

Enhancing Customer Loyalty: The Mediating Effect of Experience on Usability, Security, and Content Quality with Digital Literacy Moderation

Effect of Experience on Usability, Security, and Content Quality

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Submitted:
November 15, 2025

Revised:
December 17, 2025

Accepted:
January 29, 2026

Published Online:
January 31, 2026

ABSTRACT

In the rapidly evolving digital landscape, retaining customer loyalty has become a critical challenge for businesses. This research addresses the challenge of sustaining customer loyalty in the digital era by examining how ease of use, security, and content quality affect it. The study's purpose is to examine customer experience as a mediator and digital literacy as a moderator within this context. Employing an explanatory quantitative method focused on digital service users in West Java, the data were evaluated using Structural Equation Modeling (SEM-PLS). The findings indicate that the model possesses a remarkably high predictive capability, specifically 95.6% for the customer loyalty variable. The key discoveries highlight that ease of use, security, and content quality exert a direct and significant influence on loyalty, with content quality emerging as the most influential factor. Conversely, this article discusses that customer experience is not proven to mediate this relationship, and digital literacy does not perform a moderating function. This provides a significant contribution that the functional effectiveness and substance of information are more decisive in user loyalty than the complex experience evaluation process in this model.

Keywords: *Customer Experience, Customer Loyalty, Content Quality, Security, Usability.*

INTRODUCTION

In today's rapidly evolving digital age, sustaining customer loyalty is essential for long-term business success, as loyal customers not only drive sales but also strengthen a company's competitive position (Ertemel et al., 2021; Ahmad et al., 2022). Customer loyalty is strongly influenced by user experience when interacting with digital products or services, where positive experiences enhance satisfaction and trust, encouraging continued usage (Mokha & Kumar, 2021; Levy, 2022). Ease of use plays a critical role in shaping user experience, as systems that are simple and intuitive increase user comfort, compliance, and perceived security, particularly in human-computer interaction contexts (Albarrak, 2024). Digital services that are easy to understand and navigate provide convenience, stimulate repeat usage, and encourage recommendations, which is reflected in higher user engagement on interactive platforms. In addition, ensuring strong security is vital in digital environments involving personal and financial data, as it builds customer confidence and fosters greater loyalty and engagement (Vila et al., 2021). Furthermore, delivering relevant, informative, and engaging content significantly enhances the overall customer experience and creates added value for users (Calvano et al., 2021; Setiadi et al., 2025; Gani et al., 2025).

In a complex digital environment, digital literacy, defined as the ability to understand and effectively use digital technology, acts as a moderating factor shaping how usability, security, and content quality influence user experience (Kareem & Oladimeji, 2024). Customers with higher digital literacy can better access, evaluate, and optimally utilize digital services, whereas lower literacy may limit users from fully benefiting from these

JIMKES

Jurnal Ilmiah Manajemen
Kesatuan
Vol. 14 No. 1, 2026
pp. 1513-1526
IBI Kesatuan
ISSN 2337 - 7860
E-ISSN 2721 - 169X
DOI: 10.37641/jimkes.v14i1.4909

services (Mukherjee et al., 2024). Despite ongoing improvements in usability, security, and content quality, many firms continue to struggle with customer loyalty due to gaps between expectations and actual experiences, as well as varying levels of digital literacy that influence user perceptions and engagement (Magatef et al., 2023; Arora & Banerji, 2024). Consequently, customers with lower digital literacy may encounter difficulties in using applications despite adequate security and content quality, leading to suboptimal user experiences.

This research identifies a gap in understanding how customer experience serves as the primary mediator among platform usability, perceived security, and content quality in influencing customer loyalty, with digital literacy acting as a moderating factor. Previous studies have mostly placed satisfaction as the mediator without comprehensively exploring the user experience (Venkatakrishnan et al., 2023). Moreover, digital literacy has not been extensively examined as a factor that could either enhance or diminish the connection between experience and loyalty. Nonetheless, existing research indicates that the quality of digital experiences significantly influences loyalty by fostering user trust and engagement, and the moderation of individual variables such as digital literacy is increasingly relevant in the context of modern digital platforms (Hussein et al., 2022; Bae & Kim, 2023; Gazi et al., 2024).

