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## Customer-Centric Innovation In Service Promotion: Insights From Frequent Users On Emerging Marketing Techniques

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### Abstract

Customer-centric innovation in service promotion was explored to understand how emerging marketing techniques shaped customer loyalty and purchase intention via the mediating influence of customer trust among frequent e-commerce users. A structured web-based survey was administered to 350 active online shoppers, measuring customer-centric innovation, personalization, and use of emerging marketing techniques alongside customer trust, loyalty, and purchase intention on a five-point Likert scale. Structural Equation Modeling with mediation analysis using SPSS AMOS revealed that innovative platform features and tailored promotional efforts did not directly influence loyalty or purchase intent; instead, their effects were realized exclusively through the cultivation of customer trust. These findings from this study suggested that without first establishing trust, even highly personalized or innovative digital service offerings failed to foster consumer commitment. Managerial implications underscore the importance of transparent data practices, secure transactions, and clear communication in deploying new interactive tools, recommendation algorithms, and loyalty programs to ensure that customer-centric initiatives effectively translate into loyalty and repeat purchasing.

**Keywords:** Customer-centric innovation, emerging marketing techniques, customer trust, customer loyalty, purchase intention, e-commerce.

## Introduction

Customer-centric innovation in e-commerce service promotion had emerged as a strategic imperative as online marketplaces evolved rapidly in response to shifting consumer preferences and technological advancements. Over the past decade, e-commerce platforms had transitioned from commodity-driven models to customer-oriented systems, integrating data analytics, artificial intelligence, and interactive interfaces to personalize user experiences. Although these innovations had the potential to differentiate service offerings and strengthen market positioning, their effectiveness depended on the extent to which they resonated with frequent users' needs and expectations. Moreover, while numerous platforms had introduced novel features—such as dynamic recommendation algorithms, gamified loyalty programs, and immersive digital interfaces the empirical evidence regarding the direct impact of these innovations on customer behavioral outcomes remained fragmented.

Prior studies had highlighted customer trust as a pivotal antecedent of loyalty and purchase intention in online contexts. Yet, despite widespread recognition of trust's importance, researchers had seldom examined it as a mediating mechanism linking customer-centric innovation, personalization, and emerging marketing techniques to downstream outcomes. Existing research predominantly focused on direct effects assessing whether personalization increased satisfaction or loyalty independently without fully elucidating the process through which innovative service attributes translated into actual consumer commitment. Consequently, a clear understanding of how customer trust functioned as a conduit for converting technological and marketing innovations into favorable customer behaviors had been lacking, particularly among frequent e-commerce users whose engagement levels and purchasing frequency could significantly influence marketplace dynamics.

In response to these gaps, the present study investigated the role of customer trust in mediating the relationships between three independent constructs customer-centric innovation, personalization, and emerging marketing techniques and two dependent outcomes, namely customer loyalty and purchase intention, within the context of frequent e-commerce users. By employing a structured web-based survey with 350 active online shoppers and analyzing the data through SPSS and structural equation modeling in AMOS, the research endeavored to validate a comprehensive model that integrated both technological and relational dimensions of service promotion. This approach not only extended theoretical frameworks on trust-based consumer behavior in digital services but also provided actionable insights for e-commerce practitioners aiming to deploy customer-centric strategies that effectively foster loyalty and encourage repeat purchases.

## Need and Scope

The study was necessitated by a paucity of empirical evidence clarifying how customer-centric innovations and emerging marketing techniques in e-commerce service promotion translated into tangible consumer outcomes, particularly among frequent users; while prior research had documented the potential of personalization, AI-driven tools, and omnichannel strategies to enhance engagement, it had not thoroughly examined the mechanism—specifically customer trust—through which such innovations influenced loyalty and purchase intention. By focusing on a sample of 350 active online shoppers, the research scoped the investigation to customer-centric innovation, personalization, and novel promotional methods (e.g., interactive digital interfaces and tailored recommendations) as independent variables, with customer trust as a mediator and loyalty and purchase intention as outcome variables, thereby providing a comprehensive model of how frequent users perceived these service innovations and how trust functioned as a conduit for transforming innovative features into sustained customer commitment within the dynamic e-commerce environment.

