

How Promo Giving, Easy Access, And Digital Payments Affect To Shopee E-Commerce Sustainability

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Abstract: Shopee is currently the largest e-commerce platform in Indonesia. This study aims to examine the effect of promotions, ease of access, and digital payments on the sustainability of Shopee's e-commerce platform. Using a quantitative approach, data was collected from 170 active Shopee users through an online questionnaire with a 1–4 Likert scale. The analysis was conducted using the PLS-SEM method through SmartPLS. The results show that all three variables have a positive and significant effect on the sustainability of the platform, with ease of access being the dominant factor. The variable of promotional offers has been proven to strengthen user loyalty through credible social interactions. Ease of access encourages sustainable use and reduces environmental impact, while digital payments increase efficiency and trust. These findings support the Triple Bottom Line (TBL) framework, in which e-commerce sustainability encompasses the dimensions of profit, people, and planet.

Keywords: *Digital payment, ease of access, promo strategy, e-commerce, sustainability, online marketplace, Tripple Bottom Line (TBL)*

1. Introduction

Technological advances in Indonesia are becoming increasingly sophisticated and developing rapidly, changing consumer shopping habits from physical stores to online platforms. In this modern era, consumers no longer need to visit physical stores to buy products; with e-commerce services, they can easily access and purchase products (Japariato & Adelia, 2020).

In the last five years, e-commerce transactions in Indonesia have experienced significant growth. Based on data from Bank Indonesia sourced from: <https://pusatdata.kontan.co.id/infografik/88/Transaksi-Ecommerce-Indonesia-2019-2024>, the value of e-commerce transactions in Indonesia has continued to increase consistently from IDR 205 trillion in 2019 to IDR 487 trillion in 2024 (Bank Indonesia, 2024).

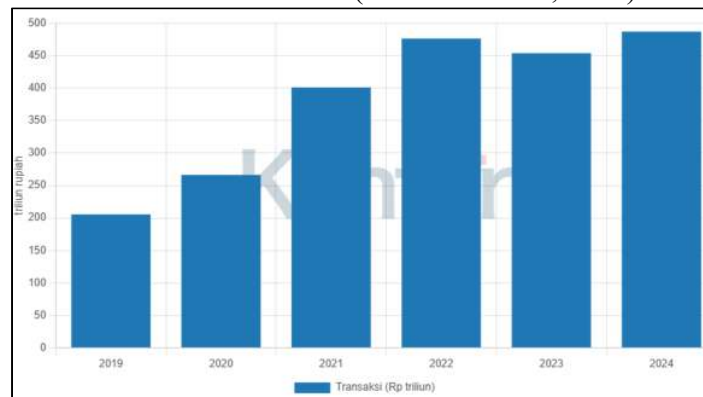


Figure 1. E-Commerce Transaction Value in Indonesia 2019-2024

However, rapid transaction growth has also triggered increasingly fierce competition among e-commerce platforms such as Tokopedia, Lazada, Blibli, OLX, and Shopee. Amidst intense competition, each platform is required to not only attract new users, but also maintain customer loyalty in order to remain relevant and sustainable in the long term. Therefore, the issue of e-commerce sustainability has become increasingly important to examine, particularly in the context of how Shopee can maintain its position as market leader.

Sustainability in e-commerce does not only refer to environmental aspects, but also encompasses overall business sustainability, such as the platform's ability to maintain revenue, user satisfaction, and operational efficiency. In this context, sustainability variables are raised in response to the issue of increasing e-commerce transaction graphs that trigger high competition, thus requiring strategies that are able to maintain Shopee's existence in a sustainable manner.

Based on research by (Alim et al., 2025), Shopee needs to continue to improve customer satisfaction as a key strategy to strengthen loyalty, because long-term relationships with customers are the foundation of sustainability E-Commerce success. Based on various previous studies, there are three main factors that have been proven to contribute to user satisfaction and loyalty to Shopee, namely: promo giving, easy access, and digital payments. Promotional strategies such as discounts, cashback, and free shipping have become the main attractions for consumers (Cindy Febya Riska et al., 2022). The right promotional strategy not only expands market reach but also creates long-term relationships between users and digital platforms (Refina Armelda Sari & Hapzi Ali, 2024). Ease of access through a user-friendly interface, responsive search features, and practical navigation also enhance the shopping experience (Pamungkasari & Priono Hero, 2025). On journal (Fahrizal et al., 2023) This supports the view that easy access, a simple interface, and an efficient user experience are important foundations in maintaining the sustainability of e-commerce platforms through increased user satisfaction and retention. Meanwhile, digital payment methods such as Shopee Pay, OVO, GoPay, DANA, and LinkAja provide a sense of security and efficiency in transactions (Usvita et al., 2023; Hayati et al., 2023). On the other hand, (Hellyatul Auwalia et al., 2024) digital payment variables are also associated with economic and environmental sustainability. Studies by Oxford Economics (2024) and MDPI (2024) found that digital payment systems can increase transaction efficiency and reduce carbon emissions compared to cash transactions, thereby supporting the profit and planet dimensions of the Triple Bottom Line (TBL) framework

Although these three factors have been extensively researched, most previous studies have only analyzed them separately. This indicates a research gap, namely that there have not been many studies that comprehensively integrate these three variables to examine their impact on the sustainability of e-commerce, particularly on the Shopee platform.

