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Revolutionizing Digital Banking: Bridging Generational Gaps to Deliver Exceptional Customer Loyalty

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Abstract
This study investigate how omnichannel integration quality comprised of channel consistency, channel transparency and channel connectivity shape the online customer experience and its subsequent influence the willingness to stay in digital banking. Drawing upon the Stimulus – Organism – Response framework, the research also examined whether the generational cohorts moderate these relationship. A quantitative method with purposive sampling is employed, involving 90 valid response from Indonesian digital banking users, belonging to Generation Y and Z. Structural equation modelling using Smart PLS is applied to assess. The findings reveal that channel connectivity does not exert a meaningful effect. Furthermore, online customer experience strongly predicts the customers' willingness to stay. These result suggest that consistency and transparency remain critical lever for optimizing digital experiences, while connectivity has become baseline expectation rather than a differentiating factor. This research extends the online customer experience and omnichannel literature by highlighting generational convergence in digital expectation. Practically it advises banks to prioritize the seamless, transparent and consistent service delivery to strengthen customer retention.
Keywords: digital banking, online customer experience, omnichannel integration, generational cohort, customer retention.

Introduction

The rapid advancement of digital technology has fundamentally transformed the banking industry by enhancing efficiency, accessibility, and personalization in financial service. In Indonesia, digital banking adoption has expanded substantially, with the number of digital banking user doublng since 2014. This growth highlight the strategic importance of digital engagement in creating customer value. Barquin et al (2019) demonstrate that digitally active customers are twice loyal and hold approximately 50% more banking products than non-digital users, this positioning digital banking as a central driver of customer satisfaction and retention.

Since 2015, Indonesian banking sector has experienced an accelerated digital transformation which driven by the advancement of information and communication technology and the increasing of societal demand for modre efficient and practical banking services. Conventional banks have responded by developing the digital platforms, particualrly mobile banking applications, which enable the customer to conduct financial transaction diretly via smartphones. This transition intensified during the COVID – 19 pandemic in 2020, as restriction on physical interaction compelled both banks and customers to shift toward technology – based virtual transactions. More recently, the integration of advanced technologies

such as artificial intelligence has further strengthened digital banking capabilities, improving operational efficiency while enriching customer experiences across digitalized products and service. Beyond operational improvement, digital banking has evolved into a strategic mechanism to fostering closer and more interactive relationship with customers. Digital platforms allow bank to deliver personalized service that enhance engagement and strengthen the long – term loyalty (Sujana et al., 2018; Addae et al., 2024). However, despite these advantage, a persisten digital divide continues to constrain the broader adoption of digital banking across segments of society, this indicates that technological progress itself does not guarantee the inclusive digital transformation.

Direct customer engagement with digitalized product and service is believed to be a key factor in building a long-term relationship with clients. Consistent interaction through various digital channels, such as mobile banking application, chatbots, social media, and internet banking, contributes to the higher level of customer satisfaction and loyalty (Kalubangga et al., 2013; Barile et al., 2025). Moreover, empirical studies have revealed that a positive digital experience encourage customers to continuously use digital banking products and services as well as recommend them to others (Shankar & Jebarajakirthy, 2019; Armelia & Wahyuni, 2020). In the context of digital banking, customer retention depends not only on the innovative features offered, but also on how banks create relevant and valuable engagement for their clients. Positive experience across multiple digital touch point help to build the trust and foster stronger loyalty toward banking institution. Therefore, this study focuses on how digital banking can address the digital divide and enhance customer retention through the optimization of engagement across diverse digital touchpoints (Ozkan et al., 2019; Kim et al., 2024).

The banking industry in Indonesia faces various challenge in implementing digital products and services. One of the main obstacles is the low of digital and financial literacy among the population, which lead many customers to hesitate in shifting from conventional to digital service. In addition, security issues such as the rise of cybercrime have further undermined clients' trust in digital banking. On the other hand, the uneven distribution of information technology infrastructure across Indonesia indirectly limits public access to digitalized banking product and service. Furthermore, generational differences in expectation regarding these digital product and service also present the additional challenges.

Despite these advances, the benefit of digitalization is not equally experienced across generation. The intergenerational digital divide continues to be a critical challenge in banking. Globally, while nearly 40% of individual under the age of 40 actively use fintech service, the figure drops to around 25% among individual which aged 60 and above (Yue et al., 2022). Elderly clients often perceive digital banking as complex, insecure or lack in trustworthiness, which reduces their willingness to adopt such services (Zhang & Nie, 2022). These disparities highlight the difficulty for banks to provide inclusive digital service that meet the expectation of both digitally savvy younger clients and older, less technologically confidents users.

From a practical standpoint, banks face the dual challenge of expending digital adoption while maintaining customer retention across age groups. Research shows that utilitarian experience such as convenience and efficiency drive continuous mobile banking usage across generations, but hedonic experience such as enjoyment and emotional satisfaction play a more significant role for older clients (Gao et al., 2015; Shankar & Jebarajakirthy, 2019). This suggest that merely offering functional features is insufficient, emotional engagement and trust must

also be cultivated to bridge the generational gaps in digital adoption.

However, important gaps remain in the literature. Much of the existing research either focuses broadly on technology adoption or primarily examines younger, digitally literate consumer, while neglecting intergenerational differences in digital customer experience. For instance, studies in Indonesia emphasize digital literacy and intrinsic motivation as determinants of mobile banking adoption (Santoso et al., 2020; Putra et al., 2024), yet they seldom address how different generation experience and evaluate the digital touchpoints. Similarly, extension of the Technology Acceptance Model has provided valuable insight into fintech adoption in rural areas (Ilmudeen & Bao, 2019), but these models often prioritize perceived usefulness over relational and experiential dimensions that are vital to build the loyalty across generations.

Therefore, this research seeks to fill two research gaps. First, it investigates how digital banking experiences which covering usability, personalization, trust and emotional engagement can be optimized to address the varying expectation of different generations. Second, it explores how such optimized experience may function as a strategic bridge to overcome the intergenerational digital divide, ultimately enhancing the customer retention in the digital banking context. By integrating digital cohort theory with empirical findings on customer loyalty, this research aims to provide actionable insight for banks to design inclusive and engaging digital touchpoints that foster trust and long-term loyalty among diverse customer segments.

Literature Review and Hypotheses

S-O-R Theory and Online Customer Experience Framework

Customer experience has emerged as a central construct in understanding consumer behavior in digital environment, moving beyond traditional measures of service quality and customer satisfaction. Klaus & Maklan (2012) argue that customer experience should be conceptualized as a holistic construct that captures not only functional but also emotional, behavioral, sensorial and social responses to digital service. Building on this perspective, Klaus (2013) developed the Online Customer Experience framework, operationalized through the customer experience quality scale (EXQ). The EXQ model identifies four key dimension such as Product Experience which reflect the extent to which the service delivers on its promises; Outcome Focus which relates to the clients' ability to achieve desired goals such as saving time or improving financial control; Moments of Truth which refers to critical service interaction that shape the perception; and Peace of Mind which emphasizes trust, security and emotional assurance.

Within digital banking, these dimensions are particularly salient, as customer perception of service quality often hinge on reliability, security, and the ability to resolve issues at critical moments (Mahfuzh et al., 2025). For example, when online banking platform provide seamless transaction and robust fraud protection, customer experience both product quality and peace of mind, which positively influence their overall experience (Klaus & Maklan, 2012). Importantly, Klaus' Online Customer Experience as an organism in the Stimulus – Organism – Response sequence, where digital stimuli such as interface design, personalization, and security features shape customer experience, which in turn drive the responses such as loyalty, continuous usage and advocacy (Andriani et al., 2025). This framework extends existing models such as Technology Acceptance Model and service quality by emphasizing the mediating role of experience rather than treating adoption as a purely cognitive process.