## Research Objectives

1. To identify the key emerging marketing techniques that are considered customer-centric in the service sector
2. To examine how frequent users perceive the effectiveness of customer-centric innovation in service promotion.
3. To determine the mediating role of customer trust in the relationship between personalized promotions and customer loyalty.
4. To determine the mediating role of customer trust in the relationship between personalized promotions and purchase intention.

## Literature Review

Customer-centric innovation and emerging marketing techniques have been the focus of extensive research as firms seek to enhance service promotion within e-commerce contexts. Marketing 4.0 paradigms, characterized by advanced digital tools and customer-centric philosophies, underscore that data-driven personalization and interactive technologies serve as cornerstones for modern promotional strategies (Kaur, Singh, Gehlot, Priyadarshi, & Twala, 2022; Rosário & Dias, 2023). Hoffman, Moreau, Stremersch, and Wedel (2022) proposed a framework illustrating how novel technologies such as augmented reality, virtual assistants, and AI-driven analytics facilitated real-time consumer engagement and enable firms to customize service offerings at scale. Complementing this, Krishen, Dwivedi, Bindu, and Kumar (2021) demonstrated through a bibliometric network analysis that interactive digital marketing techniques (e.g., chatbots, recommendation engines, and user-generated content platforms) have proliferated since 2020, directly shaping consumer touchpoints in virtual environments. Sheth (2021) and Sheth and Kellstadt (2021) further argued that the exponential growth of data (“data tsunami”) poses both challenges and opportunities, necessitating innovations that not only capture customer preferences but also respect privacy and transparency. In e-tailing specifically, Min (2021) highlighted that omnichannel integration linking online catalogs, mobile apps, and social media has become a key emerging technique, ensuring consistent, customer-centric experiences across platforms. Collectively, these studies identify the primary emerging marketing techniques AI-powered personalization, omnichannel engagement, and interactive digital interfaces that firms increasingly consider customer-centric, thereby fulfilling the first research objective to identify key customer-centric emerging techniques in service promotion.

*H1: Customer trust (CT) mediates the relationship between customer centric innovation (CC) and customer loyalty (CL).*

*H2: CT mediates the relationship between personalization (PR) and customer loyalty (CL).*

*H3: CT mediates the relationship between emerging marketing techniques (EM) and customer loyalty (CL).*

Frequent users’ perceptions of customer-centric innovation are vital to understanding how these emerging techniques translate into perceived value and satisfaction. Tuominen, Reijonen, Nagy, Buratti, and Laukkanen (2022) found that organizations implementing customer-centric strategies reported significantly higher innovativeness and business growth, as frequent users perceived novel service offerings such as customizable interfaces and on-demand support as more valuable. In line with this, Sheth, Jain, and Ambika (2023) observed that customer-centric support services (e.g., proactive assistance, 24/7 chat support, and personalized tutorials) not only improved perceived service quality but also reinforced trust among frequent purchasers. Kwok and Tang (2023) employed a fuzzy MCDM (Multi-Criteria Decision-Making) approach to illustrate how design choices in emergent technologies (e.g., VR metaverse headsets) should prioritize customer-centric criteria usability, personalization, and immersive engagement to satisfy avid users’ expectations. Moreover, Li and Duan (2025) emphasized that human-centric innovation, particularly within Industry 5.0 contexts, necessitates co-creation with end-users; frequent e-commerce shoppers expect platforms to adapt dynamically based on their feedback. Mhlanga (2023) extended this by arguing that AI and machine learning, while transformative, must be aligned with user behaviors and trust considerations to truly enhance service promotion.