The integration of usability, security, and content quality within the framework of user experience and customer loyalty underscores the complexity of customer interactions with digital platforms, which should not be examined in isolation (Pham & Bui, 2025). High usability without adequate security may generate customer skepticism, while overly secure yet difficult-to-use systems can reduce user satisfaction (Guo et al., 2023; Yum & Yoo, 2023). Therefore, engaging content must be aligned with users' needs and capabilities to optimize user experience, while digital literacy introduces a moderating dimension, as customers with varying literacy levels respond differently to usability, security, and content quality (Yang & Lee, 2022; Durmuş, 2024).

The rapid advancement of digital technology has transformed how customers interact with products and services. Therefore, this study is important as it enables firms to understand the roles of mediation and moderation, encouraging them to move beyond focusing solely on technical features and content toward considering customers' readiness to adopt technology (Calle et al., 2021; Agnihotri et al., 2025). This research is expected to provide a foundation for developing adaptive digital marketing strategies aligned with the needs of modern consumers. The study aims to examine the effects of ease of use, security, and content quality on customer loyalty, with customer experience as a mediating variable and digital literacy as a moderating variable.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Factors Influencing Customer Experience

Customer experience represents customers' cognitive, emotional, sensory, and behavioral responses formed through cumulative interactions with a digital platform before, during, and after usage (Kacprzak & Hensel, 2023; Arkadan et al., 2024; Barile et al., 2025). In digital environments, customer experience is strongly influenced by how users perceive usability, security, and content quality, as these factors determine the ease, safety, and meaningfulness of interaction. Usability enables users to accomplish tasks effectively and efficiently through intuitive navigation, ease of learning, consistency, and minimal errors, which directly shape cognitive evaluations and emotional responses during system interaction (Kivijärvi & Pärnänen, 2021). Empirical studies indicate that learnability, efficiency, memorability, low error rates, and satisfaction significantly enhance users' experiential perceptions (Ren et al., 2022; Hajesmaeel-Gohari et al., 2022; Kumar et al., 2023; Chien et al., 2024).

Security further contributes to customer experience by ensuring confidentiality, integrity, and availability of digital systems, particularly in environments involving personal data and online transactions (Khando et al., 2021). Both technical safeguards and procedural mechanisms, such as authentication, access control, and user security

awareness, foster trust and perceived safety, which are essential cognitive and affective components of experience (Hijji & Alam, 2022; Li et al., 2025). Prior research confirms that users' perceptions of security and trust significantly influence experiential outcomes (Khan et al., 2023; Haugli-Sandvik et al., 2024; Manzoor et al., 2024). Additionally, content quality enhances customer experience by providing accurate, relevant, complete, and timely information that supports understanding and decision-making (Ye et al., 2021; Qian & Jain, 2024; Han et al., 2024). High-quality content strengthens cognitive clarity, emotional satisfaction, and behavioral engagement (Ming & Goldenberg, 2021; Issa et al., 2021; Sousa et al., 2024; Aron et al., 2024).

H1: Usability has a positive effect on customer experience.

H2: Security has a positive effect on customer experience.

H3: Quality of content has a positive effect on customer experience.

Factors Influencing Customer Loyalty

Customer loyalty reflects a strong commitment to repeatedly purchase or continue using a product or service, even in the presence of alternatives and competitive marketing efforts (Cui et al., 2023). Loyalty manifests through repeat purchase intentions, actual repurchasing behavior, willingness to recommend, resistance to switching, brand preference, and long-term commitment (Hemsley-Brown, 2022; Dandis et al., 2022; Ahmad & Akbar, 2023; Baykal et al., 2024; Zhao et al., 2024; Olfat & Kirkham, 2024). In digital contexts, loyalty is influenced not only by functional system attributes but also by experiential perceptions formed during interactions.

Usability contributes to customer loyalty by reducing effort, frustration, and cognitive load, allowing users to achieve their goals efficiently and comfortably (Wang et al., 2021). Systems perceived as easy to use and reliable encourage repeated usage and long-term attachment. Similarly, security strengthens loyalty by fostering trust and reducing perceived risk, particularly in transactions involving sensitive data (Li et al., 2025). Customers are more likely to remain loyal to platforms they perceive as safe and trustworthy (Martin et al., 2021; Dhiman et al., 2023; Khan et al., 2023). Content quality also plays a critical role in sustaining loyalty by providing relevant, credible, and up-to-date information that supports users' needs and decision-making processes (Han et al., 2024). High-quality content enhances perceived value and encourages continued engagement (Ye et al., 2021). Moreover, customer experience itself acts as a central driver of loyalty, as positive cognitive, emotional, sensory, and behavioral experiences foster satisfaction, trust, and emotional attachment to the platform.