This study aims to address this challenge by combining the three variables into a single comprehensive analysis model, using the Triple Bottom Line (TBL) framework as a conceptual basis. The TBL approach enables sustainability analysis from three dimensions:

- Profit: revenue growth through repeat purchases
- People: user satisfaction and loyalty
- Planet: Resource efficiency through transaction digitization

Therefore, this study is expected to contribute theoretically and practically to understanding Shopee's e-commerce sustainability strategy, as well as serving as a reference for industry players in designing policies that can retain customers amid increasingly competitive competition.

2. Literature review

2.1. Promo Giving

Sales promotions are efforts made by companies to introduce their products, communicate with customers, and create added value for the company (M. Hafizh Amrullah, 2021). In the context of e-commerce, offering promotions is a marketing strategy that can influence **consumer expectations**. Based on **Expectation–Confirmation Theory (ECT)**, promotions that meet expectations will result in *confirmation* that increases satisfaction and intention to continue using the product. However, promotions that do not meet expectations can actually cause *disconfirmation* and reduce consumer loyalty (Vijay & Mohan Kumar, 2025).

Therefore, the provision of promotions acts as a variable that influences platform sustainability through economic aspects (profit) by increasing **customer loyalty** through the formation of continuous usage intentions. then from the social aspect (people) it influences platform sustainability by providing more affordable prices for low-income communities, and from the environmental aspect (planet) with clearance or bundling promotions that can help use up stock that is nearing its expiration date or at risk of becoming waste. According to Kotler and Keller (2015), there are three promotion indicators, as follows: (a) Promotion reach, (b) Advertising frequency, (c) Promotion message quality (Saputri et al., 2023)

2.2. Easy Access

Easy Access refers to the level of ease with which users can operate a system without requiring excessive effort (Faudi et al., 2024). In the context of e-commerce, this concept can be explained through the *Technology Acceptance Model (TAM)* developed by Davis et al. (1989), which emphasizes that *perceived ease of use* and *perceived usefulness* influence users' acceptance of technology (Mayjeksen & Pibriana, 2020).

Easy Access to the Shopee platform can increase user satisfaction and strengthen the intention to continue using the service on an ongoing basis. In addition, easy access also contributes to environmental sustainability. An easy-to-use system encourages the digitization of transactions and reduces dependence on physical processes, thereby potentially reducing waste and emissions from conventional e-commerce activities. Easy access can also expand market segmentation by enabling companies to reach consumers in remote areas or previously underserved groups, which will contribute to sustainability.

Therefore, the variable esy access supports sustainability by strengthening user loyalty and supporting more environmentally friendly e-commerce practices. Venkatesh and Davis identify the dimensions of ease of access as: (a) clarity of interaction, (b) efficiency of use, (c) technical ease, and (d) functional alignment (Yiyis Dwi Setyorini, 2020)

2.3. Digital Payment

Digital payments are a transaction system that utilizes the internet as an intermediary medium ((Hidayat et al., 2023). In e-commerce, this system is a crucial element in supporting the sustainability of online transactions because it offers convenience, efficiency, and flexibility for users. To evaluate the quality of digital payment services, the *SERVQUAL* approach developed by Parasuraman et al. (1988) is a relevant theoretical framework. *SERVQUAL* measures users' perceptions of service quality through five main dimensions: *reliability*, *responsiveness*, *assurance*, *empathy*, and *tangibles* (Bajah, 2025). This approach allows for a more comprehensive analysis of the user experience in using digital payment systems. In addition to strengthening the validity of service quality measurement, *SERVQUAL* also supports analysis of user

satisfaction and loyalty, which directly contributes to the sustainability of Shopee's e-commerce. Digital payments also contribute to sustainability by speeding up the payment process, reducing operational costs, and increasing business efficiency, as well as reducing the use of paper (receipts, physical money), supporting more environmentally friendly business practices. Thus, digital payments are not only a transaction tool, but also a sustainability strategy that supports economic efficiency (profit), social inclusion (people), and reduction of environmental impact (planet) in Shopee's e-commerce ecosystem. According to Gokhan & Sebnen in (Azzahra et al., n.d.) there are four main indicators in digital payment systems, namely: (a) ease, (b) security, (c) benefits, and (d) convenience and trust. These four indicators can be mapped into the five dimensions of *SERVQUAL*, thereby supporting a more structured evaluative approach.

