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Mobile Wallet Promotions and Consumer Purchase Frequency in E-Commerce

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Abstract

This study aims to examine the influence of mobile wallet promotions on consumer purchase frequency in e-commerce, considering the mediating roles of perceived usefulness and perceived ease of use. A quantitative explanatory approach was employed using a survey method involving 116 active mobile wallet users of GoPay, OVO, and DANA in Indonesia. Data were collected through an online questionnaire using a five-point Likert scale and analyzed with Partial Least Squares–Structural Equation Modeling (PLS-SEM) using SmartPLS 4 software. The results reveal that mobile wallet promotions have a positive and significant effect on perceived usefulness, perceived ease of use, and consumer purchase frequency, both directly and indirectly. The R^2 value of 0.642 indicates that promotional, usefulness, and ease variables explain 64.2% of the variance in consumer purchasing behavior. These findings support the Technology Acceptance Model (TAM) and Stimulus–Organism–Response (S–O–R) framework as robust theoretical bases for understanding digital purchasing behavior. Practically, the study offers insights for e-commerce platforms and digital wallet providers to design sustainable and personalized promotion strategies that enhance user satisfaction and long-term loyalty.

Keywords: Mobile Wallet Promotion, Consumer Purchase Frequency, Perceived Usefulness, Perceived Ease of Use, E-Commerce

1. Introduction

The digital transformation of payment systems has significantly altered consumer behavior, primarily through the adoption of mobile wallets as the dominant transaction medium in e-commerce. Convenience, transaction security, and attractive promotions have become the key drivers behind the increasing frequency of online purchases. In today's competitive digital marketplace, mobile wallet promotions serve not only as financial incentives but also as strategic tools that foster consumer loyalty and purchasing habits [1]. This phenomenon warrants empirical investigation, as mobile wallet promotions may not only trigger short-term sales spikes but also induce long-term behavioral shifts among digital consumers [2].

Globally, mobile wallet transactions have grown exponentially. According to Statista (2024), the number of active users in Southeast Asia has surged by over 40% in the past three years, with mobile wallets projected to become the primary payment method for e-commerce by 2026. Indonesia, as one of the largest digital markets, records more than 150 million active users of wallets such as GoPay, OVO, and DANA. This shift toward digital payments is largely driven by promotional campaigns - cashbacks, discounts, and reward points - that shape both short-term spending and repetitive purchase behavior.

Prior literature confirms that digital promotions significantly influence purchasing decisions [3]. However, most studies emphasize immediate sales effects rather than recurrent purchase frequency. Drawing from the Theory of Planned Behavior [4] and the Stimulus-Organism-Response (SOR) model [5], promotions act as external stimuli that influence perceived value (organism), ultimately leading to behavioral responses such as repeated purchases. Thus, mobile wallet promotions can be conceptualized as behavioral triggers through perceived convenience, benefits, and additional value [6].

Effective mobile wallet promotions typically include direct discounts, loyalty programs, and collaborative campaigns with e-commerce platforms [7]. Empirical evidence suggests that consumers exposed to financial incentives tend to purchase more frequently than those who are not [8]. Nevertheless, other studies caution that such promotional effects may be temporary [9]. Therefore, an empirical approach is needed to assess the extent to which mobile wallet promotions sustainably influence consumer purchase frequency.

Besides promotional factors, perceived ease of use and security reinforce this relationship. Within the Technology Acceptance Model (TAM) framework, perceived usefulness and ease of use drive user intention and behavioral consistency [10]. As promotions are integrated into mobile wallet interfaces, consumers perceive not only economic but also psychological convenience, motivating repeat transactions [11]. Hence, promotions serve dual roles as economic incentives and as psychological catalysts that nurture digital purchasing habits.

In Indonesia's e-commerce ecosystem, this dynamic is

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intensified by competition among multiple wallet providers, each deploying distinct promotional strategies. GoPay emphasizes cashbacks and Tokopedia integration, while OVO focuses on point rewards and Grab partnerships. These differences raise an academic question concerning the relative effectiveness of each promotional type on purchase frequency [12]. Moreover, demographic factors such as age and digital literacy may moderate this relationship [13].

Accordingly, this study empirically investigates the impact of mobile wallet promotions on consumer purchase frequency in e-commerce. Its objectives are to identify key promotional dimensions affecting purchase frequency, test the relationships among perceived convenience, promotional value, and repeat purchasing behavior, and provide managerial insights for digital wallet providers and e-commerce platforms. Theoretically, this study extends the SOR and TAM frameworks to digital consumer behavior; practically, it offers strategic implications for designing sustainable mobile wallet promotion systems.