Recent studies further highlight the relevance of Klaus' approach in the context of generational differences in digital banking adoption. Older clients, for instance, value the trust and peace of mind more strongly, whereas the younger clients emphasize speed and efficiency reflecting differences in how the customer experience quality dimension are prioritized across age groups (Mainardes et al., 2020; Zhang & Nie, 2022). Thus applying Klaus' Online Customer Experience framework offers a robust theoretical basis to investigate how digital banking institution can optimize the customer experiences across generational cohorts, ultimately enhancing customer retention in an increasingly competitive financial landscape.

In the Context of digital banking, Omnichannel Integration Quality has emerged as a critical factor influencing the overall customer experience. OIQ refers to the degree of seamlessness, consistency and connectivity across various service channels, including mobile application, websites, ATM, call centers and physical branches (Lin et al., 2019). A high level of integration allows customers to transition smoothly between channels without disruption, ensuring that information, services, and interaction remain coherent throughout their journey. For instance, clients may initiate a transaction through a mobile application, seek clarification from chatbot, and finalize the process in a physical branch, all without needing to repeat prior steps.

Omnichannel Integration Quality (OIQ) is a multi dimensional construct that captures how effectively firms integrate their service channels to deliver a seamless costumer journey. The first dimension is Channel Consistency, which reflects the uniformity of product information, pricing, and brand presentation across different channels, ensuring reliability and reinforcing customer trust (Frasquet et al., 2015; Xuan et al., 2023). Second, Channel Transparency refers to the seamlessness of customer transitions across channels, minimizing duplication of effort and promoting convenience (Oh et al., 2012; Gao & Huang, 2021). Third, Channel Connectivity which captures the degree of information and process integration, enabling banks and retailers to provide coherent, personalized experiences by leveraging shared customer data (Lee et al., 2019; Rahman et al., 2025). Finally, Channel Flexibility reflects the extent to which customers can freely switch between service channels, thereby enhancing the perceived control and satisfaction (Juaneda-Ayensa et al., 2016). Together, these dimensions form the foundation of OIQ and directly influence clients' online experience and behavioral outcomes (Seth et al., 2025)

This channel fluidity significantly reduces customer effort, enhances convenience and foster trust in the banking institution. From the perspective of the Stimulus – Organism – Response framework, omnichannel integration quality functions as a stimulus, that shape clients' online customer experience, which represents the organism aspect (Saha & Ali, 2024; Mahfuhz et al., 2025) A seamless omnichannel design enables clients to evaluate their experience positively across Klaus' dimension such as Product Experience through reliable service delivery, Outcome Focus via efficient goal achievement, Moment of Truth by ensuring smoother service recovery and Peace of Mind through consistent and secure interaction. Empirical research further supported this connection, demonstrating that effective channel integration enhances satisfaction, strengthen trust, and contributes to long-term customer loyalty (Lazaridis et al., 2021; Verhoef et al., 2021; Gao et al., 2021). Therefore, omnichannel integration quality can be seen as a powerful driver of OCE, directly influencing customer perception and subsequent behavioral outcomes in the digital banking sector.

Channel Consistency as Stimulus toward Online Customer Experience

Channel consistency, which refers to the uniformity of information, branding and service quality across multiple touchpoints, has been widely recognized as the key antecedents of Online Customer Experience (Frasquet et al., 2015; Athaide et al., 2024). When banks and service providers maintain the consistent pricing, product information and brand image across channels, clients are more likely to perceive their interaction as reliable and trustworthy, thereby enhancing the satisfaction and loyalty intention. Within the Stimulus – Organism – Response framework, channel consistency can be conceptualized as the stimuli that shapes the clients' evaluation of their interaction with digital banking service. A high level of consistency reduces the cognitive effort, enhance trust, and creates a sense of reliability in the service environment, which in turn positively influences the clients' internal state, in this case is Online Customer Experience (Lee et al., 2019). In this sense, OCE as the organism aspect in the S-O-R framework, reflect clients' cognitive and affective responses to the consistent service environment provided by banks.

Prior research supported this relationship, showing that consistent integration across channels strengthen the engagement and satisfaction by minimizing confusion and reinforcing the perception of seamless service journey (Frasquet et al., 2015; Lee et al., 2019; Batat & Hammedi, 2023). However, some scholars caution against excessive uniformity, arguing that clients may also value channel-specific attribute such as personalized advice in branches or speed in digital application and strict standardization may weaken the distinctive experiential value of each channel (Herhausen et al., 2015). Despite those nuances, the majority of studies highlight the positive role of channel consistency in enhancing Online Customer Experience by fostering coherence, reliability and trust. Therefore, in line with the S-O-R framework, it is proposed that:

H1: *Channel consistency positively play a significant role to influence online customer experience in digital banking*

Channel Transparency as Stimulus toward Online Customer Experience

In the context of the Stimulus – Organism – Response framework, Channel Transparency can be regarded as a critical stimulus that shape clients' perception and evaluation in digital banking. Channel transparency refers to the extent to which customer experience seamless transition between different service touchpoints such as starting a transaction on a mobile application, receiving support through a chatbot, and finalizing it at a physical branch without facing the redundancies or disruption (Oh et al., 2012). When service channels are transparently connected, clients expend less cognitive and physical effort, perceive greater convenience, and are more likely to evaluate their journey positively, thereby enhancing their Online Customer Experience as the organism.

Empirical evidence reinforced this connection. Sousa & Voss (2016) and Wu et al. (2025) emphasize that seamless service integration across channels will reduce the perceived complexity and strengthen clients' satisfaction in service encounters. Similarly, Gao & Su (2017) find that transparent channel foster clients' trust and minimize frustration, thereby improving the experiential quality of service delivery in multichannel environments. Conversely, if transparence is lacked, clients' may perceive inconsistency or interruption across channels, which can create confusion, erode trust, and diminish their overall digital experience.

While the literature largely supported a positive link between channel transparency and online customer experience, the critical challenge lies in ensuring that transparency does not eliminate the channel-specific value, but instead facilitates fluid integration. Based on this reason, we propose following hypothesis to be tested.

H2: *Channel transparency positively play a significant role to influence online customer experience in digital banking*.

Channel Transparency as Stimulus toward Online Customer Experience

Within the Stimulus – Organism – Response framework, channel connectivity can be viewed as stimulus that shape how clients commence evaluation and response to the digital banking service. Channel connectivity refers to the degree of integration and accessibility of information, process, and customer data across the multiple service channel (Lee et al., 2019). In the context of digital banking, strong connectivity ensures that transaction histories, account information, and customer profile are consistently synchronized across mobile application, ATMs, call centre and physical branches. This level of integration allows clients to continue their journey seamlessly without unnecessary repetition. As a result, clients will experience effortless, enhanced convenience, and greater satisfaction, which collectively improve their online customer experience as the organism in the S-O-R process (Prassida & Hsu, 2022)

Empirical research support this relationship, Zhang et al (2020) and Radomska et al. (2025) found that cross channel information integration strengthen clients' satisfaction and trust, which are critical determinants of positive experiential outcomes. Similarly, Cao & Li (2015) and Solem et al. (2023) highlight that seamless integration across channels minimizes the transaction cost, enhance perception of personalization and convenience, thereby enriching the customer experience. Conversely, poor channel connectivity such as fragmented system requiring customer to repeat the information or inconsistency in service delivery create frustration and erode the trust and ultimately diminishing the online customer experience. Taken together, these insight suggest that effective channel connectivity is a critical driver of customer's internal evaluation in digital banking. Therefore, we proposed following hypothesis to be tested.

