

## **THE EFFECT OF MOBILE PAYMENT TRUST AND MOBILE PROMOTION ON CUSTOMER LOYALTY AMONG E-COMMERCE APPLICATION USERS IN INDONESIA**

**Nazwa Aulia Meytun<sup>1</sup>, Puspo Dewi Dirgantari<sup>2</sup>**

<sup>1,2</sup>Faculty of Economics and Business Education, Universitas Pendidikan Indonesia, Jalan Dr. Setiabudi No.229

E-mail: [nazwameytun@gmail.com](mailto:nazwameytun@gmail.com); [puspodewi@upi.edu](mailto:puspodewi@upi.edu)

### **ABSTRACT**

This study aims to analyze the effect of mobile payment trust on customer loyalty among Shopee e-commerce users in Indonesia. The research employed a quantitative approach using a survey method. The population consisted of active Shopee users, and a sample of 97 respondents was determined based on Isaac's table at a 95% confidence level. Respondents were selected through purposive sampling with the criteria of being at least 18 years old and having used Shopee for more than six months. Data were collected through an online questionnaire consisting of 18 indicators measured using a five-point Likert scale. The data were analyzed using simple linear regression. The results showed that mobile payment trust has a positive and significant effect on customer loyalty, with an  $R^2$  value of 0.520 and a significance level of 0.000 ( $p < 0.05$ ). This indicates that 52% of customer loyalty can be explained by mobile payment trust, while the remaining 48% is influenced by other factors not examined in this study. The findings suggest that users' confidence, perceived security, and reliability of Shopee's payment system play a crucial role in enhancing their loyalty toward the platform. This study contributes to the understanding of consumer behavior in mobile marketing and provides practical insights for e-commerce companies to strengthen customer retention through trustworthy and secure mobile payment systems.

**Keywords:** mobile payment trust; customer loyalty; Shopee; e-commerce; digital marketing.

### **INTRODUCTION**

The exponential expansion of electronic commerce has fundamentally transformed the mechanisms through which consumers engage with digital marketplaces and online platforms. Indonesia, as the largest digital market across Southeast Asia, has demonstrated remarkable acceleration in internet penetration and adoption of mobile payment technologies over the preceding five years. According to recent market analyses, the number of active users engaging with e-commerce applications in Indonesia continues to expand substantially, with Shopee establishing itself as a leading platform facilitating millions of daily transactions (Srivastava & Kaul, 2023). Mobile payment systems have emerged as critical infrastructure enabling secure and efficient transactions within the digital ecosystem. The significance of building consumer confidence in digital payment mechanisms represents a fundamental consideration within contemporary consumer behavior research. Confidence constructed through robust security mechanisms, transactional transparency, and payment system dependability constitutes essential determinants influencing whether consumers maintain continued engagement with a specific platform or migrate toward alternative providers (Sahi et al., 2022). Earlier empirical investigations have revealed substantial correlations between consumer perceptions regarding digital payment security and extended-term customer retention rates. This phenomenon manifests visibly in the behavioral patterns of Indonesian e-commerce users, where decisions concerning repeated purchases demonstrate pronounced susceptibility to platform trustworthiness and payment system reliability assessments.

Customer loyalty within digital market contexts transcends mere transactional compliance, instead representing emotional and behavioral commitment toward particular brands and service providers. Shopee has implemented comprehensive strategic initiatives to establish a confidence-based ecosystem, incorporating diversified payment alternatives, advanced data encryption protocols, and buyer protection mechanisms (Madupalli & P., 2023). Nevertheless, comprehensive understanding regarding how specific dimensions of mobile payment confidence influence customer loyalty decisions within the Indonesian market context requires additional rigorous investigation. Empirical research implementing robust methodologies to establish causal relationships between mobile payment system confidence and customer loyalty maintains considerable value for delivering contextually relevant evidence for business practitioners (Arif et al., 2024). Through comprehending these fundamental mechanisms, e-commerce enterprises can refine strategic approaches toward enhancing consumer confidence and consequently maximize customer lifetime value within increasingly competitive marketplace environments.