*H4: CT mediates the relationship between CC and purchase intention (PI).*

*H5: CT mediates the relationship between PR and PI.*

*H6: CT mediates the relationship between EM and PI.*

Customer trust has emerged as the indispensable mediator between personalization or innovation efforts and downstream outcomes such as loyalty and purchase intention. Kar and Harichandan (2022), in their bibliometric analysis of green marketing innovation, noted that consumers’ willingness to adopt sustainable practices keyed strongly to trust in the firm’s authenticity an insight transferable to e-commerce, where emerging techniques (e.g., AI-driven recommendations) require transparency to build trust. Similarly, Rosário and Dias (2023) highlighted that as data-driven marketing evolves transparency in data collection and usage becomes critical to preserving customer trust. Sheth (2021) and Sheth and Kellstadt (2021) also underscored that while big data and AI enable hyper-personalization, they simultaneously heighten privacy concerns, making trust-building measures (e.g., explicit data-use policies and opt-in mechanisms) necessary for positive consumer responses. Tuominen et al. (2022) demonstrated that customer-centric strategies that integrate trust-building (e.g., secure payment gateways, clear return policies) directly boost loyalty metrics among frequent

users. Rosário and Dias (2023) and Mhlanga (2023) further contended that AI-based fraud detection and secure transaction protocols enhance perceived reliability, thereby fostering trust that mediates promotional efforts.

## Research Methodology

The study adopted a quantitative research design and employed a sample of 350 frequent e-commerce users, who were selected through simple random sampling from a population frame comprising registered customers of major online retail platforms. Data collection was conducted via a structured web-based survey, which was disseminated through email invitations and social media channels to ensure broad reach among active online shoppers through e-commerce portals. Respondents were required to indicate their frequency of online purchases to confirm their status as frequent users before proceeding to the main questionnaire. The questionnaire has six constructs namely Customer-Centric Innovation (CC), Personalization (PR), Emerging Marketing Techniques (EM), Customer Trust (CT), Customer Loyalty (CL) and Purchase Intention (PI) each measured on a five-point Likert-type scale ranging from “Strongly Disagree” to “Strongly Agree.” All measurement items were adapted from established, published scales and were slightly modified to align with the specific context of e-commerce service promotion, ensuring content validity and relevance to the study’s objectives. Secondary data has been collected from books, peer-reviewed journals, and reputable internet sources to inform the development of constructs and to contextualize the empirical findings.

Upon completion of data collection, the dataset was screened for missing values, outliers, and normality assumptions using SPSS. Exploratory Factor Analysis (EFA) was first conducted to assess the underlying factor structure and to verify that each construct’s items loaded appropriately onto their respective latent variables. Subsequently, Confirmatory Factor Analysis (CFA) was performed in SPSS AMOS to evaluate construct validity including convergent and discriminant validity and to confirm the measurement model’s goodness-of-fit indices (e.g., CFI, GFI, TLI, RMSEA, and SRMR).

Confirmatory Factor Analysis (CFA) was conducted to assess the measurement model demonstrated an excellent model fit, indicating that the observed variables reliably represented the underlying latent constructs. The Chi-square divided by degrees of freedom (CMIN/DF) was 1.17, which fell well below the acceptable threshold of 3, suggesting a well-fitting model with minimal discrepancy between the observed and estimated covariance matrices. Goodness-of-fit indices such as the GFI (0.96) and AGFI (0.94) exceeded the commonly recommended benchmark of 0.90, indicating that the hypothesized measurement structure adequately explained the variance in the data. Furthermore, incremental fit indices including the Tucker-Lewis Index (TLI = 0.99) and Comparative Fit Index (CFI = 0.99) were nearly perfect, signaling robust comparative improvement over a baseline model. Additionally, the Root Mean Square Error of Approximation (RMSEA) stood at 0.02, and the Standardized Root Mean Square Residual (SRMR) was 0.03, both well within the stringent cut-offs of 0.05, suggesting minimal approximation errors. Collectively, these indices confirmed that the constructs—comprising customer-centric innovation, personalization, emerging marketing techniques, customer trust, customer loyalty, and purchase intention—were statistically valid and conceptually coherent.