H3*: Channel connectivity positively play a significant role to influence online customer experience in digital banking.*

Online Customer Experience as Organism toward Willingness to Stay

Within the S-O-R concept, online customer experience is representing the customers' internal evaluation, perception and emotional responses toward digital interaction with a bank. A positive OCE, which is characterized by seamless usability, personalized services, trust and the consistent omnichannel delivery, create favourable cognitive and affective states that significantly influence the clients' future behaviour. One key behavioural outcome is willingness to stay, which defined as the customer's intention to continue to using the bank's digital service and maintain the relationship over time.

Empirical research indicate that when clients experience satisfy, peace of mind and trust during their digital journey, they are more likely to demonstrate loyalty and resist switching to competitors. For instance, Rather and Islam (2022) discover that online customer experience strongly predict the customer loyalty outcomes in service setting, highlighting how engaging

and personalized experiences are less motivated to explore the alternative providers. Conversely, poor experience such as inconsistent channel integration, lack of transparency, or security concern positively erode the trust and reduce the willingness to stay.

While prior research generally support the view that online customer experience fosters the willingness to stay, some studies suggest this relationship is not always straightforward. A positive digital experience may enhance short-term satisfaction but does not necessarily guarantee long-term retention. For example, Choudhury et al. (2019) and Putri & Santoso (2022) discover that even when customer report the favourable online experience, switching behaviour remain prevalent in highly competitive digital service market. This occurs because customer often prioritize factors such as price competitiveness, innovative features, or peer influence over prior positive experiences. In the context of digital banking, this implies that although online customer experience may serve as a strong predictor of willingness to stay, its impact can be moderated by situational factors such as service alternatives, switching cost, and customer demographic. This contradiction underscore the importance of viewing the online customer experience not as the sole determinants of retention but as part of a broader framework where the contextual variables also play a significant role.

H4: *Online customer experience positively play a significant role to influence willingness to stay in digital banking.*

Intergenerational as Mediator between Omnichannel Integration Quality and Online Customer Experience

The impact of online customer experience on customer behaviour in digital banking cannot be fully understood without considering the role of intergenerational differences. Generational cohort differ in their digital literacy, expectation and attitudes toward technology, which may significantly shape how online customer experience translate into behavioural outcome such as willingness to stay. Generation Y which born between 1981 and 1996, are generally comfortable with digital service but still value a balance between digital convenience and personal interaction. They often emphasize trust, security and service reliability in their banking experiences. In contrast, Generation Z which born between 1997 until 2012 are digital natives who demand seamless, fast and highly personalized digital interaction (Priporas et al., 2017). Gen Z customers are more sensitive to innovative features, gamification and omnichannel consistency and they are less tolerant of service failure compared to Gen Y (Djafarova & Bowes, 2021).

These intergenerational differences suggest that online customer experience may not equally influence willingness to stay across cohort. For Gen Y, positive online customer experience may enhance peace of mind and trust thus strengthening their loyalty. For Gen Z, however the online customer experience must deliver innovation, speed, and personalization to sustain engagement, otherwise they may quickly switch to competitors. This highlight the moderating role of generational differences, where the strength of OCE and willingness to stay relationship is contingent upon whether the customer belongs to Gen Y and Gen Z. Based on these explanation, we propose following hypothesis to be tested.

H5: *Intergenerational differences positively play a significant role as moderator between omnichannel integration quality toward online customer experience.*

Research Method

Research Design

This study adopts a quantitative research design with a causal approach to examine the relationship between omnichannel integration quality dimension such as channel consistency, channel transparency, and channel connectivity as the stimulus, online customer experience as the organism, and willingness to stay as the response, with intergenerational differences as a moderating variable. The causal design is chosen because the purpose of the research is not only to identity the association among variables but also to test the directional influences that can be translated into hypothesis under the Stimulus – Organism – Response framework.

The research population consists of digital banking users in Java Island, particularly those who actively engage with multiple digital banking channels such as mobile banking applications, internet banking, ATMs and customer service touchpoints. The research object is digital banking service experience, while the subjects are individual customers belonging to Generation Y and Generation Z. To ensure representativeness, purposive sampling is employed with criteria that respondents must be active user of digital banking service for at least one year; have experience using more than one digital banking channel, and fall into either the Gen Y or Gen Z cohorts.

The operational definition of constructs is derived from the established constructs in the literature. Omnichannel integration quality is defined as the degree to which digital banking channels are seamlessly integrated to provide a coherent customer journey. It is measured through three dimension which comprised to **channel consistency** as uniformity of information, branding and service quality across channels (Frasquet et al., 2015), channel transparency as the seamlessness of transition across the channels (Oh et al., 2012), and channel connectivity as the integration of customer data, information, and process across channels (Lee et al., 2019).

Online customer experiences refers to the customers' cognitive, affective and experiential responses toward digital banking interaction, operationalized using Klaus' EXQ model dimension such as product experience, outcome focus, moment of truth and peace of mind. Willingness to stay is defined as the customers' intention to continue using the bank's digital service and maintain long-term relationship, adapted from loyalty and retention scales (Rather & Islam, 2022). Finally, intergenerational differences are defined as customer cohort characteristics, specifically Gen Y and Gen Z, which moderate the effect of OCE on willingness to stay (Priporas et al., 2017, Djafarova & Bowes, 2021). All construct are measure using 8 points Likert-like scale which adapted and validated from prior studies.

The questionnaire distribution in this research is carried out online to effectively reach the respondents who are active user of digital banking service. The survey link is disseminated through several channels like social media platform and mailing list. The geographical focus of distribution covered major urban center in Java Island such as Jakarta, Semarang, Yogyakarta, Surabaya, and Bandung where digital banking penetration is relatively high. National digital readiness indicators show that urban centers in Java, notably DKI Jakarta, Bandung, Surabaya, Yogyakarta, and Semarang are among the most digitally advanced regions in Indonesia. Jakarta consistently ranks as tha province with the highest digital competitiveness and internet usages rates nationally, and APJII data confirms that Java maintain the highest overall internet penetration across the country, which is a key driver of digital banking

adoption. Moreover, fintech market survey reveal that the overwhelming majority of Indonesia's digital financial service providers focus on Jakarta and other large Java cities, reinforcing the inference that digital banking usage is more concentrated in urban Java relative to outside Java regions. Additionally, urban residents nationwide show substantially higher adoption of digital financial service that rural populations, further suggesting that these urban cities in Java reflect higher user densities of digital banking service compared to other island.

Data which derived from Digital District Competitiveness Index show that all of the top 10 Indonesian provinces in digital competitiveness are in Java, with DKI Jakarta as leading nationally and Central Java also has high ranking. Regions outside Java are consistently show lower digital competitiveness scores (Katadata, March 2020). A local study which conducted by Illahi et al. (2025) shows that Jakarta as Capital Region has an internet usage rate arround 85%, while DI Yogyakarta has arroun 83%, and Eas Java has arround 82.6%. These rates are significantly above the national rural average and indicate the strong digital engagement in urban Javan context, which fuels the digital banking adoption such as mobile banking application usage.

A total 150 questionnaire are deployed, with a purposive sampling approach targeting respondent who met the inclusion criteria: active use of digital banking for at least one year; experience with more than one banking channel; belonging to either Gen Y or Gen Z. Out of the distributed questionnaires, at least 90 valid responses are returned and retained for analysis, representing a minimum response rate of 60%.

