leads to stronger emotional attachment to the brand, confirming that as customers become more involved with a brand, their emotional connection with the brand intensifies. This finding aligns with the broad consensus in existing literature that customer engagement plays a pivotal role in cultivating brand love. Studies by Wallace et al. (2014) and Sarkar and Sreejesh (2014) have shown that increased customer engagement results in stronger emotional connections with brands, which in turn fosters brand love. Similarly, Tsou and Putra (2023) and Junaid et al. (2019) suggest that brand love can be a result of customer engagement, where deeper interactions lead to increased emotional attachment. However, the current study contributes new insights by quantifying the strength of this relationship in the context of omnichannel retail, providing empirical evidence that engagement across multiple touchpoints directly influences brand love. While prior research emphasized the role of engagement in emotional connections, this study extends the understanding by showing the specific impact of customer engagement on brand love within an omnichannel context. This builds on the work of Joshi and Garg (2021), who found that engagement mediates the relationship between brand love and customer loyalty, adding further weight to the argument that engagement drives emotional attachment and loyalty. Additionally, Ahluwalia et al. (2000) raised concerns about the limitations of engagement in influencing brand affection, especially in the presence of negative publicity. While the current study does not directly address the role of negative publicity, the strong positive relationship found between engagement and brand love suggests that for customers engaged in a seamless, positive omnichannel experience, the impact of external factors, such as negative publicity, may be mitigated. In conclusion, this study confirms the substantial impact of customer engagement on brand love, reinforcing the idea that engaged customers are more likely to develop deeper emotional attachments to brands. This study adds to the growing body of literature by highlighting the significance of engagement as a critical driver of brand love within the omnichannel retail context, offering valuable insights for marketers looking to enhance customer loyalty through deeper engagement across various touchpoints.

The results for H4 provide significant insights into the role of customer engagement (CE) as a mediator between omnichannel integrated quality (OIQ) and brand love (BL). Specifically, the findings indicate a partial mediation effect ($\beta = 0.164$, $t = 5.081$, $P < 0.05$), with a small effect size ($f^2 = 0.027$). This suggests that while OIQ directly influences BL, CE also plays a significant role in enhancing the emotional connection customers feel towards the brand. Since the mediation effect is partial, it implies that OIQ influences BL both directly and indirectly, through engagement.

These results are consistent with the work of Batra et al. (2012), who emphasized the importance of integrating customers into a brand's identity to foster emotional connections. This study builds upon their findings by showing that OIQ enhances CE, which in turn strengthens the emotional attachment to the brand. When customers engage with a brand across multiple touchpoints, such as online, in-store, and mobile, the quality of this integration leads to stronger engagement and, ultimately, a deeper emotional connection with the brand.

Supporting these findings, Riani and Gayatri (2023) demonstrated that customer engagement significantly influences brand love, a result also corroborated by Hamzah et al. (2021). These studies, together with the current research, underline that engagement plays a pivotal role in shaping the emotional connection customers have with brands. The positive influence of OIQ on CE in this study reinforces the broader literature, suggesting that a seamless, integrated customer experience across all channels can enhance customer engagement, leading to stronger brand affection.

Although social media has been identified as a key channel for driving engagement, especially in the context of interactive content (Riani and Gayatri, 2023), this study focuses more generally on the broader relationship between omnichannel integration and engagement, rather than delving into the specifics of social media's role. The small effect size of the mediation, however, suggests that engagement, while important, is not the sole driver of brand love. This highlights that OIQ has a direct influence on BL, even without customer engagement. Therefore, while engagement amplifies the connection, the quality of the omnichannel experience itself remains the primary determinant of brand love.

Moreover, while customer engagement partially mediates the relationship between OIQ and BL, the small effect size points to the possibility that other factors, such as brand trust or product quality, could also influence brand love. Engagement, being one of the mechanisms, suggests that a combination of factors—such as product attributes, brand reputation, and personal experiences—work together to shape customers' emotional attachment to brands.

### 5.1. Theoretical Contribution

From a theoretical perspective, this study makes significant contributions to the understanding of brand love and customer engagement (CE) within the context of omnichannel retail. First, it broadens the existing literature by identifying brand love as a critical driver of customer engagement in omnichannel retail environments. This research extends previous work by conceptualizing and empirically testing a second-order model of

omnichannel integration quality (OIQ), positioning it as a vital stimulus for enhancing customer engagement. Specifically, it establishes that OIQ is a formative second-order construct that incorporates four dimensions: Responsiveness (RES), integrated interaction quality (IIQ), fulfillment (FUL), and efficiency (EFF). These dimensions are perceived by customers as multidimensional constructs, providing a deeper and more precise understanding of how these factors influence CE. This empirical approach not only enriches existing models but also addresses a gap in prior research by capturing the unique characteristics of Generation Z (Gen Z) consumers, a segment that has been largely overlooked in earlier studies (Le and Nguyen Le, 2020; Lee et al., 2019).