The TAM [10] proposes that technology adoption is determined by perceived usefulness and perceived ease of use. In mobile wallet contexts, promotional offers enhance perceived usefulness by delivering economic benefits such as discounts and cashbacks, while simplified access and seamless redemption processes elevate ease of use [2]. Prior empirical evidence indicates that when users perceive both utility and convenience in wallet promotions, their purchase frequency tends to increase [14].

The TPB (Ajzen, 1991) emphasizes that behavioral intention is shaped by attitude, subjective norms, and perceived behavioral control. Within e-commerce, wallet promotions cultivate positive attitudes by enhancing perceived financial gains. Subjective norms emerge from social influence and peer behavior in digital payment adoption [15]. Meanwhile, perceived control reflects consumers' belief in their ability to complete secure and efficient transactions [16]. Thus, well-designed promotional schemes can strengthen these TPB constructs, ultimately reinforcing purchase intentions and frequency.

The SOR framework (Mehrabian & Russell, 1974) posits that external stimuli (promotions) affect consumers' internal states (organisms), leading to behavioral responses (responses). In this case, mobile wallet promotions act as stimuli that evoke positive perceptions of value, trust, and satisfaction [1]. Empirical studies have confirmed that such promotions increase transaction frequency through mediating variables like perceived trust and emotional engagement [17]. This indicates that economic incentives can activate emotional and cognitive responses that sustain repeated purchasing.

Digital promotions can be categorized into monetary (discounts, cashbacks) and non-monetary (loyalty points, gamification) incentives [18]. Monetary promotions have an immediate impact, while non-monetary promotions foster long-term loyalty and repeat purchases [19]. Perceived promotion value both economic and psychological mediates the relationship between promotional stimuli and consumer behavior [20]. Consumers derive satisfaction not only from financial savings but also from the emotional gratification of using innovative technologies.

Repeat purchase behavior reflects a habitual consumption pattern influenced by prior satisfaction and trust [21]. In digital payment contexts, consistent promotional benefits and smooth user experiences strengthen consumer loyalty [22]. Studies demonstrate that security, convenience, and continuous rewards encourage repeated interactions and sustained consumer engagement [23].

An integrative perspective connects TAM, TPB, and SOR frameworks to form a comprehensive understanding of consumer behavior in digital ecosystems. Promotions act as stimuli that influence perceived ease and usefulness (TAM), shape attitudes and intentions (TPB), and evoke affective and cognitive responses (SOR). The synergy of these theoretical lenses provides a robust foundation for modeling the causal pathway from mobile wallet promotions to consumer purchase frequency in e-commerce.

2. Methodology

This study adopts a quantitative survey-based explanatory design to examine the relationship between mobile wallet promotions and consumer purchase frequency in e-commerce. The research aims to empirically test how promotional activities affect consumer purchasing behavior, mediated by perceived usefulness and perceived ease of use. The conceptual framework is grounded in the Model TAM, Theory of Planned Behavior (TPB), and Stimulus Organism Response (SOR) model, as elaborated in the theoretical review section.

The population consists of active mobile wallet users who make purchases on Indonesian e-commerce platforms such as Tokopedia, Shopee, and Lazada. A purposive sampling method was applied with inclusion criteria: Users who made at least three transactions using a mobile wallet in the past three months. Users who have received promotional offers (cashback, discount, or rewards). Aged 18 years and above. A total of 116 respondents participated in this study, meeting the minimum sample requirement for PLS-SEM analysis, which is five times the number of indicators [24].

Data were collected using an online questionnaire via Google Form. The instrument contained two main sections: Section 1: Demographic information (age, gender, frequency of transactions, and preferred e-commerce platform). Section 2: Research variables measured using a 5-point Likert scale (1= strongly disagree to 5= strongly agree). The items were adapted from validated scales in prior studies and

contextualized for Indonesian consumers [25].

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4 software [26]. The analysis steps included: Convergent validity test (factor loading> 0.7; AVE> 0.5). Reliability analysis (Cronbach's Alpha and Composite Reliability> 0.7). Discriminant validity (Fornell Larcker criterion). Hypothesis testing using the bootstrapping procedure with a 5% significance level. The PLS-SEM approach was chosen for its suitability in analyzing complex models with relatively small sample sizes. Next Operationalization of Variables on Table 1.