2.4. Sustainability

According to (Geissdoerfet et al, 2020), the sustainability of e-commerce is defined as the ability of a platform to remain profitable, maintain consumer loyalty, and pay attention to social and environmental impacts (Bashir et al., 2022). The *Triple Bottom Line (TBL)* concept introduced by John Elkington highlights three main dimensions of sustainability: *profit, people, and planet* (Yovita et al., 2023). The application of TBL enables companies to operate more sustainably, reduce negative impacts on the environment, and make positive contributions to society. Meanwhile, *Expectation–Confirmation Theory (ECT)* explains that user satisfaction arises when services meet their expectations, which then encourages the intention to continue using the platform (*continuance intention*) (Shukla, 2025).

The Theory of Planned Behavior (TPB) adds that behavioral intention is influenced by attitudes toward the platform, social norms (e.g., recommendations from others), and perceived behavioral control (Maichum et al., 2016). In the context of Shopee, users who have positive attitudes, feel supported by their social environment, and have easy access to payment features will be more likely to use the platform sustainably.

By integrating the Triple Bottom Line (TBL) framework, Expectation Confirmation Theory (ECT), and Theory of Planned Behavior (TPB), this study builds a theoretical foundation that emphasizes that e-commerce sustainability depends not only on digital efficiency, but also on consumer behavior and commitment to social-environmental values. In this context, e-commerce sustainability is measured through six indicators (Ramadhani & Hermawan, n.d.) representing the environmental, economic, and social dimensions of TBL as follows: (a) use of environmentally friendly packaging (environmental dimension), (b) percentage of visitors who make purchases, (c) number of visitors to e-commerce sites, (d) use of secure payment systems, (e) recommending the application to others, (f) continuing to use the application in the future.

2.5. E-Commerce

Triandini & Atmojo in (Nugraheni Septaningtyas, 2021) state that the advantages of using e-commerce in business are increased efficiency, reduced storage costs, increased sales, better customer relations, entry into new markets, and ultimately greater financial profits. In the context of Shopee, the sustainability of e-commerce is not only determined by operational efficiency, but also by digital strategies that are able to maintain user loyalty and strengthen social and environmental values. The application of technology, effective promotion, and secure payment systems are important factors in building the long-term sustainability of the platform.

3. Research Framework And Hypotheses**3.1. How Promo Giving Affect to Shopee E Commerce Sustainability**

In the e-commerce business model, promotion is one of the key strategic elements that supports the growth of platforms such as Shopee in Indonesia. Shopee's success in encouraging consumers to shop online can be attributed to its aggressive marketing strategy (Volyn Visya Handini et al., 2024). Marketing strategies that offer promotions not only attract new customers but also increase the loyalty of existing customers by offering interesting and entertaining activities. From the research that has been conducted, the hypothesis proposed is:

H1: Promo Giving have a positive and significant effect on the sustainability of Shopee's e-commerce.

3.2. How Easy Access Affect to Shopee E Commerce Sustainability

One important factor in Shopee's sustainability is the ease of use of the application. According to research by Nezarudin & Pela in (Nugraheni Septaningtyas, 2021), the easier it is to access the application, the more people will make online purchases. Research by (Oktavia Putri et al., 2024) shows that improving the quality of features that make it easier for users, coupled with a satisfying shopping experience, significantly increases customer loyalty to Shopee. This increase in user loyalty will influence customers' decisions to continue using and even recommend Shopee e-commerce on an ongoing basis. Based on the research conducted, the hypothesis proposed is:

H2: Easy Access has a positive and significant effect on the sustainability of Shopee E-commerce.

3.3. How Digital Payment Affect to Shopee E Commerce Sustainability

According to (Nur Octavia, 2023) From an economic perspective, digital payments accelerate transaction processes, reduce the possibility of errors, and improve operational efficiency. Research conducted by (Nonik et al., 2024) shows that digital payments have a positive influence on purchasing decisions on the Shopee Marketplace. In addition, this system also contributes to environmental sustainability by reducing the use of physical money, printed receipts, and manual processes that have the potential to produce waste and carbon emissions. This is in line with the findings obtained by (Mu et al., 2025) in their research, which shows that digital payments effectively create a more efficient environment for the implementation of digital transformation and green innovation. Based on the research conducted, the hypothesis proposed is:

H3: Digital payments have a positive and significant effect on the sustainability of Shopee E-Commerce.