The structural path model, tested using Structural Equation Modeling (SEM) had demonstrated a highly satisfactory fit, reinforcing the soundness of the hypothesized relationships among the variables. The CMIN/DF value for the structural model was 1.15, slightly better than that of the measurement model, affirming model parsimony and minimal residuals. The GFI (0.96) and AGFI (0.94) once again exceeded acceptable thresholds, indicating that the model accounted for the majority of variances and covariances within the dataset. Similar to the CFA results, the TLI and CFI both scored 0.99, reflecting superior model performance and confirming that the proposed paths among independent variables, mediating variable, and dependent outcomes were well-supported by the empirical data. Additionally, the RMSEA remained extremely low at 0.02, and the SRMR value of 0.03 highlighted the model's strong predictive accuracy. These results collectively validated the hypothesized mediation of customer trust between the independent variables (customer-centric innovation, personalization, and emerging marketing techniques) and the outcome variables (customer loyalty and purchase intention), offering compelling evidence for the strength and consistency of the theoretical framework.

Once the measurement model was validated, path analysis was employed in AMOS to test the hypothesized relationships among the independent variables (Customer-Centric Innovation, Emerging Marketing Techniques and Personalization), the mediating variable (Customer Trust) and dependent variables (Customer Loyalty and Purchase Intention). Mediation analysis followed the procedures and was supplemented by bootstrapping techniques (Bootstrap sample size = 5000) to examine the significance of

indirect effects. All statistical analyses adhered to conventional thresholds for reliability (Cronbach's  $\alpha \geq 0.70$ ) and model fit (CFI and TLI  $\geq 0.90$ ; RMSEA  $\leq 0.08$ ; SRMR  $\leq 0.08$ ), thereby ensuring the rigor and robustness of the study's methodological framework.

## Data Analysis

The demographic profile of the respondents ( $n = 350$ ) revealed that the sample predominantly comprised male participants ( $n = 210, 60\%$ ), while females represented a smaller proportion ( $n = 140, 40\%$ ). In terms of frequency of shopping on e-commerce platforms, a majority of the respondents ( $n = 205, 58.57\%$ ) reported shopping a few times in a month, followed by those who shopped once in a week ( $n = 95, 27.14\%$ ), whereas a smaller segment indicated that their shopping behavior depended on varying circumstances ( $n = 50, 14.29\%$ ). Regarding occupation, the sample included a diverse group with employees forming the largest category ( $n = 105, 30\%$ ), closely followed by self-employed individuals ( $n = 95, 27.14\%$ ), students ( $n = 85, 24.29\%$ ), and a residual category labeled as 'other' ( $n = 65, 18.57\%$ ). Additionally, with respect to social media usage, nearly half of the respondents ( $n = 165, 47.14\%$ ) accessed social media several times a day, followed by a considerable number who used it a few times daily ( $n = 96, 27.43\%$ ), while the remaining respondents ( $n = 89, 25.43\%$ ) indicated variability in their social media usage depending on different factors.