Second, this study responds to calls from scholars (Herhausen et al., 2015; Shen et al., 2018; Banerjee et al., 2021; Zhang et al., 2019; Raza et al., 2020) for a more detailed understanding of CE dimensionality within the omnichannel context. By adopting two core dimensions of CE—enthused participation and social connection—this research offers a more comprehensive analysis of CE, particularly focusing on Gen Z. This approach not only deepens our understanding of CE but also provides insight into its role in shaping brand love within omnichannel retail.

Finally, the study enhances the Stimulus-Organism-Response (S-O-R) framework by integrating OIQ as the antecedent stimulus, CE as the organism, and brand love (BL) as the response. The confirmation of the mediation effect of CE between OIQ and BL further solidifies the relevance of the S-O-R framework in explaining consumer behavior in omnichannel retail settings. This study strengthens the theoretical foundation for future research in this area, offering a robust model for understanding the dynamic relationships between omnichannel integration, customer engagement, and brand love.

### 5.2. Managerial Contribution

From a managerial perspective, this study offers valuable insights into how retailers can effectively design integrated omnichannel experiences that resonate with Generation Z, thereby enhancing their engagement and fostering brand love. The findings emphasize the importance of focusing managerial efforts on improving and optimizing the integration of service channels across four key dimensions: Responsiveness (RES), integrated interaction quality (IIQ), fulfillment (FUL), and efficiency (EFF). These dimensions have been identified as the most influential factors in shaping the overall quality of omnichannel integration and, by extension, driving customer engagement and brand love. Retailers should regularly assess and manage these dimensions to maximize their impact on consumer behavior, ensuring that the omnichannel experience remains both effective and responsive to customer needs.

Moreover, this study underscores that a successful omnichannel strategy should not be limited to optimizing a single channel, but rather focus on the seamless integration of all customer touchpoints. By creating a consistent and personalized experience across platforms, businesses can strengthen their relationships with Generation Z consumers, cultivating deeper emotional connections and fostering higher levels of brand loyalty and advocacy. This holistic approach is key to building long-term consumer loyalty and driving sustained brand success.

## 6. CONCLUSION

This study advances our understanding of the relationship between omnichannel integration quality (OIQ), customer engagement (CE), and brand love (BL), particularly in the context of Generation Z. By examining the mediating role of CE between OIQ and BL, the study adds value to the existing literature and offers practical insights for both researchers and practitioners. While the findings are valuable, it is important to acknowledge several limitations, which open avenues for future research that can broaden the scope and applicability of these insights.

First, the study focuses on a single retailer, specifically an omnichannel beauty and skincare retailer. This narrow focus limits the generalizability of the results to other types of retailers or markets. As such, future research could expand on this study by exploring how these findings apply to a variety of industries, potentially broadening the understanding of omnichannel integration and customer behavior across diverse retail contexts.

Second, this study centers exclusively on Generation Z, a specific demographic group. The limited demographic focus restricts the generalizability of the findings to other age groups or cultural backgrounds. To provide a more comprehensive view, future research could examine how other consumer segments, such as Millennials or Generation X, respond to different service quality dimensions in omnichannel settings, helping to create a broader understanding of consumer behavior in this rapidly evolving landscape.

Third, the study was conducted in the early stages of the omnichannel retail industry in Indonesia. Given the industry's ongoing development, the measurement items used in this study may not fully capture the changing dynamics of omnichannel retail. As the industry matures, future studies may need to refine or adapt existing measurement tools to account for these developments, providing a more accurate and up-to-date understanding of consumer engagement and brand love in omnichannel contexts.

Finally, although the study identifies key dimensions of service quality, there may be other factors influencing brand love in omnichannel retail environments that were not explored here. Future research could delve into additional dimensions or refine existing measures to provide a more comprehensive understanding of the drivers of brand love, further enriching the body of knowledge in omnichannel retail research.

## REFERENCES

Ahluwalia, R., Burnkrant, R.E., Unnava, H.R. (2000), Consumer response to negative publicity: The moderating role of commitment. Journal of Marketing Research, 37(2), 203-214.

Bagozzi, R.P., Yi, Y. (1988), On the evaluation of structural equation models. Journal of the Academy of Marketing Science, 16(1), 74-94.