H4: Usability has a positive effect on customer loyalty.

H5: Security has a positive effect on customer loyalty.

H6: Quality of content has a positive effect on customer loyalty.

H7: Customer experience has a negative effect on customer loyalty.

Customer Experience as a Mediating Variable

Customer experience serves as a key mechanism through which usability, security, and content quality influence customer loyalty. Rather than affecting loyalty directly, these system attributes shape users' perceptions, emotions, and behaviors, which subsequently determine their commitment to the platform (Gustafsson et al., 2024; Barile et al., 2025). Usability enhances loyalty by first improving customers' cognitive evaluations of ease and efficiency, which then translate into satisfaction, trust, and engagement (Wang et al., 2021). Similarly, security contributes to loyalty by reducing perceived risk and increasing confidence, thereby strengthening affective and behavioral components of customer experience (Khando et al., 2021).

Content quality also exerts its influence indirectly through customer experience by shaping clarity, perceived usefulness, and emotional responses during information processing (Ye et al., 2021). Accurate and relevant content enhances understanding and

trust, which are critical experiential dimensions leading to loyalty (Goff et al., 2022; Kiili et al., 2023). Prior research highlights that customer experience integrates multiple system attributes into a holistic evaluation that ultimately drives repeat usage, recommendation behavior, and resistance to switching (Zanger et al., 2022; So et al., 2023). Accordingly, the literature supports customer experience as a central mediating mechanism linking usability, security, and content quality to customer loyalty.

H8: Customer experience mediates the relationship between usability and customer loyalty.

H9: Customer experience mediates the relationship between security and customer loyalty.

H10: Customer experience mediates the relationship between content quality and customer loyalty.

Digital Literacy as a Moderating Variable

Digital literacy reflects individuals' ability to access, evaluate, use, and create digital information effectively, ethically, and securely (Vodă et al., 2022). Beyond technical skills, digital literacy includes cognitive and social competencies such as critical evaluation, ethical awareness, and data security understanding (Morgan et al., 2022). These capabilities influence how users perceive and respond to usability, security, and content quality. Consequently, higher levels of digital literacy enable individuals to make more informed judgments and engage more confidently in digital environments.

Users with higher digital literacy are better equipped to navigate complex systems, interpret content accurately, and understand security features, resulting in more positive experiential evaluations (Oh et al., 2021; Buchan et al., 2024). Conversely, users with lower literacy may experience difficulties even when system quality is objectively high, leading to weaker experiential outcomes. Digital literacy also shapes how customer experience translates into loyalty, as digitally literate users are more likely to recognize value, trust systems, and maintain long-term engagement (Vodă et al., 2022; Tenberga & Daniela, 2024). Prior studies emphasize that differences in digital literacy create heterogeneous user responses to identical system features, underscoring its role as a moderating variable in digital behavior (Martínez-Bravo et al., 2022). Thus, existing literature supports the moderating role of digital literacy in strengthening or weakening the relationships between usability, security, content quality, customer experience, and customer loyalty.

H11: Digital literacy moderates the relationship between usability and customer experience.

H12: Digital literacy moderates the relationship between security and customer experience.

H13: Digital literacy moderates the relationship between content quality and customer experience.

H14: Digital literacy moderates the relationship between customer experience and customer loyalty.

Figure 1 depicts the relationships between the variables examined in this study. This model is grounded in pertinent theoretical principles and is backed by prior research findings. It acts as a guide for examining how independent variables affect dependent variables through mediating variables, as well as the impact of moderating variables, in line with the research goals.