For data analysis techniques, structural equation modelling with Partial Least Square is applied using Smart PLS software. SEM-PLS is chosen due to its ability to handle complex models with multiple relationship, latent constructs, and moderating effects. The analysis procees two stages, the first was measurement model evaluation comprised of validity and reliability test. The second was structural model evaluation which focus on bootstrapping significance test. The validity and reliability test are conducted to ensure that the research instrument meet the required measurement quality before the hypotheses are tested. The parameters used in this research are the loading factor, and Average Variance Extracted. Following Hair et al. (2019), factor loading above 0.70 and AVE values greater than 0.50 are considered acceptable threshold. In addition, reliability testing is carried out using the parameter of Cronbach's Alpha and composite reliability, where value greater than 0.70 are demonstrate the internal consistency of the measurement items. The combination of these parameters ensured that each construct in the model is both valid in representing the intended concept and reliable in providing the consistent measurement across items.

Results and Discussion

Respondent Description

A total of 150 questionnaires are distributed and 90 valid responses are returned and included in the analysis stage, yielding a response rate of 60%. The respondents are divided into two main generational cohort that is Generation Y (millennial) and Generation Z based on their year of birth. Out of total respondents, 40% belong to Generation Y which born between 1981-1999) while 60% are Generation Z which born between 2000-2012. This distribution provided a balanced representation between both cohorts, and also enabling the meaningful comparison in the multi-group analysis.

In term of gender composition, 54% of respondents are female, and 46% are male, indicating relatively equal representation. Regarding the educational background, the majority of respondents held a bachelor degree about 62%, followed by high school graduate about 25%, and postgraduate degree about 13%, these are reflecting the concentration of digitally active users among the educated groups. With respect to digital bank usage, most respondents are reported using mobile application as their primary channel about 78%, followed by internet banking about 12%, ATMs about 6% and other customer service channel such as call center or chatbot about 4%. In addition, 67% of respondents are indicated using digital banking service daily basis, while 25% use them in several times a week, and only 8% which use them on monthly basis.

Validity of Measurement

To ensure the accuracy and credibility of the research findings, this study carefully examined the validity of the measurement instruments employed. Validity refers to the extent to the accuration of measurement scale measures the intended construct. In this research, each questionnaire item is designed and evaluated based on theoretical foundation and prior studies to ensure that it is appropriate reflect the underlying concept. Establishing validity is crucial, as it provides confidence that the data collected are meaningful, reliable, and truly representative of the construct under investigation.

Table 1. Items for Channel Consistency

No	Item	Indicator	Outer Loading P-values	Average Variance Extracted
1	The information provided across my bank's channel (mobile app, website, branch, and ATM) are always consistent	CC1	0.539	0.570
	Prices, fees, and promotions are the same, regardless of the channel I use.	CC2	0.793	
	The design and interface of different banking channels are uniform and easy to be recognized	CC3	0.744	
	I receive the same level of service quality across all banking channels	CC4	0.638	

The validity test for the construct of Channel Consistency is assessed through outer loading and the Average Variance Extracted. The outer loading values show that two indicators, namely CC2 with score of 0.793 and CC3 with score of 0.744, exceed the recommended threshold of 0.70, and indicating that these items strongly represent the construct. Meanwhile, CC4 with score of 0.638 falls slightly below the threshold but is still considered acceptable as it remains above 0.60. On the other hands CC1 with score of 0.539 demonstrate the lowest loading, suggesting that this item has a weaker contribution to explaining the construct. The AVE value obtained for Channel Consistency is 0.470, which is slightly above the minimum recommended value of 0.50. This result implies that on average, the indicators capture the sufficient variance from the construct.

Table 2. Items for Channel Transparency

No	Item	Indicator	Outer Loading P-values	Average Variance Extracted
2	I can start a banking transaction in one channel and complete it in another without any problems	CT1	0.447	0.539
	I do not need to repeat information when switching the service channel (application to branch)	CT2	0.824	
	The process of moving across channels in my bank is smooth	CT3	0.862	
	My bank allows me to tract the status of transactions across all channels	CT4	0.729	

The construct of Channel Transparency is evaluated using four indicators with their outer loading values and the Average Variance Extracted serving as the basis for assessing validity. The outer loading result indicate that three items namely CT2 with score of 0.824, CT3 with score of 0.862, and CT4 with score of 0.729 exceed the recommended threshold of 0.70, thereby demonstrating the strong representation of the construct. These items show that customers generally perceive transparency when switching channels, moving across channels, and tracking transactions. However, CT1 show a relatively low outer loading value of 0.447, which falls well below the minimum acceptable level of 0.70. This suggests that CT1 does not adequately reflect the Channel Transparency construct and may weaken the convergent validity. The Average Variance Extracted for Channel Transparency is 0.539 which surpasses the threshold of 0.50, indicating that the construct, on average, captures more than half of the variance of its indicators. This supports the presence of convergent validity.

Table 3. Items for Channel Connectivity

No	Item	Indicator	Outer Loading P-values	Average Variance Extracted
3	My transaction history is updated in real time across all banking channels	CN1	0.795	0.630
	My profile and personal data are synchronized across all channel of my banks	CN2	0.862	
	I can access the same set of banking service across different channels.	CN3	0.828	
	The bank uses integrated information about me to provide personalized services	CN4	0.667	

The construct of Channel Connectivity is measured using four indicators with the outer loading values and the Average Variance Extracted serving as benchmarks for validity assessment. The result reveal that three items such as CN1 with the score of 0.795, CN2 with the score of 0.862, and CN3 with the score of 0.828 exceed the recommended threshold of

0.70, suggesting that these indicators strongly represent the construct. These items capture the extent to which customer experience seamless integration across banking channels, such as real time transaction updates, synchronized personal data, and consistent service accessibility.

Meanwhile, CN4 recorded a lower outer loading of 0.667, which is slightly below the ideal cut-off point of 0.70. Although still acceptable in exploratory research, this value indicates that CN4 contributes less strongly to the construct compared to the other items. The Average Variance Extracted value for Channel Connectivity is 0.630 surpassing the threshold of 0.50. This demonstrates that the construct explains more than half of the variance of its indicators, thereby confirming sufficient convergent validity. Overall, the construct of Channel Connectivity is adequately measured, with three strong indicators and one moderately acceptable indicator that still adds value to the overall dimension.

Table 4. Items for Online Customer Experience

No	Item	Indicator	Outer Loading P-values	Average Variance Extracted
4	The bank's digital service (mobile application, internet banking, ATMs) are easy to use and navigate	OCE1	0.647	0.503
	The digital channel of my bank provide service that meet my needs	OCE2	0.483	
	I find the design and layout of my bank's digital platforms are appealing	OCE3	0.825	
	Using my bank's digital service help me to complete my transaction quickly	OCE4	0.833	
	My bank's digital channel makes it easy for me to manage my financial activities	OCE5	0.699	

The construct of Online Customer Experience is assessed using five indicators with outer loading values and Average Variance Extracted used to evaluate the measurement validity. The result show that three indicators which are OCE3 with score of 0.825, OCE4 with score of 0.833 and OCE5 with score of 0.699 demonstrate the acceptable level of loading. These items highlight the importance of appealing digital design, transaction efficiency, and ease of managing financial activities as central components of online customer experience. In contrast, OCE1 with score of 0.647 and especially OCE2 with score of 0.483 fall below the recommended threshold of 0.70. While OCE1 is moderately acceptable in exploratory research, OCE2 is considerably weak and provide limited contribution to capture the essence of online customer experience. This indicates that customer may not strongly associate the general fulfillment of needs (OCE2) with their overall online experience in the same way as they value usability, efficiency and design.

The Average Variance Extracted for this construct is 0.503, slightly above the minimum threshold of 0.50. This confirms that the construct explains more than half of the variance of its indicators, thus meeting the requirements for convergent validity. Nevertheless, the relatively low loading of OCE2 suggest that refinement or potential removal of this item in future studies may further strengthen the validity of the construct.