**Table 1: Mediation Analysis**

Hypothesis	Type	Path	Beta	p-value	Result
H1	Direct effect (A)	CC $\rightarrow$ CL	-0.032	0.703	Full mediation
	Indirect effect (B)	CC $\rightarrow$ CT $\rightarrow$ CL	0.240	<0.001	
	Total effect (A+B)		0.208	0.001	
H2	Direct effect (A)	PR $\rightarrow$ CL	0.064	0.369	Full mediation
	Indirect effect (B)	PR $\rightarrow$ CT $\rightarrow$ CL	0.203	<0.001	
	Total effect (A+B)		0.267	<0.001	
H3	Direct effect (A)	EM $\rightarrow$ CL	0.037	0.618	Full mediation
	Indirect effect (B)	EM $\rightarrow$ CT $\rightarrow$ CL	0.208	<0.001	
	Total effect (A+B)		0.245	0.001	
H4	Direct effect (A)	CC $\rightarrow$ PI	-0.094	0.305	Full mediation
	Indirect effect (B)	CC $\rightarrow$ CT $\rightarrow$ PI	0.262	<.001	
	Total effect (A+B)		0.168	0.017	
H5	Direct effect (A)	PR $\rightarrow$ PI	-0.069	0.317	Full mediation
	Indirect effect (B)	PR $\rightarrow$ CT $\rightarrow$ PI	0.222	<.001	
	Total effect (A+B)		0.153	0.019	
H6	Direct effect (A)	EM $\rightarrow$ PI	0.005	0.914	Full mediation
	Indirect effect (B)	EM $\rightarrow$ CT $\rightarrow$ PI	0.227	<.001	
	Total effect (A+B)		0.232	0.002	

Notes: CC = Customer centric innovation, CT = Customer trust, CL = Customer loyalty, PR = Personalization, EM = Emerging marketing techniques, PI = Purchase intention, Bootstrap sample size = 5000.

Source: Compiled from SPSS AMOS output

The mediation analysis was conducted using SPSS AMOS to examine whether customer trust (CT) significantly mediated the relationships between three independent variables customer-centric innovation (CC), personalization (PR), and emerging marketing techniques (EM) and two dependent variables customer loyalty (CL) and purchase intention (PI). The mediation hypotheses were tested through bootstrapping with 5000 resamples, and the significance of indirect effects was determined by the corresponding p-values.

The findings supported full mediation in all six hypotheses. Specifically, for H1, the direct effect of CC on CL was not statistically significant ( $\beta = -0.032, p = .703$ ), whereas the indirect effect through CT was significant ( $\beta = 0.240, p < .001$ ), indicating that customer trust fully mediated the relationship between CC and CL. A similar pattern was observed for H2, where the direct effect of PR on CL was insignificant ( $\beta = 0.064, p = .369$ ), while the indirect effect through CT was significant ( $\beta = 0.203, p < .001$ ), confirming full mediation. Likewise, H3 indicated full mediation as the direct effect of EM on CL was not significant ( $\beta = 0.037, p = .618$ ), but the indirect path via CT was significant ( $\beta = 0.208, p < .001$ ). These findings collectively suggested

that customer-centric innovation, personalization, and emerging marketing techniques influenced customer loyalty exclusively through the mediating role of customer trust.

In the context of purchase intention, the results for H4, H5, and H6 consistently showed full mediation. The direct effect of CC on PI was negative and non-significant ( $\beta = -0.094$ ,  $p = .305$ ), while the indirect effect via CT was significant ( $\beta = 0.262$ ,  $p < .001$ ), supporting full mediation in H4. For H5, the direct effect of PR on PI was also non-significant ( $\beta = -0.069$ ,  $p = .317$ ), but the mediated effect through CT was statistically significant ( $\beta = 0.222$ ,  $p < .001$ ), again affirming full mediation. Similarly, for H6, the direct influence of EM on PI was not significant ( $\beta = 0.005$ ,  $p = .914$ ), yet the indirect pathway through CT remained significant ( $\beta = 0.227$ ,  $p < .001$ ). The total effects in all six models were statistically significant, despite the lack of direct paths, further confirming that customer trust served as a crucial mechanism in translating customer-centric strategies into desirable customer outcomes, namely loyalty and purchase intentions.

### Discussion and Conclusion

The present study's findings underscored that customer trust served as the pivotal mechanism through which customer-centric innovation, personalization, and emerging marketing techniques influenced both customer loyalty and purchase intention among frequent e-commerce users. Empirical results revealed that none of the independent variables exerted significant direct effects on loyalty or purchase intention; rather, their impacts emerged exclusively via trust. This indicated that innovative platform features or tailored promotional efforts were insufficient to elicit loyalty or buying intent unless they first engendered trust. In practical terms, these insights aligned with theoretical frameworks positing trust as a mediator of technology-driven service benefits and behavioral outcomes. By demonstrating full mediation across all six hypothesized paths, the study extended extant research by empirically validating that in e-commerce service promotion, trust constitutes the essential conduit linking customer-centric strategies to downstream loyalty and purchasing behaviors.