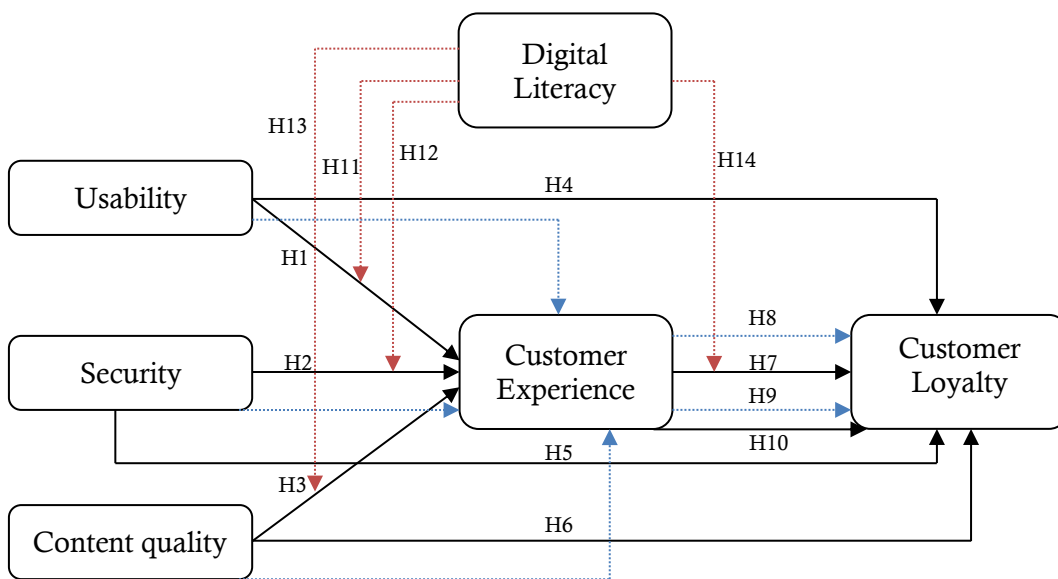


Figure 1. Conceptual Model of Research

RESEARCH METHODS

This study adopts a quantitative research approach with an explanatory design to clearly describe and test the causal relationships among the variables under investigation. The use of an explanatory framework is appropriate because it enables the testing of theoretically derived hypotheses and provides empirical evidence on how usability, security, and content quality influence customer loyalty. In this model, customer experience is positioned as an intervening variable that explains the mechanism of influence, while digital literacy functions as a moderating variable that may strengthen or weaken the relationships between the main constructs.

The object of the research comprises users of digital services or platforms who have direct experience interacting with digital systems. The target population includes all active digital service users in West Java. However, the population size is considered infinite due to the absence of accurate statistical data regarding the total number of users. Consequently, purposive sampling was employed by selecting respondents who have experience using digital services and possess sufficient digital literacy to understand and evaluate digital interactions. The determination of sample size, which calculates the minimum number of respondents by multiplying the number of observed indicators by the minimum number of respondents per indicator. Given the use of 34 indicators and a minimum of five respondents for each indicator, the minimum sample size required for this study was 170 respondents.

Data were collected through a structured questionnaire developed from measurement indicators adopted from previous studies. Respondents' perceptions were measured using a five-point Likert scale, ranging from strongly disagree to strongly agree. Prior to hypothesis testing, the measurement model was assessed to ensure the validity and reliability of the instrument. The data analysis was conducted using Structural Equation Modeling (SEM) with SmartPLS software, allowing for the simultaneous examination of direct, mediating, and moderating effects within the proposed research model.

RESULTS

This study applied Structural Equation Modeling with Partial Least Squares (SEM-PLS) to analyze 34 observed variables and 6 latent constructs. The analysis incorporated both measurement and structural models to examine the relationships among constructs. The measurement model was used to assess validity and reliability through a confirmatory factor analysis approach. Convergent validity was evaluated using factor loadings and Average Variance Extracted (AVE), with acceptable thresholds of >0.70 (or >0.60 for

exploratory research) for loadings and >0.50 for AVE. Discriminant validity was assessed to ensure clear distinctions among constructs. Reliability was measured using Composite Reliability and Cronbach's Alpha, where values above 0.70 indicate adequate internal consistency.