Table 5. Items for Willingness to Stay

No	Item	Indicator	Outer Loading P-values	Average Variance Extracted
5	I intend to continue using my bank's digital channel in the future	WS1	0.682	0.600
	I would not switch to another bank's digital channel even if I have the alternatives	WS2	0.862	
	I am willing to recommend my bank's digital channel to others	WS3	0.719	
	I plan to maintain a long-term relationship with my bank through its digital channels	WS4	0.757	
	I feel committed to staying with my current bank because of its digital service	WS5	0.836	

The construct of Willingness to Stay is measured using five indicators with outer loading values and the Average Variance Extracted as the criteria for validity. The result indicates that four indicators such as WS2 with score of 0.862, WS3 with score of 0.719, WS4 with score of 0.757 and WS5 with score of 0.836 achieve value above the 0.70 threshold, showing a strong contribution to the construct. These items reflect different aspect of customer loyalty intention, such as resistance to switching, willingness to recommend, maintaining the long-term relationship, and a sense of commitment which driven by digital service. One item WS1 with score of 0.682 slightly below the ideal cut-off of 0.70 but still acceptable in exploratory study. Although weak, it still provides meaningful insight into customers' intention to keep using digital channels.

The Average Variance Extracted, for Willingness to Stay is 0.600, which is comfortably above the minimum threshold of 0.50. This indicates that the construct explains at least 60% of the variance in its indicators, confirming solid convergent validity. Overall, Willingness to Stay is well-represented by its indicators, with particularly strong contribution from WS2 and WS5, while WS1 is weak but still acceptable. This suggest that customers' long-term commitment is influenced not only by future usage intention but also by resistance to alternatives, satisfaction and advocacy behavior.

Reliability of Measurement

To ensure the consistency and stability of the measurement instruments, this research assessed the reliability of the construct by evaluating the internal consistency measurement. Reliability refers to the extent to which an instrument consistently produces similar result under repeated conditions, thereby conforming that the indicators are free from random error. In this research, two commonly applied reliability coefficients are examined, such as Cronbach's Alpha and Composite Reliability. Both indicators assess the internal consistency of the items within each construct, with values above the recommended threshold of 0.70 generally considered acceptable for social science research.

Table 6. Reliability Check Result for All Construct

No	Item	Composite Reliability (T-statistic)	Cronbach's Alpha (T-statistic)
1	Channel Connectivity	0.871	0.801
2	Channel Consistency	0.776	0.613
3	Channel Transparency	0.816	0.687
4	Online Customer Experience	0.830	0.754
5	Willingness to Stay	0.881	0.830

The reliability of all construct in this research is evaluated using two internal consistency measures, namely Composite Reliability and Cronbach's Alpha. Both indices serve to which the items within a construct consistently represent the same underlying latent variable. The result demonstrate that all construct achieves Composite Reliability values above the recommended threshold of 0.70, indicating strong reliability across the model. Specifically, Channel Connectivity with Composite Reliability score of 0.871 and Cronbach's Alpha score of 0.801; Online Customer Experience with Composite Reliability score of 0.830 and Cronbach's Alpha score of 0.754; and Willingness to Stay with Composite Reliability score of 0.881 and Cronbach's Alpha score of 0.830 display particularly strong reliability which exceed the minimum standard. Channel Transparency and Channel Consistency show a slightly lower on Cronbach's Alpha value fall below the conventional threshold of 0.70. However, since both constructs has composite reliability value greater than 0.70, their internal consistency can still be considered acceptable, especially in social science context.

Path Analysis Result

The path analysis is conducted to test the hypothesized relationship among construct in the model. The result indicates mixed findings, with some hypotheses are supported while the others are not. First, based on table 7 below, Channel Connectivity did not show a significant effect on Online Customer Experience, suggesting that seamless transaction updates and synchronized data across channels do not directly enhance the customers' perception of online experience. Similarly, when moderated by generational cohort, Channel Connectivity is failed to demonstrate a significant influence with score of t-statistic is 0.014 below the threshold 1.96.

In contrast, Channel Consistency exhibits a strong and significant and positive effect on Online Customer Experience with t-statistic score is 4.760. This indicates that consistent information, pricing, and service across channels play a crucial role in shaping the favorable customer experience. However, the moderating effect of Generational Cohort on this relationship is not significant with t-statistic score is 0.895, meaning that generational cohort do not alter the impact of consistency. Channel Transparency is also found to significantly affect the Online Customer Experience with t-statistic score 2.083, showing that customers value the transparent process such as smooth channel transition and the ability to transaction tracking. Nevertheless, the moderation of Generational Cohort did not yield the significant result. Finally, Online Customer Experience demonstrated a very strong and significant influence on Willingness to Stay, thus this research underscore that positive digital experience

substantially increases the clients' intention to remain loyal and maintain long-term relationship with their bank's digital service.

Table 7. Path Analysis

No	Independent Construct	Moderation Construct	Dependent Construct	T-statistic	P-values	Result
1	Channel Connectivity	-	Online Customer Experience	0.144	0.885	Not supported
2	Channel Consistency	-		4.760	0.000	Supported
3	Channel Transparency	-		2.083	0.037	Supported
4	Channel Connectivity	Generation	Online Customer Experience	0.014	0.989	Not supported
5	Channel Consistency			0.895	0.371	Not supported
6	Channel Transparency			1.171	0.242	Not supported
7	Online Customer Experience	-	Willingness to Stay	44.340	0.000	Supported

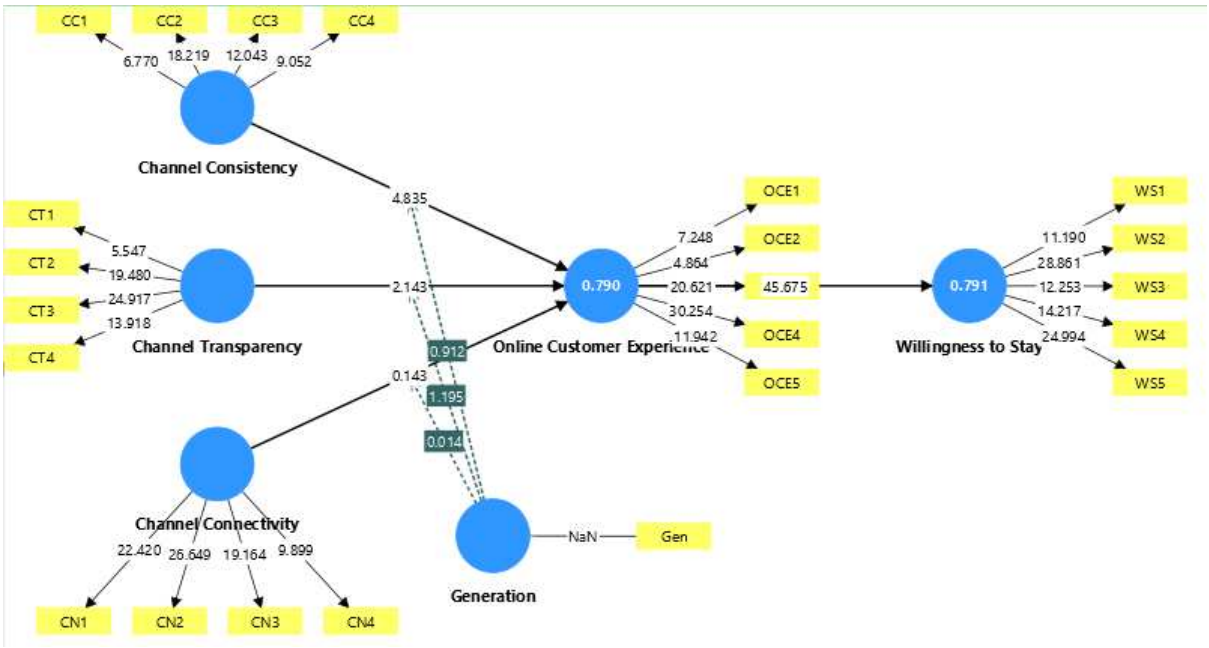

Figure 1. Research Model

Discussion

This research provides several important insights into the role of omnichannel integration in shaping customer experience and loyalty in digital banking. The findings show that Channel Consistency significantly influences Online Customer Experience. This result is in line with prior studies that emphasize how consistency in information, pricing and service across multiple touchpoints enhances customer trust and satisfaction (Verhoef et al., 2015; Cocco & Demoulin, 2022). Likewise, Channel Transparency was also found to have a significant effect on Online Customer Experience, supporting the earlier which argues that transparency in digital process such as transaction monitoring and seamless channel switching contribute to

build customer confidence and strengthening the digital service experience (Jones et al., 2020; Herhausen et al., 2015).