Drawing from the preceding contextual framework, the fundamental research inquiry that guides this investigation becomes: How does confidence in mobile payment systems influence customer loyalty among Shopee e-commerce platform users throughout Indonesia? This formulation implies the necessity for quantifying the magnitude of effect exerted by the independent construct (mobile payment confidence) upon the dependent

construct (customer loyalty) through employing validated and measurable instruments. The overarching aim of this investigation is examining how confidence in mobile payment mechanisms influences customer loyalty manifestations among Indonesian Shopee e-commerce users. Specific research goals encompass identifying which dimensions of mobile payment confidence exert the greatest significance upon loyalty expressions, quantifying the magnitude of such effects through regression analytical procedures, and elucidating the mechanisms through which payment system attributes translate into sustained customer behavioral commitment. This investigation contributes theoretical advancements to consumer behavior scholarship within digital commerce environments while simultaneously offering practical strategic recommendations for e-commerce practitioners. The findings provide empirical substantiation regarding confidence mechanisms as loyalty antecedents, thereby guiding platform operators toward resource allocation decisions emphasizing payment infrastructure robustness. Additionally, the research delivers context-specific insights applicable within Southeast Asian digital marketplaces where mobile payment adoption patterns and consumer preferences exhibit distinctive characteristics diverging from Western markets.

**METHOD**

This investigation employed a quantitative methodological approach incorporating survey-based data collection procedures. The research population encompassed individuals maintaining active user status on the Shopee e-commerce platform within Indonesian geographic boundaries. Through application of Isaac's statistical sampling table calibrated at 95% confidence level specifications, a sample magnitude of 97 respondents was mathematically determined as appropriate for the investigation scope (Ha et al., 2023) as cited in Slovin's formula applications). Respondent selection followed purposive sampling methodology incorporating specified inclusion criteria requiring participants to be minimum 18 years chronologically, possess Shopee utilization experience exceeding six months duration, and demonstrate engagement in monetary transactions via the platform (Aslam et al., 2020). These parameters ensured participant capacity for informed assessment regarding payment confidence dimensions and loyalty manifestations. Data acquisition transpired through structured online questionnaire administration implementing digital survey distribution mechanisms. The measurement instrument comprised 18 distinct indicators operationalizing the theoretical constructs of payment confidence and customer loyalty. Response options operated according to five-point Likert scale specifications, ranging from maximum disagreement positioning through maximum agreement positioning, thereby enabling ordinal-level measurement of respondent perceptions and attitudes (Hair et al., 2023). The questionnaire incorporated demographic inquiry sections alongside substantive items addressing confidence dimensions—encompassing personal safety beliefs, data protection perceptions, and system dependability evaluations—and loyalty manifestations encompassing repeat purchase intentions, positive word-of-mouth communication propensities, and resistance toward competitor platforms. Pilot testing procedures validated instrument reliability and clarity prior to primary data collection implementation.

**RESULT & DISCUSSION**

The investigation successfully obtained completed questionnaire responses from all 97 sample participants, representing 100% response rate. Demographic characteristics revealed age distribution concentrating between 21-35 years (68.0%), predominantly female composition (62.9%), and professional employment status (71.1%). Approximately 89.7% of participants reported utilizing Shopee monthly with transaction frequencies exceeding five occasions, signifying active platform engagement. Mobile payment preference demonstrated overwhelming endorsement for digital wallet mechanisms and installment payment options, with 76.3% of respondents regularly employing these alternatives alongside conventional payment approaches.

**Table 1.** Demographic Profile of Research Participants (n=97)

<b>Characteristic</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Age Range	18-20 years	12	12.4%
	21-25 years	34	35.1%
	26-30 years	32	33.0%
	31-35 years	15	15.5%
	36+ years	4	4.1%
Gender	Male	36	37.1%
	Female	61	62.9%
Employment	Professional	69	71.1%
	Student	18	18.6%
	Self-employed	10	10.3%

Monthly Usage	1-4 transactions	10	10.3%
	5-10 transactions	52	53.6%
	11+ transactions	35	36.1%

Reliability assessment through Cronbach's alpha coefficient computation yielded values of 0.847 for mobile payment confidence construct and 0.823 for customer loyalty construct, both substantially exceeding the conventional 0.70 threshold, thereby confirming internal consistency adequacy (Almaiah et al., 2022). Validity examination through exploratory factor analysis demonstrated that all 18 indicators loaded substantially upon their respective intended constructs, with factor loadings consistently surpassing 0.60 threshold specifications. Payment confidence dimensional structure encompassed three sub-dimensions: personal security reassurance (items 1-6,  $\alpha=0.831$ ), data protection confidence (items 7-12,  $\alpha=0.814$ ), and system reliability perception (items 13-18,  $\alpha=0.802$ ).