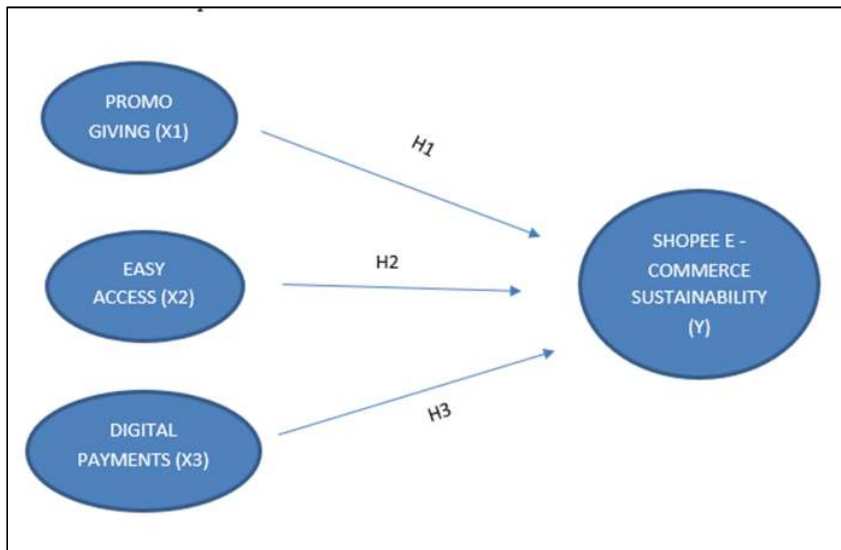


Figure 2. Conceptual Framework

4. Research Method

This study uses a quantitative approach with the aim of testing the influence of each variable on the sustainability of Shopee e-commerce. A quantitative approach was chosen because it is capable of producing numerical data that can be analyzed statistically to test the formulated hypotheses. Data in numerical form allows researchers to perform objective and specific calculations, as well as to identify patterns of relationships between variables in a systematic and measurable manner.

The population in this study was active users of Shopee e-commerce in Indonesia, with a total of 229 respondents. The research sample was determined purposively to be 170 respondents, with the following criteria: (a) aged between 17 and 50 years, and (b) having used the Shopee application for at least the last month. The minimum sample size was determined based on the recommendation of Hair et al. (2011) in the PLS-based SEM approach, which is the number of indicators multiplied by 10 (Pratama Hafidz et al., 2023). With 17 indicators, the minimum sample size required was 170 respondents.

Data collection was conducted online through the distribution of questionnaires using Google Forms. This method was chosen because it allowed respondents to fill out the questionnaire independently, practically, and efficiently. The questionnaire instrument was designed using a 1–4 Likert scale to measure each variable indicator. This scale was chosen to eliminate neutral options, so that the responses given were more decisive and produced a clearer analysis in drawing research conclusions.

The collected data were analyzed using the *Partial Least Squares - Structural Equation Modeling (PLS-SEM)* method with the help of S martPLS software. This analysis included several main stages, namely: **Convergent validity**, to ensure that the indicators in one construct were interrelated and measured the same thing. **Discriminant validity**, to ensure that each construct in the model is clearly distinct from one another. **Reliability test**, to measure the consistency and stability of indicators in measuring a particular construct. **R-square**, to determine the extent to which independent variables can explain dependent variables in the model. **Path analysis**, to identify the magnitude of direct effects between variables and test causal relationships in structural models.

Table. 1 Table Of Indicator Lists

Variables	Indicators	Source
Promo Giving	PG 1. Wide promotion reach in the form of Flash Sale, Cashback dan Gratis Ongkir . PG 2. Quantity of advertisements in mass media through TV, YouTuber, Instagram, Tiktok. PG 3. Quality of message delivery.	(Saputri et al., 2023)
Easy Access	Ea 1. Clear and understandable Ea 2. Does not take much effort to interact with the system Ea 3. The system is easy to use Ea 4. Easy to operate the system according to what the user wants to do	(Yiyis Dwi Setyorini, 2020)
Digital Payment	DP 1. Easy DP 2. Security DP 3. Benefits DP 4. Convenience & Trust.	(Azzahra et al., n.d.)
Sustainability	S 1. Use of environmentally friendly packaging S 2. Use of environmentally friendly packaging Measuring the percentage of visitors who make purchases S 3. Measuring the Number of Visitors Visiting E-Commerce Sites S 4. Use of a secure payment system. S 5. Recommend others to use the application S 6. Continue to use the application in the future	(Ramadhani & Hermawan, n.d.)