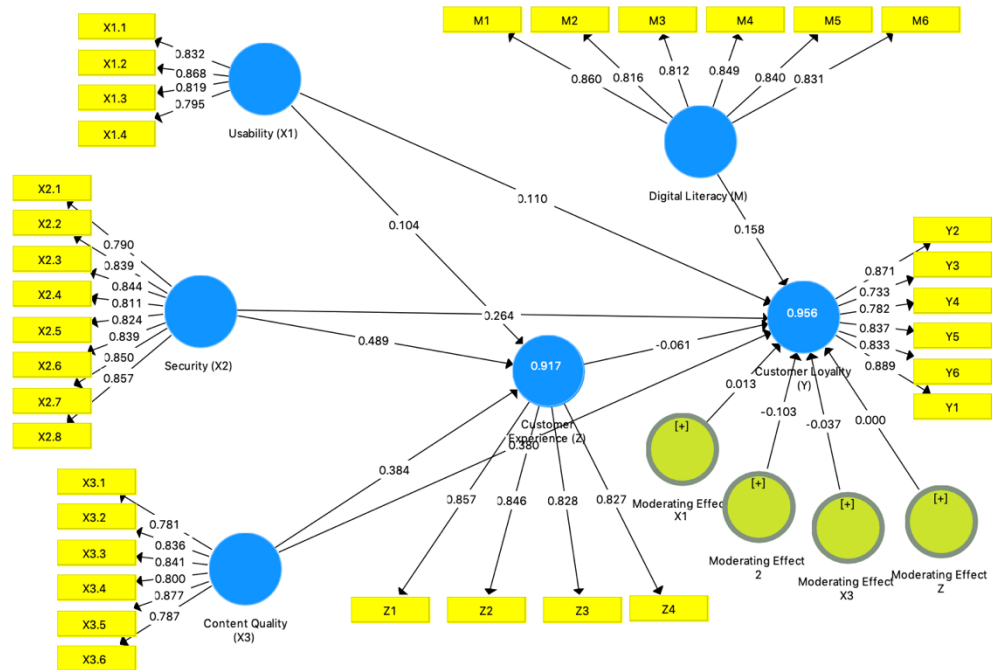


Figure 2. Outer Model

Figure 2 presents the outcomes of convergent validity testing conducted with PLS, focusing on the loading factor and AVE value. A construct is deemed valid when the loading factor is above 0.70, and the AVE surpasses 0.50. The findings from the analysis indicate that all indicators have satisfied the criteria for convergent validity.

Table 1. AVE Values, Cronbach's Alpha, and Composite Reliability

Variable	AVE	Cronbach's Alpha	Composite Reliability
Usability (X1)	0.687	0.848	0.898
Security (X2)	0.692	0.936	0.947
Content Quality (X3)	0.674	0.903	0.925
Customer Experience (Z)	0.705	0.860	0.905
Customer Loyalty (Y)	0.682	0.906	0.928
Digital Literacy (M)	0.697	0.913	0.932

Table 1 shows the test results, which indicate that all constructs have AVE values exceeding 0.50, confirming the achievement of convergent validity. Furthermore, the Cronbach's Alpha and Composite Reliability scores for all variables are above the minimum threshold of 0.70, indicating a strong level of internal reliability. Thus, the indicators for the variables of usability, security, content quality, customer experience, customer loyalty, and digital literacy were proven to be consistent, reliable, and suitable for use in further structural model testing.

The PLS approach for evaluating structural models is intended to examine the relationships among latent variables through the use of bootstrapping path coefficient analysis. This method is employed to assess both the direction and importance of the effects among constructs in research. PLS-SEM allows for accurate analysis of complex relationships, even when using relatively small sample sizes, making it suitable for testing prediction-based structural models and theory development.