On the other hand, Channel Connectivity did not show a significant impact on Online Customer Experience. This finding diverges from previous research which emphasize the relevance of seamless integration across channels in shaping clients' perception (Verhoef et al., 2015; Bag et al., 2021). A possible explanation is that clients now have consideration about real-time synchronization and data integration as basic features, or hygiene factors, rather than differentiating elements. In other word, connectivity is expected by default and therefore does not significantly enhance perceived experience. Similarly, the moderating effect of generational cohort is also not supported across all tested relationship. This result is inconsistent with earlier studies that suggest that generational differences influence digital behavior (Chung et al., 2018; Bartoli et al., 2023). In the context of digital banking, however it appears that positive experiences are universally valued across generation, thereby minimizing the differences between customer cohorts.

From a theoretical perspective, each hypothesis can be logically justified. Channel Consistency ensure that clients encounter uniform quality across channels, reducing the confusion and built trust. For example, when a bank provides identical loan interest rest on its website, mobile application and branch office, clients are reassured of its reliability. Channel transparency also logically improves the customer experience because it allows them to track the transaction, continue processes across channels, and feel in control of their interaction. For instance, a client who begin an online loan application and seamlessly completes it at a branch with all prior data intact experiences a greater sense of empowerment. In contrast, while channel connectivity should theoretically matter, the insignificant finding suggest that its presence is no longer a source of added value, though its absence would likely frustrate the clients.

Clients already assume that their balance will update instantly across ATMs, mobile application, and internet banking platforms. Meanwhile the strong effect of online customer experience on willingness to stay highlight how a smooth and satisfying digital journey fosters loyalty. For example, clients who enjoy the quick fund transfer, seamless bill payments and responsive support are more likely to remain loyal rather than consider switching to another banks. Finally, the unsupported moderation effect indicate that generational cohorts perceive consistency, transparency, and connectivity similarly, reflects the widespread adoption and normalization of digital banking across age groups. For instance, both Millennials and Baby Boomers generation, like value transparency in tracking their digital transactions, showing that this need transcends the generational boundaries.

Several explanations for why generational cohort did not significantly moderate the channel connectivity, channel consistency, and channel transparency to online customer experience are the homogenization of digital experience expectations. Over time, digital banking and online channels have matured and become more standardized. As most banks now offer similar feature in connectivity, consistency and transparency, customer across generation may have converging expectation. In other words, younger and older cohort may both expect the seamless service, synchronized data across channels, and transparent process, making difference minimal. Thasleena & Shanti (2025) found that while the expectation such as preferences for personalization or transaction speed, ease of use, reliability, and clarity in

digital banking are shared across cohort. Brosius et al. (2022) also showed that generation did not differ strongly in media trust implying that for many digital-service related construct, generational differences are smaller than the popular belief.

Further, if channel connectivity, consistency and transparency are already implemented at at high level in the banks, there may be little variation across the generational cohort. In such case, moderation is hard to detect because all cohort experience similarly high level of those stimuli, making the incremental effect of cohort small or statistically non-significant. Dorie & Loranger (2020) found the generational differences happened in usage frequency or channel spend rather than in how much connectivity or consistency matter, particularly when the system is mature. Overall, this research emphasize that consistency and transparency remain as critical drivers of online customer experience, while the connectivity has become a baseline expectation rather than a competitive differentiator. Moreover, the findings also confirm that positive customer experience in digital banking play a pivotal role in shaping the willingness to stay across all generational cohort. These insights provide meaningful implication for both, theory and practice, and also suggest that banks should prioritize the consistency and transparency in their omnichannel strategies while ensuring that the overall customer experience remain smooth, engaging, and reliable to strengthen the clients' loyalty.

Conclusion

This research concludes that among the three dimensions of omnichannel integration, channel consistency and channel transparency are critical determinants of positive online customer experience, while channel connectivity no longer serves as a significant differentiator. Online customer experience strongly enhancing the willingness to stay, underscoring its pivotal role in fostering digital loyalty. Interestingly, the moderating effect of generational cohort was not supported, indicating that both Generation Y and Generation Z perceive digital banking service similarly in terms of consistency, transparency and connectivity.

These result indicate that digital expectation have become increasingly standardized across generational cohorts, reflecting the maturity and normalization of digital banking platform. Rather than segmenting customers primarily by age, bank should recognize that baseline digital expectation such as reliability, clarity, and process continuity are now unversally assumed. From a managerial perspective, this implies that competitive differentiation no longer lies in offering channel-specific features, but in orchestrating consistent end – to – end customer journeys across digital and physical touchpoints. Specifically banks should prioritize real-time data synchronization across channels, ensuring that customer interaction initiated through mobile application can be seamlessly continued via call centers and branch services without information loss or repetition.

Additionally, standardizing the service recovery protocols across channels such as complaint handling, transaction dispute resolution, and security verification can reinforce customer trust at critical moments of interaction. Given the convergence of digital expectation across cohorts, investmnet in omnichannel integration should focus on process continuitu and interaction coherence, rather than age based customization, as these factors are more likely to sustain customer loyalty in a digitally mature banking environment.

Despite offering meaningful insight, this research has several limitations. First, the sample size is relatively small which is about 90 respondents, and limited to Indonesian digital

banking user in urban areas, which may restrict the generalizability of the findings. The second is, the research design is cross-sectional, preventing the causal inferences regarding the long-term impact on online customer experience on retention. Third, only Generation Y and Z are considered, leaving out the older cohort such as Baby Boomer generation who may face greater barrier in adopting digital banking. Future research could expand the sample to include more diverse demographics and geographic region, adopt the longitudinal design to capture behavioral change over time, and examine the additional moderating factor such as digital literacy, trust or cultural differences. Moreover, further studies could explore the role of emerging technologies such as artificial intelligence, biometric authentication and gamification in shaping customer experiences across generations.