Banerjee, M. (2014), Misalignment and its influence on integration

quality in multichannel services. Journal of Service Research, 17(4), 460-474.
Banerjee, S., Dellarocas, C., Zervas, G. (2021), Interacting user-generated content technologies: How questions and answers affect consumer reviews. Journal of Marketing Research, 58(4), 742-761.
Batra, R., Ahuvia, A., Bagozzi, R.P. (2012), Brand love. Journal of Marketing, 76(2), 1-16.
Baykal, B. (2020), Generational differences in omnichannel experience: Rising new segment: Gen Z. In: Managing Customer Experiences in an Omnichannel World: Melody of Online and Offline Environments in the Customer Journey. United Kingdom: Emerald Publishing Limited. p117-132.
Brynjolfsson, E., Hu, Y.J., Rahman, M.S. (2013), Competing in the Age of Omnichannel Retailing. Cambridge: MIT Sloan Management Review.
Calvo-Porral, C., Lévy-Mangín, J.P. (2018), Pull factors of the shopping malls: An empirical study. International Journal of Retail and Distribution Management, 46(2), 110-124.
Carroll, B.A., Ahuvia, A.C. (2006), Some antecedents and outcomes of brand love. Marketing Letters, 17, 79-89.
Cohen, J. (1988), Statistical Power Analysis for the Behavioral Sciences. Hillsdale, NJ: Erlbaum.
Fornell, C., Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50.
Gao, M., Huang, L. (2021), Quality of channel integration and customer loyalty in omnichannel retailing: The mediating role of customer engagement and relationship program receptiveness. Journal of Retailing and Consumer Services, 63, 102688.
Hair, J.F. Jr., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S. (2021), Partial Least Squares Structural Equation Modeling (PLS-SEM) using R: A Workbook. Germany: Springer Nature. p197.
Hair, J.F. Jr., Matthews, L.M., Matthews, R.L., Sarstedt, M. (2017), PLS-SEM or CB-SEM: Updated guidelines on which method to use. International Journal of Multivariate Data Analysis, 1(2), 107-123.
Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. (2014), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). United States: Sage Publications.
Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M. (2019), When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2-24.
Hamzah, Z.L., Abdul Wahab, H., Waqas, M. (2021), Unveiling drivers and brand relationship implications of consumer engagement with social media brand posts. Journal of Research in Interactive Marketing, 15(2), 336-358.
Han, J.H., Kim, H.M. (2019), The role of information technology use for increasing consumer informedness in cross-border electronic commerce: An empirical study. Electronic Commerce Research and Applications, 34, 100826.
Hansen, R., Sia, S.K. (2015), Hummel's digital transformation toward omnichannel retailing: Key lessons learned. MIS Quarterly, 14, 3.
Herhausen, D., Binder, J., Schoegel, M., Herrmann, A. (2015), Integrating bricks with clicks: Retailer-level and channel-level outcomes of online–offline channel integration. Journal of Retailing, 91(2), 309-325.
Hoogveld, M., Koster, J.M. (2016), Implementing omnichannel strategies: The success factor of agile processes. Advances in Management and Applied Economics, 6(2), 25.
Hossain, T.M.T., Akter, S., Kattiyapornpong, U., Dwivedi, Y. (2020), Reconceptualizing integration quality dynamics for omnichannel marketing. Industrial Marketing Management, 87, 225-241.
Huang, E., Lin, S.W., Cheng, K.T. (2019), How does omnichannel integration quality affect consumers' stickiness intention. Journal of Retailing and Consumer Services, 51, 406-414.
Joshi, R., Garg, P. (2021), Role of brand experience in shaping brand love. International Journal of Consumer Studies, 45(2), 259-272.
Junaid, M., Hou, F., Hussain, K., Kirmani, A.A. (2019), Brand love: The emotional bridge between experience and engagement, generation-M perspective. Journal of Product and Brand Management, 28(2), 200-215.
Kenny, D.A. (2018), Moderator variables: Introduction. Moderator Variables: Introduction. SAGE, 11-25.
Lachowicz, M.J., Preacher, K.J., Kelley, K. (2018), A novel measure of effect size for mediation analysis. Psychological Methods, 23(2), 244.
Le, A.N.H., Nguyen-Le, X.D. (2020), A moderated mediating mechanism of omnichannel customer experiences. International Journal of Retail and Distribution Management, 49(5), 595-615.
Lee, Z.W., Chan, T.K., Chong, A.Y.L., Thadani, D.R. (2019), Customer engagement through omnichannel retailing: The effects of channel integration quality. Industrial Marketing Management, 77, 90-101.
Li, Y., Tan, R., Gong, X. (2023), How omnichannel integration promotes customer word-of-mouth behaviors: The mediating roles of perceived personal preference fit and perceived social relatedness. Information Technology and People, 36(4), 1726-1753.
Lim, X.J., Cheah, J.H., Dwivedi, Y.K., Richard, J.E. (2022), Does retail type matter? Consumer responses to channel integration in omnichannel retailing. Journal of Retailing and Consumer Services, 67, 102992.
Lin, S.W., Huang, E.Y., Cheng, K.T. (2023), A binding tie: Why do customers stick to omnichannel retailers? Information Technology and People, 36(3), 1126-1159.
Lowry, P.B., Gaskin, J. (2014), Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. IEEE Transactions on Professional Communication, 57(2), 123-146.
Mainardes, E.W., Rosa, C.A.D.M., Nossa, S.N. (2020), Omnichannel strategy and customer loyalty in banking. International Journal of Bank Marketing, 38(4), 799-822.
Mehrabian, A., Russell, J.A. (1974), The basic emotional impact of environments. Perceptual and Motor Skills, 38(1), 283-301.
Nunnally, J.C., Bernstein, I.H. (1994), Psychometric Theory. New York, NY: McGraw-Hill.
Ogbeibu, S., Jabbour, C.J.C., Gaskin, J., Senadjki, A., Hughes, M. (2021), Leveraging STARA competencies and green creativity to boost green organisational innovative evidence: A praxis for sustainable development. Business Strategy and the Environment, 30(5), 2421-2440.
Parasuraman, A., Zeithaml, V.A., Malhotra, A. (2005), ES-QUAL: A multiple-item scale for assessing electronic service quality. Journal of Service Research, 7(3), 213-233.
Prentice, C., Wang, X., Loureiro, S.M.C. (2019), The influence of brand experience and service quality on customer engagement. Journal of Retailing and Consumer Services, 50, 50-59.
Raza, S.A., Umer, A., Qureshi, M.A., Dahri, A.S. (2020), Internet banking service quality, e-customer satisfaction and loyalty: The modified e-SERVQUAL model. The TQM Journal, 32(6), 1443-1466.
Riani, G.N., Gayatri, G. (2023), Turning fans into lovers: Content strategy for brand's social media pages to build stronger relationships. Jurnal Manajemen dan Pemasaran Jasa, 16(1), 63-78.
Sarkar, A., Sreejesh, S. (2014), Examination of the roles played by brand love and jealousy in shaping customer engagement. Journal of Product and Brand Management, 23(1), 24-32.
Sarstedt, M., Bengart, P., Shaltoni, A.M., Lehmann, S. (2018), The use of sampling methods in advertising research: A gap between theory and practice. International Journal of Advertising, 37(4), 650-663.
Sarstedt, M., Ringle, C.M., Cheah, J.H., Ting, H., Moisescu, O.I.,