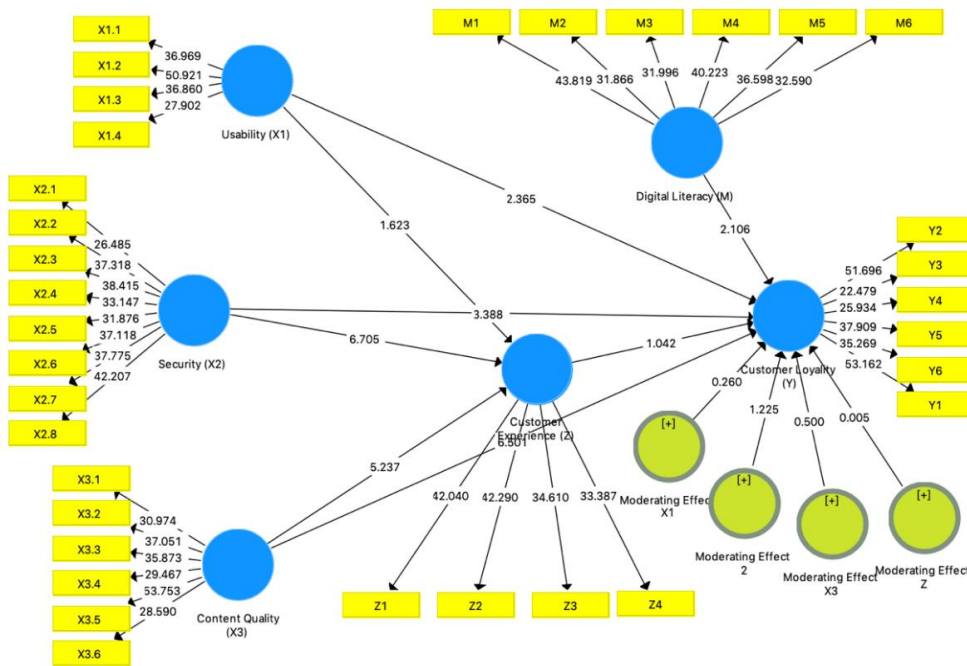


Figure 3. Bootstrapping Result

Figure 3 shows that the results from the structural testing indicate that both security (X2) and content quality (X3) significantly impact customer experience (Z), as evidenced by t-statistic values of 6.705 and 5.237, which are greater than 1.96. Conversely, usability (X1) does not significantly affect customer experience because the t-value is 1.623 (<1.96). Regarding customer loyalty, usability (2.365), security (3.388), content quality (6.501), and digital literacy (M) = 2.106 have a significant effect, while customer experience is not significant = 1.042. The moderating effects of X1 (t = 0.260), X2 (t = 1.225), X3 (t = 0.500), and Z (t = 0.005) are all insignificant. The model confirms the dominance of direct effects over moderating effects.

The inner model is evaluated using SMARTPLS 3, which looks at the relationships between latent constructs. A crucial indicator of the structural model's explanatory power, the R-Square value shows how well exogenous variables explain endogenous variables in the model.

Table 2. R Square Test

Variable	R Square
Customer Experience (Z)	0.917
Customer Loyalty (Y)	0.956

According to Table 2, an R-Square value of 0.917 means that the independent variables in the model account for 91.7% of the variability in customer experience, with factors outside the model accounting for the remaining 8.3%. Similarly, the model's excellent capacity to explain is demonstrated by its R-Square value of 0.956 for customer loyalty, which captures 95.6% of the variation.

The Q² value is the main indicator in PLS for assessing the predictive ability of the model against observational data. A model is considered to have strong predictive capabilities if its Q² value exceeds zero. A Q² value above 0.25 indicates moderate predictive relevance, while a value exceeding 0.50 reflects strong and significant predictive ability.

Table 3. Q-square

Variable	SSO	SSE	Q ² (=1-SSE/SSO)
Customer Experience (Z)	680.000	247.870	0.635
Customer Loyalty (Y)	1,020.000	376.624	0.631

Table 3 shows that customer experience and customer loyalty have Q^2 values of 0.635 and 0.631, respectively, which are much higher than the 0.50 cutoff. These results imply that the model has a strong capacity to foresee and explain endogenous variables. The PLS-SEM model is regarded as pertinent and trustworthy for prediction purposes because the large difference between the SSO and SSE values shows that the prediction error is comparatively low.

In PLS-SEM analysis, Goodness of Fit (GoF) is used alongside R^2 and Q^2 to provide a more comprehensive evaluation of model fit. GoF assesses how effectively the model represents the complexity of empirical data and validates constructs. A GoF score of 0.10 reflects a poor fit, whereas a score of 0.25 indicates a moderate fit, and a score of 0.36 or above represents a strong fit. Furthermore, the Standardized Root Mean Square Residual (SRMR) is employed to assess the degree to which the model's correlation matrix corresponds with the observed data. A good SRMR value is recommended to be below 0.08, indicating adequate model fit.

Table 4. SRMR Test

Test	SRMR
Saturated Model	0.047
Estimated Model	0.047

The saturated model's SRMR value of 0.047 is displayed in Table 4, and the estimated model exhibits a high degree of model fit. The PLS-SEM model is suitable since the value is below the recommended threshold of 0.08, which suggests that there is little difference between the model's predicted correlation matrix and the actual data.