References

Addae, J.A., Boakye, K.G., Ampong, G.O.A., Anyigba, H., Majeed, M., Abubakari, A., & Ofori, K.S. (2024). The Interplay between Multichannel Integration Quality, Service Convenience, Service Experience, Multichannel Perceived Value and e-WOM. *International Journal of Quality and Reliability Management*, 42(4), 1110-1131, https://doi.org/10.1108/ijqrm-08-2023-0264

Andriani, A., Setyorini, H., & Shibghatalloh, F. (2025). Investigating e-servicescape influence to customer response in digital Islamic banking. *International Journal of Islamic Economics and Finance*, 4(1), 101-120, https://doi.org/10.18196/ijief.v4i1.10299

Armelia, P.A., & Wahyuni, M.A. (2020). Pengaruh Kompetensi Aparatur Desa, Efektivitas Pengendalian Internal dan *Moral Sensitivity* terhadap Pencegahan Fraud dalam Pengelolaan Keuangan Desa. *Vokasi: Jurnal Riset Akuntansi,* 9(2), 61-70, https://doi.org/10.23887/vjra.v9i2.26125

Athaide, G.A., Zhang, J.Q., & Klink, R.R. (2024). Customer Experience Management (CXM) and New Product Success: an Empirical Investigation. *European Journal of Innovation Management,* https://doi.org/10.1108/EJIM-11-2023-1033

Baabdulah, A.M., Alalwan, A.A., Rana, S., & Taghizadeh, H. (2021). The Prerequisite and Consequences of Customers' Online Experience Regarding the Moderating Role of Brand Congruity : Evidence from Iranian Bank. *Journal of Islamic Marketing*, 13(10), 2144-2172, https://doi.org/10.1108/JIMA-09-2020-0277

Bag, S., Gupta, S., Kumar, A., & Sivarajah, U. (2021). An Integrated Artificial Intelligence Framework for Knowledge Creation and B2B Marketing Rational Decision Making for Improving Firm Performance. *Industrial Marketing Management*, 92, 178-189, https://doi.org/10.1016/j.indmarman.2020.12.001

Barile, D., Secundo, G., & Del Vecchio, P. (2025). Discovering the Phygital Customer Experience: Which Digital Technologies Influence Leading Companies' Process? *European Journal of Innovation Management*, 1-26, https://doi-org.proxy.undip.ac.id/10.1108/EJIM-08-2024-0887

Bartoli, A., Cappa, F., & Oriani, R. (2023). Generational differences in digital behavior: a systematic literature review. *Journal of Infrastructure, Policy and Development*, 8(9), 6755, https://doi.org/10.24294/jipd.v8i9.6755

Barquin, S., de Gantes, G., Vinayak, H.V., & Shrikhande, D. (2019, february). *Digital banking in Indonesia: Building Loyalty and generating grwoth.* Jakarta: McKinsey & Company, https://www.mckinsey.com/industries/financial-services/our-insights/digital-banking-in-indonesia-building-loyalty-and-generating-growth

Batat, W., & Hammedi, W. (2023). The Extended Reality Technology (ERT) Framework for Designing Customer and Service Experiences in Phygital Settings: a Service Research Agenda. *Journal of Service Management*, 34(1), 10-33, https://doi.org/10.1108/JOSM-08-2022-0289

Brosius, A., Ohme, J., & de Vreese, C.H. (2022). Generational Gaps in Media Trust and Its Antecedents in Europe. *The International Journal of Press/Politics*, 27(1), 226-247, https://doi.org/10.1177/19401612211039440

Cao, L., & Li, L. (2015). The Impact of Cross-Channel Integration on Retailers' Sales Growth. *Journal of Retailing*, 91(2), 198-216, https://doi.org/10.1016/j.jretai.2014.12.005

Choudhury, K., Singh, N., & Mishra, B.B. (2019). Service Quality and Customer Loyalty in e-Commerce: a Study of Online Banking in India. *Journal of Asia Business Studies*, 13(1), 1-24, https://doi.org/10.1108/JABS-02-2017-0027

Chung, S., Kramer, T., & Wong, E.M. (2018). Do Touch Interface Users Feel More Engaged? The Impact of Input Device Type on Online Shoppers Engagement, Affect, and Purchase Decision. *Psychology and Marketing*, 35(11), 795-806, https://doi.org/10.1002/mar.21135

Cocco, H., & Demoulin, N.T.M. (2022). Designing a Seamless Shopping Journey through Omnichannel Retailer Integration. *Journal of Business Research,* 150, 461-475, https://doi.org/10.1016/j.jbusres.2022.06.031

Djafarova, E., & Bowes, T. (2021). Instagram Made Me Buy It: Generation Z Impulse Purchase in Fashion Industry. *Journal of Retailing and Consumer Services*, 59(1), 102345, https://doi.org/10.1016/j.jretconser.2020.102345

Dorie, J., & Loranger, D. (2020). The Multi-generation: Generational Differences in Channel Activity. *International Journal of Retail & Distribution Management*, 48(9), 1005-1022, https://doi.org/10.1108/IJRDM-06-2019-0196

Frasquet, M., Miguel, M.J., & Molla, A. (2015). Do channel integration efforts pay off in terms of online and offline customer loyalty? *International Journal of Retail and Distribution Management*, 43(7), 589-609, https://doi.org/10.1108/IJRDM-07-2014-0092

Gao, L., & Su, Y. (2017). Online Channel Integration and Consumers' Channel Choice Behavior: a Transaction Cost Perspective. *INdustrial Management & Data System,* 117(9), 2077-2094, https://doi.org/10.1108/IMDS-02-2016-0052citeturn17search86

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, https://doi.org/10.1016/j.jretconser.2021.102688

Gao, P., Waechter, K.A., & Bai, X. (2015). Understanding Consumers' Continuance Intention toward Mobile Purchase: a Theoretical Framework and Empirical Study: a Case of Chine. *Computers in Human Behavior,* 53, 249-262,

https://doi.org/10.1016/j.chb.2015.07.014

Gao, W., Fan, H., Li, W., & Wang, H. (2021). Crafting the customer experience in omnichannel context: the Role of channel integration. *Journal of Business Research*, 126, 12-22, https://doi.org/10.1016/j.jbusres.2020.12.056

Hair, J.F., Babin, B.J., Anderson, R.E., Black, W.C. (2019). *Multivariate data analysis, 8th edition*. Hampshire, UK: Cengage Learning.

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, https://doi.org/10.1016/j.jretai.2014.12.009

Illahi, S.K., Taufiq, M., Wardaya, W. (2025). The Impact of Infrastructure Access and Information Technology Use on Open unemployment Rate in Java. *Asian Journal of Applied Business and Management*, 4(3), 1033-1046, https://doi.org/10.55927/ajabm.v4i3.423

Ilmudeen, A., & Bao, Y. (2019). What Obstructs Customer Acceptance of Internet Banking? Security and Privacy, Risk, Trust, and Website Usability and the Role of Moderators. *The Journal of Hight Technology Management Research*, 29(1), 109-123, https://doi.org/10.1016/j.hitech.2018.04.010

Jones, A., White, E., Brown, J., & Taylor, L. (2020). Differential Evaluation of Chatbot-led Interaction: a Comparative Analysis. *Journal of Business Research,* 45(1), 87-102

Juaneda-Ayensa, E., Mosquera, A., & Murillo, S.Y., (2016). Omnichannel Customer Behavior: Key Drivers of Technology Acceptance and Use and Their Effects on Purchase Intention. *Frontiers in Psychology,*7, 1117, https://doi.org/10.3389/fpsyg.2016.01117

Kalubangga, M., Kakwezi, P., & Kaiize, D. (2013). The Effect of Fraudulent Procurement Practice on Public Procurement Performance. *International Journal of Business and Behavioral Science,* 3.

Katadata. (2020, March 5). *EV-DCI: Menilik Daya Saing Digital Daerah di Indonesia*. Katadata.co.id. https://katadata.co.id/analisisdata/5e9a57af903e0/ev-dci-menilik-daya-saing-digital-daerah-di-indonesia?