5. Result and Discussion

Validity Test

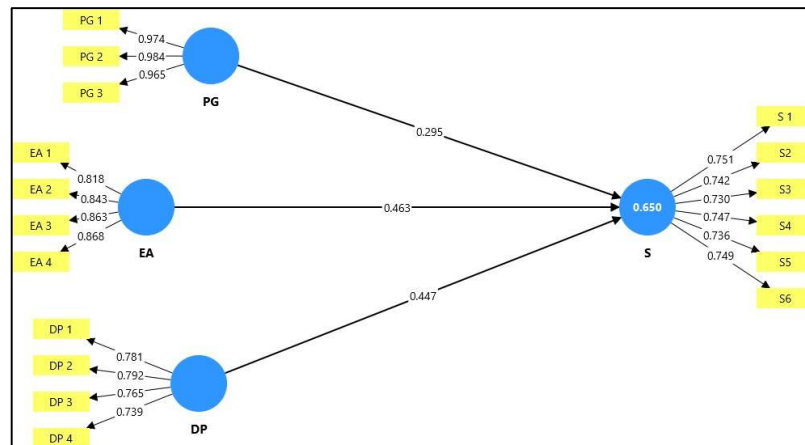


Figure. 3 Conceptual Model

The three constructs have a directional relationship to the main dependent construct, Sustainability (S), which is measured through six indicators (S1-S6). This shows that PG, EA, and DP variables directly influence the operational sustainability of the shopee e-commerce platform.

Table. 2 *Outer Loadings*
Convergent Validity

	PG	EA	DP	S	Result
PG 1	0.974				Valid
PG 2	0.984				Valid
PG 3	0.965				Valid
EA 1		0.818			Valid
EA 2		0.843			Valid
EA 3		0.863			Valid
EA 4		0.868			Valid
DP 1			0.781		Valid
DP 2			0.792		Valid
DP 3			0.765		Valid
DP 4			0.739		Valid
S 1				0.751	Valid
S 2				0.742	Valid
S 3				0.730	Valid
S 4				0.747	Valid
S 5				0.736	Valid
S 6				0.749	Valid

An indicator can be declared to meet convergent validity and have a high level of validity when the outer loadings value is > 0.70 (Uma Sekaran and Roger Bougie, 2010). The results displayed in the figure show that the indicators for the constructs Promo Giving (X1), Easy Access (X2), Digital Payments (X3), and Shopee E-Commerce Sustainability (Y) have an **outer loading** value that is above the minimum threshold of 0.70, which means that each indicator is able to represent the measured construct consistently and strongly. Based on these results, it can be concluded that all constructs in the model have met the criteria for convergent validity.

Table. 3 *HTMT*
Discriminant Validity

	DP	EA	PG	S
DP				
EA	0.113			
PG	0.281	0.265		
S	0.656	0.647	0.574	

The results of the discriminant validity test using the Heterotrait-Monotrait Ratio (HTMT) method show that all constructs in the model have HTMT values below the 0.85 threshold, as recommended by Clark and Watson 1995; Kline 2011 on (Henseler et al., 2015). This indicates that each construct is able to distinguish itself empirically from other constructs. Overall, these results reinforce that the research model has good discriminant validity, so that the constructs used can be relied upon to measure different dimensions in the context of shopee e-commerce sustainability.

Table. 4 Reliability Test**Reliability Test**

	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)	Result
Promo Giving (X1)	0.973	0.974	0.983	0.949	Reliable
Easy Access (X2)	0.870	0.874	0.911	0.720	Reliable
Digital Payments (X3)	0.772	0.778	0.853	0.592	Reliable
Sustainability (Y)	0.837	0.838	0.881	0.551	Reliable

Reliability test is a test conducted to determine whether a variable can be trusted or reliable in measuring the intended construct. According to Hair et al. (2019) in (Purwanto & Sudargini, n.d.-a), a Cronbach's Alpha value ≥ 0.70 indicates a good level of internal consistency. In addition, Composite Reliability (CR) and Average Variance Extracted (AVE) are also used as measures of construct reliability, with a CR value above 0.70 and an AVE of at least 0.50. These findings indicate that each construct has good internal consistency and is reliable in measuring the intended variables. Thus, this research model has met the criteria for statistical reliability and can be used for further analysis.

Table. 5 R-Square**R Square**

	R-square	R-square adjusted
S	0.650	0.644

In the context of social research and consumer behavior, the R-square value ≥ 0.50 can be categorized as strong (Hair et al., 2014) which means that the model has good predictive ability and is suitable for use in theoretical modeling. The test results of the structural model show that the Sustainability (S) construct has an R-square value of 0.650 and an adjusted R-square of 0.644. This value indicates that the three independent variables (Promo Giving, Easy Access, and Digital Payment) together are able to explain 65% of the dependent variable (shopee e-commerce sustainability).

This finding indicates that the strategy of giving promotions, easy access, and digital payment technology has an important role in supporting the sustainability of shopee e-commerce platform operations.