Table 5. GoF Index

Metric	Value
Average AVE	0.690
Average R-Square	0.937
Goodness of Fit Index	0.804

Table 5 shows that the model has an excellent fit with a GoF value of 0.804, significantly higher than the benchmark of 0.36. This implies that the PLS-SEM model has excellent measurement and structural quality and accurately describes empirical data. Hypothesis testing using the bootstrapping technique is widely used in data analysis, especially in SmartPLS 3. This method is flexible because it does not require a normal distribution or a large sample size. Bootstrapping allows for the accurate estimation of path coefficients and the determination of t-statistics or p-values to assess the significance of the relationships between variables in the model.

Table 6. Path Significance Test

Variable	Original Sample	t-statistics (O/STDEV)	p-value	Description
Usability (X1) -> Customer Experience (Z)	0.104	1.623	0.105	Insignificant
Security (X2) -> Customer Experience (Z)	0.489	6.705	0.000	Significant
Content Quality (X3) -> Customer Experience (Z)	0.384	5.237	0.000	Significant
Usability (X1) -> Customer Loyalty (Y)	0.110	2.365	0.018	Significant
Security (X2) -> Customer Loyalty (Y)	0.264	3.388	0.001	Significant
Content Quality (X3) -> Customer Loyalty (Y)	0.380	6.501	0.000	Significant
Customer Experience (Z) -> Customer Loyalty (Y)	-0.061	1.042	0.298	Insignificant
Usability (X1) -> Customer Experience (Z) -> Customer Loyalty (Y)	-0.006	0.772	0.441	Insignificant
Security (X2) -> Customer Experience (Z) -> Customer Loyalty (Y)	-0.030	0.984	0.325	Insignificant

Variable	Original Sample	t-statistics (O/STDEV)	p-value	Description
Content Quality (X3) -> Customer Experience (Z) -> Customer Loyalty (Y)	-0.023	1.040	0.299	Insignificant
Moderating Effect X1 -> Customer Loyalty (Y)	0.013	0.260	0.795	Insignificant
Moderating Effect X2 -> Customer Loyalty (Y)	-0.103	1.225	0.221	Insignificant
Moderating Effect X3 -> Customer Loyalty (Y)	-0.037	0.500	0.617	Insignificant
Moderating Effect Z -> Customer Loyalty (Y)	0.000	0.005	0.996	Insignificant

Based on Table 6, direct effects show that usability on customer experience is not significant, with $t = 1.623$ and $p = 0.105$, indicating that usability does not significantly improve customer experience. In contrast, security significantly affects customer experience ($t = 6.705$, $p < 0.001$), highlighting the importance of system security in shaping customer experience. Similarly, content quality has a significant positive effect on customer experience ($t = 5.237$, $p < 0.001$), confirming that high-quality content enhances user experience.

Regarding customer loyalty, usability ($t = 2.365$, $p = 0.018$), security ($t = 3.388$, $p = 0.001$), and content quality ($t = 6.501$, $p < 0.001$) all have significant direct effects, indicating that these factors directly increase customer loyalty. However, customer experience does not significantly influence customer loyalty ($t = 1.042$, $p = 0.298$), suggesting no direct effect in this model. The mediating effects of customer experience on the relationships between usability, security, and content quality with customer loyalty are all insignificant. The t-values and p-values are 0.772 and 0.441 for usability, 0.984 and 0.325 for security, and 1.040 and 0.299 for content quality, indicating that customer experience does not act as a mediator in these relationships.

The moderating effects of digital literacy on all examined paths are also not significant. The moderation of usability ($t = 0.260$, $p = 0.795$), security ($t = 1.225$, $p = 0.221$), content quality ($t = 0.500$, $p = 0.617$), and customer experience ($t = 0.005$, $p = 0.996$) shows that digital literacy does not strengthen any of the relationships. These results demonstrate that customer loyalty is primarily influenced by the direct effects of usability, security, and content quality, while customer experience neither serves as a mediator nor a direct predictor, and no significant moderating effects were identified in this model.

DISCUSSION

This study reveals that customer loyalty is more directly influenced by functional aspects such as usability, security, and content quality than by customer experience. This has broad implications in today's digital ecosystem, where users tend to prioritize effectiveness and tangible value over mere emotional or cognitive sensations when interacting with platforms. These findings reinforce research from Calle et al. (2021) and Dube and Jacobs (2023), which states that digital technology fundamentally changes the way customers interact, where the fulfillment of basic technical needs becomes a key prerequisite before building long-term relationships. Usability's direct influence on customer experience was not significant, echoing findings by Xiang and Guo (2023), Albarrak (2024), and Lun et al. (2024), who suggest that ease of use must reach a certain threshold before it meaningfully affects perception.