Simple linear regression analysis examining mobile payment confidence effects upon customer loyalty produced statistically significant findings. The regression coefficient ( $\beta$ ) equaled 0.721, demonstrating that incremental unit increases in confidence perceptions corresponded to 0.721 unit increases in loyalty manifestations. The obtained coefficient of determination ( $R^2$ ) magnitude reached 0.520, signifying that payment confidence dimensions collectively accounted for 52.0% of observable customer loyalty variations. The remaining 48.0% of loyalty variance remained attributable to alternative variables external to this investigation framework. Statistical significance testing yielded t-statistic values of 8.947 with associated probability levels of  $p<0.001$ , substantially exceeding conventional significance thresholds of 0.05, thereby confirming rejection of null hypotheses and substantiating confidence effect meaningfulness (Guidoum & Elkhansa, 2023). The resulting regression equation takes the form:  $Loyalty = 2.156 + 0.721(\text{Confidence})$ , indicating that even minimum confidence levels produce observable loyalty foundations, with confidence enhancements generating proportional loyalty strengthening.

**Table 2.** Simple Linear Regression Analysis Results

Variable	Coefficient	Standard Error	t-statistic	p-value	95% CI
Constant	2.156	425	5.074	<0.001	[1.317, 2.995]
Mobile Payment Confidence	721	81	8.947	<0.001	[0.562, 0.880]
$R^2$	520		p<0.001		
Adjusted $R^2$	515				
F-statistic	80.050				

Comparative examination of confidence sub-dimensions revealed differential impact magnitudes upon loyalty outcomes. Personal security reassurance generated the strongest direct effects ( $\beta=0.289$ ,  $p<0.001$ ), followed by system reliability perceptions ( $\beta=0.251$ ,  $p<0.001$ ), with data protection confidence demonstrating slightly attenuated influence ( $\beta=0.181$ ,  $p<0.01$ ). These patterns suggest consumers prioritize experiential safety sensations and perceivable system performance characteristics when formulating loyalty assessments.

**Table 3.** Dimensional Confidence Effects Upon Customer Loyalty

Confidence Dimension	Direct Effect ( $\beta$ )	p-value	Effect Size
Personal Security Reassurance	289	<0.001	Large
System Reliability Perception	251	<0.001	Large
Data Protection Confidence	181	4	Medium
Combined Model ( $R^2$ )	520	<0.001	-

The investigation's empirical results provide substantive evidence demonstrating that mobile payment confidence mechanisms exert robust and statistically meaningful positive influences upon customer loyalty manifestations among Indonesian e-commerce populations. The obtained  $R^2$  coefficient magnitude of 0.520 indicates that confidence-based factors account for approximately half of observable loyalty variations, representing a considerable effect proportion that validates theoretical propositions regarding confidence as fundamental loyalty antecedent (Zhou et al., 2021). This magnitude aligns favorably with preceding cross-cultural investigations examining comparable constructs, though contextual particularities of the Indonesian digital marketplace may explain nuanced variations from international benchmarks. The statistical significance ( $p<0.001$ ) associated with regression coefficients substantially exceeds conventional p-value thresholds, providing robust confidence that observed relationships reflect genuine phenomenon manifestations rather than random measurement fluctuations (Su et al., 2021). The regression coefficient magnitude of 0.721 signifies that substantial confidence improvements translate into meaningful loyalty enhancements, operationalizing the theoretical proposition that payment system trustworthiness constitutes a critical lever for organizational loyalty cultivation. This quantitative relationship carries substantial practical implications for platform management decision-making regarding resource prioritization toward payment infrastructure enhancement.

The investigation's findings align substantially with established consumer behavior theoretical frameworks emphasizing confidence as requisite foundation for extended commitment relationships. Social exchange theory perspectives propose that consumers evaluate transactional engagement through cost-benefit assessments, wherein perceived confidence represents critical benefit dimension reducing transaction risk perceptions (Franque et al., 2021), as reconceptualized by (Bailey et al., 2022). When consumers experience heightened confidence regarding payment security and system dependability, they rationally conclude that continued platform engagement presents favorable benefit-to-risk ratios, thereby amplifying loyalty propensities. Additionally, the findings substantiate trust-based relationship frameworks suggesting that confidence operates as psychological mechanism converting episodic transactions into enduring relational bonds (Chin et al., 2022), as extended by (Al-Okaily et al., 2024). Within e-commerce contexts characterized by digital mediation and physical anonymity, confidence in payment mechanisms comprises the primary affective mechanism through which consumers reduce perceived vulnerability and construct relational investment. The dimensional analysis revealing personal security reassurance as highest-impact confidence sub-dimension corroborates emotion-based relationship formation perspectives, suggesting that felt safety sensations constitute more influential loyalty drivers than abstract data protection concepts or technical reliability indicators.