Table. 6 Path Coefficient**Direct Effect**

	Original sample	Sample mean	Standard deviation	T statistics	P values	Result
PG -> S	0.295	0.293	0.049	6.020	0.000	Significant
EA -> S	0.463	0.463	0.045	10.209	0.000	Significant
DP -> S	0.447	0.455	0.054	8.352	0.000	Significant

The sign or direction on the path (path coefficient) must be in accordance with the hypothesized theory, its significance can be seen in the t test or CR (critical ratio) obtained from the bootstrapping process (resampling method) (Purwanto & Sudargini, n.d.-b). The results of path analysis in the structural model show that the three independent variables (Digital Payment (DP), Easy Access (EA), and Promo Giving (PG)) have a significant effect on the Sustainability (S) construct in the context of Shopee e-commerce sustainability.

Hypothesis Test

H1: Promo Giving has a positive and significant effect on the Sustainability of Shopee E-Commerce

Promo Giving (PG) has an influence value of 0.295, which, although lower than other variables, still shows strong statistical significance (T-statistic = 6.020; p-value = 0.000). This finding confirms that promotional strategies continue to play an important role in building user loyalty and supporting the sustainability of e-commerce platforms. This interpretation is in line with the results of research by (Najwa, 2025), which shows that promotional giving and a comfortable shopping experience contribute to increased customer loyalty.

Effective promotions can create confirmation of consumer expectations, as explained in Expectation–Confirmation Theory (ECT), thereby encouraging sustainable usage intentions. However, in current e-commerce practices, the effectiveness of promotions depends not only on the content of the message, but also on who delivers the message. In this context, influencer-driven promotion is an important element that strengthens the impact of promotions on continuous purchase intent. When promotions are delivered by figures who are considered credible and relatable, consumers tend to trust the message more and are more motivated to make repeat purchases.

A study by (Silvia Choirun Nissa & Ihwan Susila, 2025) shows that influencers operate through parasocial interactions, where consumers feel an emotional connection with public figures on social media, making their recommendations appear credible and persuasive. Therefore, within the Triple Bottom Line (TBL) framework, promotional activities support the profit dimension through increased transactions and the people dimension through social influence.

H2: Easy Access has a positive and significant effect on the sustainability of Shopee E-Commerce.

Easy Access (EA) shows the strongest influence on the sustainability of Shopee e-commerce, with an original sample value of 0.463, a T-statistic of 10.209, and a p-value of 0.000. This finding indicates that convenience and ease of access to the e-commerce system are key factors that encourage users to continue using the platform on an ongoing basis.

A study by (Faudi et al., 2024) supports these results, showing that Shopee has succeeded in creating an easy-to-use and intuitive marketplace, thereby encouraging revisit intention or the tendency of users to return to make transactions. Ease of access not only enhances the user experience but also strengthens customer loyalty and retention, which are crucial in maintaining long-term operational sustainability amid increasingly fierce digital competition. Furthermore, ease of access also has implications for environmental sustainability. The digitization of transaction processes driven by easily accessible systems can reduce dependence on physical activities such as document printing, manual delivery, and face-to-face interactions that have the potential to generate carbon emissions. Thus, ease of access not only contributes to the profit dimension through efficiency and user loyalty, but also strengthens the planet dimension in the Triple Bottom Line (TBL) framework through reduced environmental impact.

H3: Digital payments have a positive and significant effect on the sustainability of Shopee e-commerce.

Digital Payment (DP) shows a coefficient value of 0.447 with a T-statistic of 8.352 and a p-value of 0.000. These results indicate that digital payment technology has a significant and

positive effect on the sustainability of the Shopee e-commerce platform. (Bara Maulana et al., 2024) in their study show that digital payment services affect the ease of transactions in e – commerce.

Digital payment technology not only simplifies the transaction process for users but also improves operational efficiency and consumer trust in the platform. Furthermore, digital payments also contribute to environmental sustainability. By reducing the use of physical money, printed receipts, and manual processes, this system helps reduce waste and carbon emissions from conventional transaction activities (Mu et al., 2025). Therefore, digital payments support two main dimensions in the *Triple Bottom Line* (TBL) framework: profit through efficiency and user loyalty, and planet through reduced environmental impact.

6. Conclusion

Based on the results of the PLS-SEM analysis of 170 respondents, it was found that the three variables (promo giving, easy access, and digital payments) had a positive and significant effect on the sustainability of Shopee e-commerce. Easy access was the dominant factor with a path coefficient of 0.463, followed by digital payments at 0.447, and promo giving at 0.295. The results of testing the structural model show that the *Sustainability* (S) construct has an R-square value of 0.650 and an adjusted R-square of 0.644. These findings indicate that promo giving, easy access, and digital payment technology play an important role in supporting the operational sustainability of the Shopee e-commerce platform.

This study contributes by integrating marketing strategies, technology-based easy access, and digital payment systems into a comprehensive model based on the *Triple Bottom Line* (TBL) framework, which can serve as a reference for decision makers in designing Shopee's e-commerce sustainability strategy.