Content quality has been proven to be the most dominant factor in driving customer loyalty. The implication of this finding is that companies should not only focus on the quantity of information, but also on the perceived informational value, which includes accuracy, relevance, and timeliness of data. This is in line with the view of Ye et al. (2021), the usefulness of information is the main focus of users on digital platforms. Strategically, companies that are able to present credible and consistent content will be more successful in retaining customers than those that rely solely on interface aesthetics. Security

significantly influences loyalty and is crucial in determining the user experience. Logically, these findings show that without guaranteed data and transaction security (the principles of confidentiality, integrity, and availability), other features in digital services will lose their value in the eyes of customers. The broader implication is that security is no longer merely a technical feature “behind the scenes,” but rather a strategic marketing instrument that builds trust, which, according to Vila et al. (2021), it contributes directly to better customer engagement.

A particularly unexpected result of this research was the minimal impact of customer experience as a mediator and digital literacy as a moderator. Unlike previous studies that often placed satisfaction or experience as the sole mediator. Arora and Banerji (2024), it shows a direct path from technical quality to loyalty. This indicates that for respondents in this sample, ease of use and security were sufficient to form repeat purchase commitment without the need to go through a complex experience evaluation process. Similarly, digital literacy was found not to significantly moderate any relationships, consistent with Amnas et al. (2024) and Durmuş (2024), who suggest that standardization in digital platforms or inclusive usability may reduce the relevance of individual technical ability. This indicates that the effects of usability, security, and content quality on customer loyalty operate independently of users’ literacy levels, reinforcing the dominance of direct functional effects over mediating or moderating factors.

Digital literacy has not been proven to strengthen or weaken the relationship between variables. This may indicate that digital platforms have now reached a level of standardization that makes individual technical abilities less relevant, or that existing usability standards are sufficiently inclusive for various levels of literacy. This study concludes that to build strong loyalty in the digital age, companies must prioritize investment in security infrastructure and high-quality content curation. While customer experience strategies remain relevant holistically, focusing on direct functionality and data security has a more certain impact on customer resilience to competitor temptations.

CONCLUSION

Customer loyalty in the digital age is the result of fulfilling basic functional and substantial needs. This research clearly demonstrates that factors like user-friendliness, security assurances, and the quality of information provided significantly influence users’ ongoing commitment to utilizing the service. This key finding provides important insight that users today tend to value accuracy, content relevance, and personal data protection more than mere emotional or cognitive sensations during the interaction process. This provides strategic direction for digital platform managers that strengthening technical infrastructure and curating credible information are key determinants for retaining customers.

Regarding the results showing no significant influence on several relationship paths in the model, this is not a methodological failure or instrument validity issue. Instead, this phenomenon reflects the reality of user behavior in the research area, indicating that customers have reached a certain level of digital maturity. They are more pragmatic, where certainty of security and content benefits are sufficient to build loyalty without having to rely on individual digital literacy levels or mediated experiences. However, the validity of this conclusion has limitations because the research sample only focused on a specific geographical area, so the unique characteristics of the local community greatly influenced the final results.

As a recommendation, future research projects should expand their population coverage to various regions with varying levels of digital infrastructure in order to verify the consistency of these findings. In addition, it is advisable to explore other psychological variables, such as trust or brand attachment, which may have different mechanisms in linking technical aspects with loyalty. The use of a combined approach of quantitative data and in-depth interviews will also provide a richer perspective on why functional aspects currently dominate customer loyalty behavior far more than traditional experiential aspects.

FUNDING STATEMENT: This research did not receive any specific grant from funding agencies in the public, commercial, or not - for - profit sectors.

CONFLICTS OF INTEREST: The author declares no conflict of interest.

DECLARATION OF GENERATIVE AI STATEMENT: During the preparation of this work, the author(s) used ChatGPT, Grammarly, and Turnitin in order to enhance readability, check grammatical consistency, and evaluate textual similarity. After using this tool/service, the author(s) reviewed and edited the content as needed and take full responsibility for the content of the publication.

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