This research confirmed that customer-centric innovation, personalization, and the deployment of emerging marketing techniques positively affected customer loyalty and purchase intention only when mediated by customer trust. The results provided robust evidence that without establishing trust, even highly innovative or personalized digital service offerings failed to translate into improved loyalty or intention to purchase. Consequently, customer trust emerged as the linchpin for successfully leveraging customer-centric initiatives within e-commerce contexts.

### Managerial Implications

Managerial implications drawn from these findings emphasize that e-commerce firms should prioritize trust-building mechanisms when implementing innovative service features or personalized promotions. Managers ought to invest in transparent data practices, secure payment systems, and clear communication regarding customer-centric innovations to foster trust. By ensuring that every novel interactive tool, recommendation algorithm, or loyalty program is perceived as trustworthy, firms can effectively convert innovation into measurable gains in customer loyalty and purchase intention. In addition, ongoing trust cultivation efforts such as real-time support channels and privacy assurances should accompany any rollout of emerging marketing techniques.

### Limitations and Future research

Despite its contributions, the study had several limitations that warrant future research. First, the cross-sectional design precluded assessments of causality or temporal dynamics; longitudinal or experimental studies could strengthen causal inferences. Second, data were collected from a single cohort of frequent e-commerce users, potentially limiting generalizability to occasional users or other service sectors. Third, all measures relied on self-reported perceptions, which may be subject to common method variance. Future research might explore additional mediators (e.g., perceived value, satisfaction) or moderators (e.g., cultural context, technology readiness) and incorporate objective behavioral metrics or qualitative methods to deepen understanding of how trust underpins customer-centric innovation in diverse e-commerce environments.

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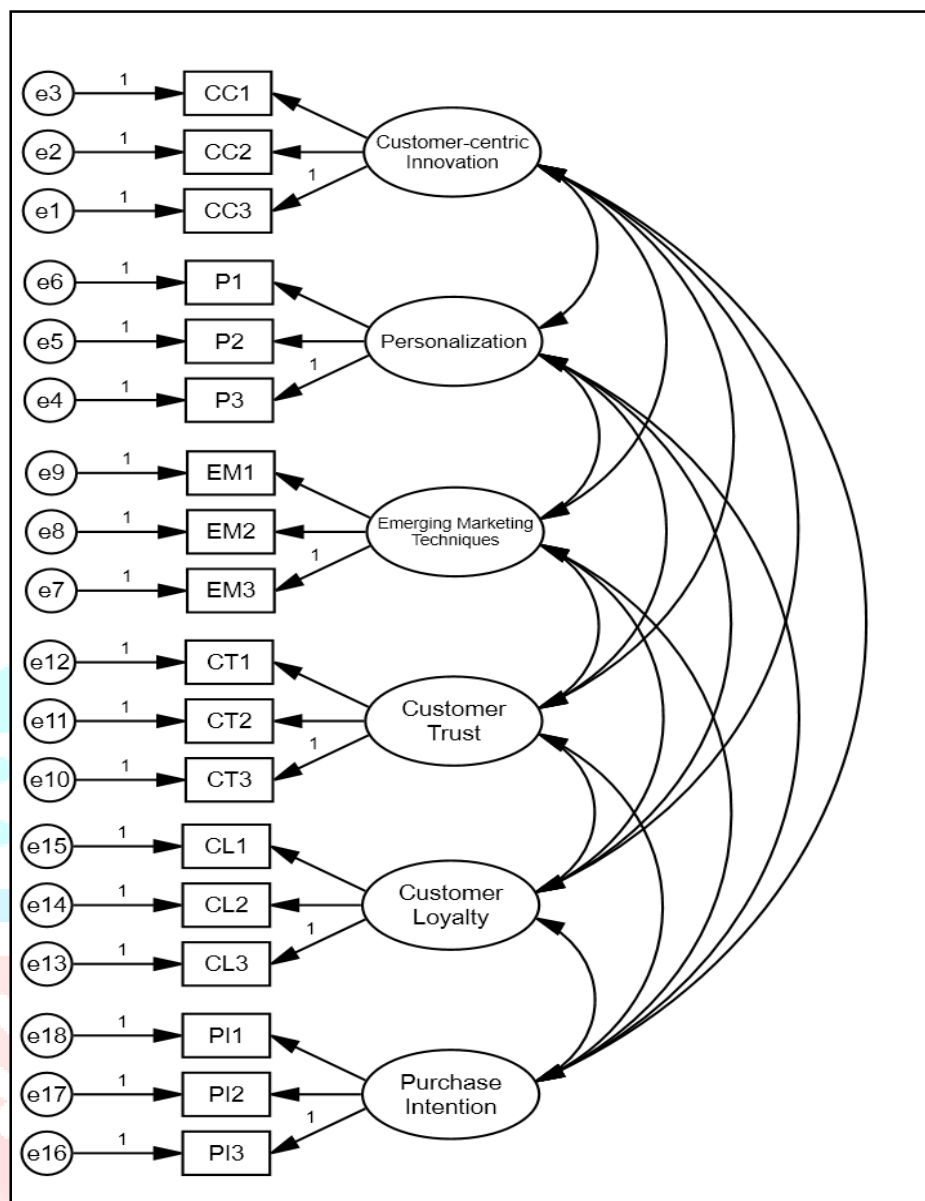
## Appendix