7. Implications

7.1. Theoretical Implications

This study contributes theoretically by integrating promo giving, easy access, and digital payments into a comprehensive model based on the *Triple Bottom Line* (TBL) framework. This integration strengthens the literature on e-commerce sustainability by emphasizing that sustainability is not only determined by financial aspects (*profit*), but also by user experience (*people*) and environmental impact (*planet*). The results of this study support the *Expectation–Confirmation Theory* (ECT) and *Technology Acceptance Model* (TAM) by showing that ease of access and efficient payment systems encourage sustainable use intentions. These findings also enrich the e-commerce sustainability model by providing empirical evidence that targeted promotions still play an important role in driving user loyalty, even though their influence is lower than that of access and technology factors.

7.2. Practical Implications

For practitioners and management at Shopee and other e-commerce platforms, these findings provide strategic guidance that sustainability efforts depend not only on aggressive promotion, but also on improving the quality of user experience. Companies need to ensure that their application interfaces remain lightweight, fast, and accessible, and provide a variety of secure and reliable digital payment methods. Additionally, promotions can be optimized with a more personalized approach, such as utilizing analytical data and credible influencers, to increase relevance for users. Integrating these three aspects simultaneously will help companies maintain customer loyalty, improve operational efficiency, and contribute to more environmentally friendly business practices.

8. Research Limitation

This study has several limitations that need to be considered. First, the sample size is limited to active Shopee users aged 17–50 who have used the app in the past month. This limits the generalizability of the findings to older or younger age groups, as well as to users who are not active on a regular basis.

Second, the study only focuses on one e-commerce platform, namely Shopee, so it does not reflect the dynamics of sustainability on other platforms such as Tokopedia, Lazada, or Bukalapak, which have different user characteristics and business strategies.

Third, the approach used is quantitative, so the data obtained is only in the form of numbers without in-depth exploration of the respondents' motivations, perceptions, or subjective experiences. Therefore, future research is recommended to use mixed methods that combine quantitative and qualitative approaches, as well as expand the scope to cross-platforms and more diverse demographics so that the results are more comprehensive and can be generalized more broadly.

References

- Alim, T., Zufriah, D., Fathoni, M. I., Tinggi, S., Bisnis, I., Nusa, K., Manajemen, A., & Yogyakarta, A. (2025). Pengaruh Kepuasan Pelanggan dan Kualitas Layanan Terhadap Loyalitas Pelanggan pada E-Commerce Shopee. In *Maret: Vol. XII* (Issue 1).
- Azzahra, I. S., Setyabudi, D., & Santosa, H. P. (n.d.). *Terpaan Promosi Cashback dan Intensitas Komunikasi Peer Group Terhadap Minat Menggunakan OVO*. <https://peraturan.bpk.go.id>,
- Bajah, J. (2025). Reverse Supply Chain and Its Effect on Customer Satisfaction: A Comparative and SERVQUAL Analysis of Retail Practices. *International Journal of Supply Chain Management*, 14(4), 41–54. <https://doi.org/10.59160/ijscm.v14i4.6334>
- Bara Maulana, F., Nazar, S., Naim, Bucci Ryando, M., & Ramdhan, S. (2024). *THE INFLUENCE OF DIGITAL PAYMENT SERVICE FEATURES ON CONSUMERS' EASE IN TRANSACTING IN E-COMMERCE*.
- Bashir, M., Alfalih, A., & Pradhan, S. (2022). Sustainable business model innovation: Scale development, validation and proof of performance. *Journal of Innovation and Knowledge*, 7(4). <https://doi.org/10.1016/j.jik.2022.100243>
- Cindy Febya Riska, Ilmi Nabilah, Julietha Lindasari F.N, & Putri Disty Kholipah. (2022). *PENGARUH DISKON DAN PROMOSI TERHADAP KEPUTUSAN PEMBELIAN PADA PENGGUNA E-COMMERCE SHOPEE*.
- Fahrizal, Suherman, & Ika Febrilia. (2023). Pengaruh Perceived Ease Of Use, Perceived Usefulness dan Satisfaction Terhadap Continuance Intention Pengguna Aplikasi Food Delivery Saat Pandemi. *Jurnal Bisnis, Manajemen Dan Keuangan*.
- Faudi, A. R., Rafli, A., Politeknik, F., Malang, N., & Politeknik, M. M. (2024). *SHOPEE (Studi Kasus pada Mahasiswa Program Studi D-IV Manajemen Pemasaran Jurusan Administrasi Niaga Tingkat 1-4 Politeknik Negeri Malang Tahun 2023)*. 2(10), 139–147. <https://doi.org/10.61722/jiem.v2i10.2672>
- Hair, J. F. ., Black, W. C. ., Babin, B. J. ., & Anderson, R. E. . (2014). *Multivariate data analysis*. Pearson Education Limited.
- Hellyatul Auwalia, N., Dianta S, K. A., & Wibowo, A. (2024). Pengaruh Literasi Digital dan Digital Payment Terhadap Pengembangan Usaha (Studi Kasus UMKM Di Pasar Tanah Abang). *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi*, 3(5).
- Hidayat, T. S., Abdurrahman, L., & Rekayasa Industri, F. (2023). KEAMANAN DAN PRIVASI TEKNOLOGI PEMBAYARAN DIGITAL PADA UMKM DENGAN MENGGUNAKAN PLATFORM BLOCKCHAIN HYPERLEDGER FABRIC. In *Jurnal Ilmiah Teknologi Informasi Terapan* (Vol. 9, Issue 2).
- M. Hafizh Amrullah. (2021). *PENGARUH PROMOSI DAN BRAND IMAGE TERHADAP KEPUTUSAN PEMBELIAN JASA PENGIRIMAN BARANG PADA PT AEROJASA CARGO (AERO EXPRESS) JAKARTA TAHUN 2021*.