The investigation's conclusions carry direct applicability for organizational strategy formulation within competitive e-commerce environments. Platform operators seeking loyalty enhancement should prioritize payment infrastructure investments creating consumer psychological security sensations and demonstrable system reliability. Rather than emphasizing technical encryption specifications, marketing communications should emphasize consumer protection mechanisms, fraud detection systems, and rapid problem resolution procedures that translate technical competencies into emotionally reassuring messages. The noted differential impacts across confidence dimensions suggest diversified communication strategies targeting distinct consumer audience segments exhibiting varying information processing propensities. Moreover, the moderate unexplained variance (48.0%) simultaneously suggests that loyalty cultivation requires multifactorial approaches extending beyond confidence optimization. Concurrent attention toward product assortment optimization, pricing competitiveness, delivery efficiency, and customer service responsiveness remains essential for comprehensive loyalty architecture (Okello Candiya Bongomin & Ntayi, 2020). Nevertheless, within the payment functionality domain, confidence represents a non-negotiable foundation upon which additional loyalty-inducing initiatives must construct.

The Indonesian digital marketplace context presents distinctive characteristics influencing confidence-loyalty relationships compared to Western e-commerce environments. Lower historical exposure to digital payment mechanisms among certain population segments implies that confidence cultivation requires more deliberate communication and experiential demonstration strategies compared to markets with extended digital payment familiarity (Okello Candiya Bongomin & Ntayi, 2020). Additionally, regulatory environments, banking infrastructure maturity, and competitive intensity specific to Southeast Asia create contextual conditions potentially amplifying payment confidence importance as loyalty determinant. The substantial sample response engagement (100% completion) and concentrated age demographics (68% between 21-35 years) suggest particularly strong confidence-loyalty relationships among digitally sophisticated demographic cohorts. Older consumer segments or those with limited e-commerce experience may demonstrate attenuated confidence effects or require qualitatively different confidence-building approaches. Future investigations incorporating age-stratified analysis or generational comparisons would illuminate such potential heterogeneity.

The investigation's findings extend and contextualize earlier scholarship examining payment system characteristics as behavioral determinants (Ha et al., 2023). Whereas preceding investigations frequently examined confidence as mediating variable between platform characteristics and behavioral outcomes, this research substantiates direct confidence-loyalty relationships with quantifiable effect magnitudes applicable to strategic resource allocation. The identified 52% variance explained rate positions confidence as comparatively powerful loyalty antecedent relative to numerous alternative variables examined within consumer behavior research domains.

## **CONCLUSION**

This investigation examined through quantitative empirical methodology how confidence in mobile payment systems influences customer loyalty manifestations among Shopee users throughout Indonesia. The research successfully collected data from 97 active platform users through structured online questionnaires, analyzed response patterns through simple linear regression procedures, and produced statistically meaningful findings substantiating confidence as robust loyalty antecedent. The regression analysis demonstrated positive and statistically significant confidence effects upon loyalty ( $\beta=0.721$ ,  $p<0.001$ ), with payment confidence dimensions collectively explaining 52.0% of customer loyalty variance. Dimensional analysis revealed that personal security reassurance perceptions generate the strongest loyalty influences, followed by system reliability perceptions and data protection confidence, thereby indicating that emotional security sensations constitute more influential loyalty drivers than abstract technical security specifications. These findings provide empirical substantiation that e-commerce platform operators significantly amplify customer retention through

deliberate investments in payment system confidence cultivation. Rather than treating payment functionality as a commodified technical feature, platform managers should conceptualize confidence-building as strategic loyalty investment generating substantial return magnitude. Marketing communications should emphasize fraud protection mechanisms and problem resolution procedures translating technical competencies into emotionally reassuring consumer messaging. Concurrently, the moderate unexplained variance acknowledgment indicates that comprehensive loyalty strategies require multifactorial approaches addressing product assortment, pricing, delivery efficiency, and service responsiveness alongside payment confidence optimization. Future research directions should incorporate longitudinal investigation designs examining whether confidence-loyalty relationships maintain consistency across extended temporal periods, incorporate additional variables examining mechanisms through which confidence translates into behavioral loyalty manifestations, and examine potential moderating effects of consumer demographics, prior digital experience, and competitive alternative availability upon confidence-loyalty relationships.

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