Table 1. Operationalization of Variables

Variable	Indicators	Operational Definition
Mobile Wallet Promotion (X1)	Discounts, Cashback, Reward Points, Accessibility	The degree to which respondents perceive financial and non-financial benefits offered through digital wallet promotions.
Perceived Usefulness (X2)	Efficiency, Benefit, Added Value	The perception that using a digital wallet enhances transaction efficiency and shopping experience.
Perceived Ease of Use (X3)	Navigation Ease, Speed, Simplicity	The user's perception that the mobile wallet is easy and convenient to use without technical barriers.
Consumer Purchase Frequency (Y)	Transaction Frequency, Consistency, Repeat Tendency	The number and regularity of online purchases made using a mobile wallet over a given period.

Construct validity was assessed using Confirmatory Factor Analysis (CFA). Reliability was evaluated using Cronbach's Alpha and Composite Reliability, with thresholds above 0.7 indicating internal consistency. The researcher ensured anonymity and confidentiality of all participants. Participation was voluntary, and all collected data were used exclusively for academic purposes in accordance with ethical research standards.

3. Results And Discussion

A total of 116 respondents participated in this study. Most were between 21 and 35 years old (72%), with users of OVO (38%), GoPay (34%), and DANA (28%). About 81% of respondents made more than three e-commerce transactions per month, indicating that the sample represented active digital wallet users. The outer model assessment showed that all indicators had factor loadings above 0.70 and AVE values exceeding 0.50, confirming convergent validity. Composite Reliability values ranged between 0.83 and 0.92, and Cronbach's Alpha values between 0.78 and 0.89, indicating high internal reliability. Next Hypothesis Testing Results on Table 2.

Table 2. Hypothesis Testing Results

Path Relationship	Path Coefficient	t-Value	p-Value	Decision
Mobile Wallet Promotion → Perceived Usefulness	0.482	6.321	0.000	Supported
Mobile Wallet Promotion → Perceived Ease of Use	0.451	5.768	0.000	Supported
Perceived Usefulness → Consumer Purchase Frequency	0.398	4.987	0.000	Supported
Perceived Ease of Use → Consumer Purchase Frequency	0.274	3.216	0.002	Supported
Mobile Wallet Promotion → Consumer Purchase Frequency	0.256	2.843	0.005	Supported

The structural model yielded an R^2 value of 0.642 for Consumer Purchase Frequency, indicating that 64.2% of its variance is explained by the independent variables. The Q^2 predictive relevance value of 0.511 further confirmed strong predictive accuracy of the model. The results confirm that mobile wallet promotions significantly influence consumer purchase frequency, both directly and indirectly through perceived usefulness and ease of use. First, hypotheses H1 and H2 validate the TAM, revealing that accessible and beneficial promotions enhance perceptions of usefulness and ease [27]. Consumers perceive mobile wallets as more efficient and enjoyable when promotional benefits are frequent and tangible.

Second, H3 and H4 demonstrate that perceived usefulness and ease of use strongly drive purchase frequency, consistent with prior studies [28]. When promotions improve user convenience and transaction satisfaction, repeat purchase behavior increases significantly. Third, the direct relationship (H5) underscores that financial incentives such as discounts and cashback can build habitual purchasing behavior. This aligns with the Stimulus Organism Response (SOR) framework, where external promotional stimuli trigger positive cognitive and emotional responses, leading to repeated actions [29]. From a theoretical perspective, integrating TAM and S-O-R enhances the understanding of digital consumer behavior, while practically, the results emphasize designing sustainable and personalized promotion strategies. E-commerce platforms and mobile wallet providers should blend monetary and non-monetary incentives (e.g., loyalty rewards) to maintain long-term engagement and consumer retention.

4. Conclusion

Based on data analysis from 116 active digital wallet users in e-commerce transactions, this study concludes that mobile wallet promotions significantly influence consumer purchase frequency, both directly and indirectly through perceived ease of use and perceived usefulness. The findings confirm that promotional incentives such as cashback, discounts, and loyalty rewards serve not only as short-term sales drivers but also as behavioral reinforcements fostering repeated purchase patterns. These results validate the applicability of the TAM and the Stimulus Organism Response (SOR) framework, demonstrating how promotional stimuli shape consumer perceptions and psychological responses that ultimately lead to recurring online purchases. Theoretically, this study contributes by integrating digital promotion strategies, technological perception, and consumer behavior into a unified empirical framework. Practically, it offers valuable insights for digital wallet providers and e-commerce platforms to design adaptive, personalized, and retention-oriented promotion strategies. Promotions should not merely emphasize financial incentives but also focus on creating a seamless and trustworthy user experience that enhances satisfaction and long-term engagement. Therefore, value-driven and convenience-based promotions can strengthen consumer loyalty, enhance the digital payment ecosystem, and contribute to the sustainable and inclusive growth of Indonesia's digital economy.