Radomir, L. (2020), Structural model robustness checks in PLS-SEM. Tourism Economics, 26(4), 531-554.

Shen, X.L., Li, Y.J., Sun, Y., Wang, N. (2018), Channel integration quality, perceived fluency, and omnichannel service usage: The moderating roles of internal and external usage experience. Decision Support Systems, 109, 61-73.

Tsou, H.T., Putra, M.T. (2023), How gamification elements benefit brand love: The moderating effect of immersion. Marketing Intelligence and Planning, 41(7), 1015-1036.

Van Dolen, W.M., Dabholkar, P.A., De Ruyter, K. (2007), Satisfaction with online commercial group chat: The influence of perceived technology attributes, chat group characteristics, and advisor communication style. Journal of Retailing, 83(3), 339-358.

Vivek, S.D., Beatty, S.E., Dalela, V., Morgan, R.M. (2014), A generalized multidimensional scale for measuring customer engagement. Journal of Marketing Theory and Practice, 22(4), 401-420.

Vivek, S.D., Beatty, S.E., Morgan, R.M. (2012), Customer engagement: Exploring customer relationships beyond purchase. Journal of Marketing Theory and Practice, 20(2), 122-146.

Wallace, E., Buil, I., De Chernatony, L. (2014), Consumer engagement with self-expressive brands: Brand love and WOM outcomes. Journal of Product and Brand Management, 23(1), 33-42.

Wolfinbarger, M., Gilly, M.C. (2003), eTailQ: Dimensionalizing, measuring, and predicting eTail quality. Journal of Retailing, 79(3), 183-198.

Xie, C., Gong, Y., Xu, X., Chiang, C.Y., Chen, Q. (2023), The influence of return channel type on the relationship between return service quality and customer loyalty in omnichannel retailing. Journal of Enterprise Information Management, 36(4), 1105-1134.

Zhang, M., He, X., Qin, F., Fu, W., He, Z. (2019), Service quality measurement for omni-channel retail: Scale development and validation. Total Quality Management and Business Excellence, 30(Suppl 1), S210-S226.

Zhang, J., Onal, S., Das, R., Helminsky, A., Das, S. (2019), Fulfilment time performance of online retailers–an empirical analysis. International Journal of Retail & Distribution Management, 47(5), 493-510.