Kim, L., Jindabot, T., & Yeo, S.F. (2024). Understanding Customer Loyalty in Banking Industry: A Systematic Review and Meta-analysis.*Heliyon*, 10(1) e36619, https://doi.org/10.1016/j.heliyon.2024.e36619

Klaus, P., Maklan, S. (2012). Towards a Better Measure of Customer Experience. *International Journal of Market Research*, 5496), 771-792, https://doi.org/10.2501/IJMR-2013-021

Klaus, P. (2013). The Case of Amazon.com: Toward a Conceptual Framework of Online Customer Service Experience Using the Emerging Consensus Technique. *Journal of Service Marketing*, 27(6), 443-457, https://doi.org/10.1108/JSM-02-2012-0030

Lazaridis, C., Sarantopoulos, P., Vrechopoulos, A., & Doukidis, G. (2021). Effects of Increased Omnichannel Integration on Customer Satisfaction and Loyalty Intention. *International Journal of Electronic Commerce*, 25(4), 440-468, https://doi.org/10.1080/10864415.2021.1967005

Lee, Z.W.Y., Chan, T.K.H., Chong, A.Y.L., & Thadani, D.R. (2019). Customer

Engagement through Omnichannel Retailing: The Effects of Channel Integration Quality. *Industry Marketing Management*, 77, 90-101, https://doi.org/10.1016/j.indmarman.2018.12.004

Lin, X., Wang, X., & Hajli, N. (2019). Building e-Commerce Satisfaction and Boosting Sales:The Role of Social Commerce Trust and Its Antecedents. *International Journal of Electronic Commece*, 23(3), 328-363, https://doi.org/10.1080/10864415.2019.1619907

Mahfuzh, M.A., Setyono, J., & Riza, A.F. (2025). Examining the model for enhancing e-loyalty in digital banks. *Signifikan: Jurnal Ilmu Ekonomi*, 14(1), 247 – 264, https://doi.org/10.15408/sjie.v14i1.44901

Mainardes, E., W., de Moura Rosa, C.A. & Nossa, S.N. (2020). Omnichannel strategy and customer loyalty in banking. *International Journal of Bank Marketing*, 38(4), 799 – 820, https://doi.org/10.1108/IJBM-04-2019-0151

Oh, L., B., Teo, H.H., & Sambamurthy, V. (2012). The Effect of Retail Channel Integration through The Use of Information Technologies on Firm Performance. *Journal of Operations Management*, 30(5), 368-381, https://doi.org/10.1016/j.jom.2012.03.001

Ozkan, P., Suer, S., Keser, I.K. & Kocakoc, I.D. (2019). The Effect of Service Quality and Customer Satisfaction on Customer Loyalty: The Mediation of Perceived Value of Service, Corporate Image, and Corporate Reputation. *International Journal of Bank Marketing*, https://doi.org/10.1108/IJBM-03-2019-0096

Prassida, G.F., & Hsu, P.Y. (2022). The Harmonious Role of Channel Integration and Logistics Service in Omnichannel Retailing: the Case of IKEA. *Journal of Retailing and Consumer Services,* 68, 103030, https://doi.org/10.1016/j.jretconser.2022.103030

Priporas, C.V., Stylos, N., & Fotiadis, A.K. (2017. Generation Z Consumers' Expectation of Interaction in Smart Retailing: a Future Agenda. *Computers in Human Behavior,* 77(1), 374-381, https://doi.org/10.1016/j.chb.2017.01.058

Putra, F.H., Suhardjanto, D., Trinugroho, I., & Arifin, T. (2024). Overcoming Barrier to Inclusion: The Role of Financial Literacy and Digital Divide in Expanding Financial Access in Indonesia. *Journal of Ecohumanism*, 3(8), 9956-9966, https://doi.org/10.62754/joe.v3i8.5608

Putri, C.D.P., & Santoso, I.H. (2022). Implementation of Klaus's Customer Experience Quality Concept on Intention to Switch Nexa Internet Customers to Other Internet Provider. Jurnal Ekonomi, 12(04), 230-239.

Radomska, J., Kawa, A., Hajdas, M., Klimas, P., & Silva, S. C. (2025). Unveiling retail omnichannel challenges: developing an omnichannel obstacles scale. *International Journal of Retail & Distribution Management*, *53*(13), 1-20, https://doi.org/10.1108/IJRDM-04-2024-0169

Rahman, S.M., Carlson, J., Gudergan, S.P., & Wetzels, M. (2025). How do omnichannel customer experiences afffect customer engagement? Theory and empirical validation. *Journal of Business Research*, 150, 115196, https://doi.org/10.1016/j.jbusres.2025.115196

Rather, R.A., & Islam, J.U. (2022). Customer Experience and Engagement in Service Marketing: an Empirical Study of the Antecedents and Consequences. *Journal of*

Retailing and Consumer Services, 65(1), 102867, https://doi.org/10.1016/j.jretconser.2021.102867

Santoso, I.H., Nurcholis, L., & Kartika, E. (2020). Intention to Use Mobile Banking Application: Gender Based. *Jurnal Penelitian Ekonomi dan Bisnis*, 5(2), 203-211, https://doi.org/10.33633/jpeb.v5i2.3126

Seth, T., Keshari, N., Chowdhury, S., Nath Jha, S. (2025). Evaluating customer satisfaction through omnichannel banking integration quality: a Moderated mediation mechanism. *Academy of Marketing Studies Journal*, 29(4), 1-16

Shankar, A., & Jebarajakirthy, C. (2019). The Influence of e-Banking Service Quality on Customer Loyalty: A Moderated Mediation Approach. *International Journal of Bank Marketing*, 37(5), 1119-1142, https://doi.org/10.1108/IJBM-03-2018-0063

Solem, B.A.A., Frederisksen, J.I., & Sorebo, O. (2023). Dynamic Capabilites in The Realisation of Omnichannel Retailing. *International Journal of Retail and Distribution Management*, 51(1), 21-38, https://doi.org/10.1108/IJRDM-12-2021-0599

Sousa, R., & Voss, C.A. (2016). Service Quality in Multichannel Services Employing Virtual Channels. *Journal of Service Management*, 27(4), 460-478.

Sujana, E., Yasa, I.N.P., & Wahyuni, M.A. (2018). Testing of Fraud Diamond Theory based on Local Wisdom on Fraud Behavior. *Advanced in Economics, Business, and Management Research*, 69, 12-15.

Thasleena, K.F., & Shanti, P. (2025). Generational Divide in Digital Banking: Comparing Experience and Expectation Across Generation X, Y, and Z. *Indian Journal of Information Sources and Services*, 15(2), 268-274, https://doi.org/10.51983/ijiss-2025.IJISS.15.2.34

Verhoef, P.C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J.Q., Fabian, N., & Haenlein, M. (2021). Digital Transformation: A Multidisciplinary Reflection and Research Agenda. *Journal of Business Research*, 122, 889-901.

Verhoef, P.C., Kannan, P.K., & Inman, J.J. (2015). From multi channel retailing to omni-channel retailing: Introduction to the special issue on multi channel retailing. *Journal of Retailing*, 91(2), 174-181, https://doi.org/10.1016/j.jretai.2015.02.005

Wu, L.W., Wu, Y.H., Tang, Y.C., & Wang, C.Y. (2025). Strenghtening Journey Satisfaction trough Effective Customer Journey Design for Omnichannel Retailing. *International Journal of Retail & Distribution Management*, 1,7 https://doi-org.proxy.undip.ac.id/10.1108/IJRDM-08-2024-0405

Xuan, Q.T., Truong, H.T.H., & Vo, T.Q. (2023). The impacts of omnichannel retailing properties on customer experince and brand loyalty: a Study in the banking sector. *Cogent Business & Management*, 10(2), 2244765, https://doi.org/10.1080/23311975.2023.2244765

Yue, P., Korkmaz, A.G., Yin, Z., & Zhou, H. (2022). The Rise of Digital Finance: Financial Inclusion or Debt Trap. *Finance Research Letter,* 46, 102477

Zhang, M., Zhu, C., & Ye, Y. (2020). The Effect of Cross-channel Integration on Customer Loyalty in Omnichannel Retailing: The Mediating Role of Customer Engagement. *Journal of Retailing and Consumer Services*, 55, 102-113.

Zhang, Y., & Nie, H. (2022). Older Adults' Adoption of Mobile Banking in China: A Qualitative Study. *Frontiers in Psychology*, 13, 918057