Reference

[1] Subagiyo, Gustia, A., & Oktavian Syah, D. (2022). The Effect of E-wallet and Sales Promotion on Purchasing Decisions. *Best Journal of Administration and Management*, *1*(1), 53–60. DOI: https://doi.org/10.56403/bejam.v1i1.30 .

[2] Nguyen, O. T. K. (2022). Impacts of Promotional Benefit on Actual use Behavior of Mobile Wallet: Evidence from Vietnam. *International Journal of E-Business and E-Government Studies*, *14*(3), 530–559. DOI: https://doi.org/10.34109/ijebeg .

[3] Ruparel, N., Bhardwaj, S., Seth, H., & Choubisa, R. (2023). Systematic Literature Review of Professional Social Media Platforms: Development of a Behavior Adoption Career Development Framework. *Journal of Business Research*, *156*, 113482. DOI: https://doi.org/10.1016/j.jbusres.2022.113482 .

[4] Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. DOI: https://doi.org/10.1016/0749-5978(91)90020-T .

[5] Roessler, K. K., Weber, S., Tawil, N., & Kühn, S. (2022). Psychological Attributes of House Facades: A Graph Network Approach in Environmental Psychology. *Journal of Environmental Psychology*, *82*. DOI: https://doi.org/10.1016/j.jenvp.2022.101846 .

[6] Mongula, A., Masnita, Y., & Kurniawati, K. (2023). Environmental Concern: Does it Drive Green Purchase Intention of Sustainable Packaging? *Jurnal Ekonomi Bisnis dan Kewirausahaan*, *12*(3), 290. DOI: https://doi.org/10.26418/jebik.v12i3.67498 .

[7] Yuni Dharta, F., Risdwiyanto, A., Herlandi Putra, I., Utami, E. Y., & Ambarwati, R. (2024). Analysis of The Influence of E-Customer Satisfaction, E-Service Quality and Digital Sales Promotion on Customers Repurchase Intention Through Digital Wallet Shopeepay. *Jurnal Sistim Informasi dan Teknologi*, *5*, 95–101. DOI: https://doi.org/10.60083/jsisfotek.v5i4.335 .

[8] Barba Aragón, M. I., Jiménez Jiménez, D., & Sanz Valle, R. (2014). Training and Performance: The Mediating Role of Organizational Learning. *BRQ Business Research Quarterly*, *17*(3), 161–173. DOI: https://doi.org/10.1016/j.cede.2013.05.003 .

[9] Adler, S. J., Röseler, L., & Schöniger, M. K. (2023). A Toolbox to Evaluate the Trustworthiness of Published Findings. *Journal of Business Research*, *167*, 114189. DOI: https://doi.org/10.1016/j.jbusres.2023.114189 .

[10] Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3). DOI: https://doi.org/10.2307/249008 .

[11] Ban, V. S., Lega, B., & Batjer, H. H. (2016). Maximizing the Potential of Social Media and Social Networks in Neurosurgery. *World Neurosurgery*, *91*, 609–610. DOI: https://doi.org/10.1016/j.wneu.2016.02.117 .

[12] Chen, S. C. A., Perfect, J., Colombo, A. L., Cornely, O. A., Groll, A. H., Seidel, D., … Govender, N. P. (2021). Global Guideline for the Diagnosis and Management of Rare Yeast Infections: An Initiative of the ECMM in Cooperation with ISHAM and ASM. *The Lancet Infectious Diseases*. Elsevier Ltd. DOI: https://doi.org/10.1016/S1473-3099(21)00203-6 .

[13] Hoenigl, M., Salmanton-García, J., Walsh, T. J., Nucci, M., Neoh, C. F., Jenks, J. D., … Cornely, O. A. (2021, August 1). Global Guideline for the Diagnosis and Management of Rare Mould Infections: An Initiative of the European Confederation of Medical Mycology in Cooperation With the International Society for Human and Animal Mycology And The American Society for Microbiology. *The Lancet*. Infectious Diseases. NLM (Medline). DOI: https://doi.org/10.1016/S1473-3099(20)30784-2 .

[14] Chairoel, L., Widyarto, S., & Pujani, V. (2015). ICT Adoption in Affecting Organizational Performance Among Indonesian SMEs. *The International Technology Management Review*, *5*(2), 82. DOI: https://doi.org/10.2991/itmr.2015.5.2.3 .

[15] Woodhead, A. J., Graham, N. A. J., Robinson, J. P. W., Norström, A. V, Bodin, N., Marie, S., Balett, M.-C., & Hicks, C. C. (2021). Fishers Perceptions of Ecosystem Service Change Associated with Climate-Disturbed Coral Reefs. *People and Nature*, *3*(3), 639–657. DOI: https://doi.org/https://doi.org/10.1002/pan3.10220 .