Table 2: Measurement scale

<i>Construct</i>	<i>Items</i>
Customer-centric innovation	<ol style="list-style-type: none"> <li>1. The e-commerce platforms I use regularly implement new features that reflect customer needs.</li> <li>2. I have observed that innovative promotional methods on these platforms are designed based on customer feedback.</li> <li>3. These platforms continuously innovate to make my shopping experience more convenient and engaging.</li> </ol>
Personalization	<ol style="list-style-type: none"> <li>1. I receive product recommendations that match my past browsing or purchase behavior.</li> <li>2. The advertisements I encounter on e-commerce platforms are highly personalized to my preferences.</li> <li>3. I believe these platforms use my data to deliver personalized offers and services effectively.</li> </ol>
Emerging marketing techniques (EM)	<ol style="list-style-type: none"> <li>1. I frequently see influencer-driven marketing campaigns on social media connected to the e-commerce platforms I use.</li> <li>2. The platforms I use adopt interactive tools like AR/VR, chatbots, or gamified promotions.</li> <li>3. I find marketing messages via WhatsApp, push notifications, or voice assistants increasingly used by these platforms.</li> </ol>
Customer trust (CT)	<ol style="list-style-type: none"> <li>1. I trust that these platforms protect my personal and payment information.</li> <li>2. The consistent performance of these platforms has built my confidence in them.</li> <li>3. I believe these platforms are transparent and reliable in delivering what they promise.</li> </ol>
Customer loyalty (CL)	<ol style="list-style-type: none"> <li>1. I prefer to purchase frequently from the same e-commerce platform.</li> <li>2. I rarely switch to other platforms once I find a reliable one.</li> <li>3. I would recommend my preferred e-commerce platform to others.</li> </ol>
Purchase intention (PI)	<ol style="list-style-type: none"> <li>1. I intend to purchase more from my preferred e-commerce platform in the near future.</li> <li>2. Personalized and innovative services motivate me to shop more often.</li> <li>3. I am willing to try new features and promotions launched by these platforms.</li> </ol>

Notes: All items are measured on 5-point Likert type scale from strongly disagree (1) to strongly agree (5)

Figure 1: Confirmatory factor analysis



**Figure 2: Structural Model**