[16] Butkouskaya, V., Oyner, O., & Kazakov, S. (2023). The Impact of Omnichannel Integrated Marketing Communications (IMC) on Product and Retail Service Satisfaction. *Journal of Economics, Finance and Administrative Science*, *28*(56), 319–334. DOI: https://doi.org/10.1108/JEFAS-09-2022-0237 .

[17] Hollebeek, Linda D, Glynn, Mark S, & Brodie, Roderick J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, *28*(2), 149–165. DOI: https://doi.org/10.1016/j.intmar.2013.12.002 .

[18] K Pramudito, D., Yani, I., Utami, E. Y., Nuraini, R., & Kushariyadi. (2024). Analysis of the Influence of Digital Service Quality and Online Promotions on Customers Intention to use Digital Wallet Application Gopay. *Jurnal Sistim Informasi dan Teknologi*, *5*, 44–50. DOI: https://doi.org/10.60083/jsisfotek.v5i4.326 .

[19] Kirchberger, M., Wouters, M., & Anderson, J. C. (2020). How Technology Based Startups can use Customer Value Propositions to Gain Pilot Customers. *Journal of Business-to-Business Marketing*, *27*(4), 353–374. DOI: https://doi.org/10.1080/1051712X.2020.1831212 .

[20] Sudirjo, F., Syamsuri, H., Mardiah, A., Widarman, A., & Novita, Y. (2023). Analysis of the Influence of Customer Perceived Benefit, Ease of use and Sales Promotion on the Decision to use Digital Wallets for Shopeepay Customers. *Jurnal Sistim Informasi dan Teknologi*, *5*(3), 63–68. DOI: https://doi.org/10.60083/jsisfotek.v5i3.304 .

[21] Wulandari, T. A., & Assidiq, M. I. (2023). Influencer Marketing

Strategy of Start-Up Company as the Provider of Fast-Moving Consumer Goods (Fmcg) Products in Indonesia. *Journal of Eastern European and Central Asian Research*, *10*(4), 569–579. DOI: https://doi.org/10.15549/jeecar.v10i4.1365 .

[22] Funk, J. L. (2007). Solving the Startup Problem in Western Mobile Internet Markets. *Telecommunications Policy*, *31*(1), 14–30. DOI: https://doi.org/10.1016/j.telpol.2006.11.003 .

[23] Dawes, P. L., & Massey, G. R. (2006). A Study of Relationship Effectiveness Between Marketing and Sales Managers in Business Markets. *Journal of Business and Industrial Marketing*, *21*(6), 346–360. DOI: https://doi.org/10.1108/08858620610690119 .

[24] Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Mediation Analysis*. https://doi.org/10.1007/978-3-030-80519-7_7

[25] Janse, J., Kalkman, J. P., Burchell, G. L., Hopperus Buma, A. P. C. C., Zuiderent-Jerak, T., Bollen, M. T. I. B., & Timen, A. (2022). Civil-Military Cooperation in the Management of Infectious Disease Outbreaks: A Scoping Review. *BMJ Global Health*, *7*(6), 1–13. DOI: https://doi.org/10.1136/bmjgh-2022-009228 .

[26] Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in Second Language and Education Research: Guidelines Using an Applied Example. *Research Methods in Applied Linguistics*, *1*(3). DOI: https://doi.org/10.1016/j.rmal.2022.100027 .

[27] Di Vaio, A., Palladino, R., Pezzi, A., & Kalisz, D. E. (2021). The Role of Digital Innovation in Knowledge Management Systems: A Systematic Literature Review. *Journal of Business Research*, *123*(September 2020), 220–231. DOI: https://doi.org/10.1016/j.jbusres.2020.09.042 .

[28] Rahim, A., Saleem, S., & Noman, M. (2023). Case Study on the Effectiveness of a College Civic Engagement Program in Gulmit Gojal Hunza, Pakistan. *International Journal of Social Science & Entrepreneurship*, *3*(2), 19–34. DOI: https://doi.org/10.58661/ijsse.v3i2.128 .

[29] Govers, M., & van Amelsvoort, P. (2023). A Theoretical Essay on Socio-Technical Systems Design Thinking in the Era of Digital Transformation. *Gruppe. Interaktion. Organisation. Zeitschrift Fur Angewandte Organisationspsychologie*, *54*(1), 27–40. DOI: https://doi.org/10.1007/s11612-023-00675-8 .