- Maichum, K., Parichatnon, S., & Peng, K. C. (2016). Application of the extended theory of planned behavior model to investigate purchase intention of green products among Thai consumers. *Sustainability (Switzerland)*, 8(10). <https://doi.org/10.3390/su8101077>
- Mayjeksen, A., & Pibriana, D. (2020). *Technology Acceptance Model (TAM) Untuk Menganalisis Penerimaan Pengguna Terhadap Penggunaan Aplikasi Belanja Online XYZ*. 7, 580–592.
- Mu, X., Chen, D., & Zhang, H. (2025). The impact of digital transformation on the sustainable development of enterprises: an analysis from the perspective of digital finance. *Journal of Applied Economics*, 28(1). <https://doi.org/10.1080/15140326.2025.2464488>
- Najwa, N. (2025). The Influence of Promotions and Ease of Shopping on E-Commerce Application Customers. *Pakistan Journal of Life and Social Sciences (PJLSS)*, 23(1). <https://doi.org/10.57239/pjlss-2025-23.1.00148>
- Nonik, P., Yanti, P., & Sujana, N. (2024). Pengaruh Digital Marketing Dan Digital Payment Terhadap Keputusan Pembelian pada Marketplace Shopee oleh Mahasiswa Fakultas Ekonomi Undiksha. *Jurnal Pendidikan Ekonomi Undiksha*, 16(2), 2599–1426. <https://doi.org/10.23887/jjpe.v16>
- Nugraheni Septaningtyas. (2021). *PENGARUH KEMUDAHAN DAN KUALITAS INFORMASI TERHADAP KEPUTUSAN PEMBELIAN PADA E-COMMERCE TRAVELOKA TAHUN 2021*.
- Nur Octavia, A. (2023). *ANALISIS INTENSI DAN KEPERCAYAAN PELANGGAN DALAM MENGGUNAKAN E-PAYMENT PADA E-COMMERCE DI INDONESIA*.
- Oktavia Putri, R., Rachbini, W., Sarjana Ekonomi Syariah, P., & Ekonomi dan Bisnis, F. (2024). Pengaruh Kemudahan Fitur dan Kepuasan Terhadap Loyalitas Pelanggan Kalangan Millennials di E-Commerce Shopee. *Pengaruh Kemudahan Fitur (Putri, Dkk.) Madani: Jurnal Ilmiah Multidisiplin*, 2(11), 2986–6340. <https://doi.org/10.5281/zenodo.14504412>
- Pamungkasari, S. A., & Priono Hero. (2025). Jurnal Maneksi (Management Ekonomi dan Akuntansi) PENGARUH PENGGUNAAN E-COMMERCE SHOPEE DAN DIGITAL PAYMENT TERHADAP PERILAKU KONSUMTIF MAHASISWA. *Jurnal Maneksi (Management Ekonomi Dan Akuntansi)*, 14(2). <https://doi.org/10.31959/jm.v14i2>
- Pratama Hafidz, G., Sandriana Ulfa Prodi Manajemen, V., & Ekonomi dan Bisnis, F. (2023). IDENTIFIKASI MODEL UTAUT 2 PADA NIAT PENGGUNAAN LAYANAN DIGITAL ALLO BANK. In *Jurnal Bisnis dan Manajemen* (Vol. 3, Issue 4).
- Purwanto, A., & Sudargini, Y. (n.d.-a). Partial Least Squares Structural Suation Modeling (PLS-SEM) Analysis for Social and Management Research : A Literature Review. *Journal of Industrial Engineering & Management Research*, 2(4). <https://doi.org/10.7777/jiemar.v2i4>
- Purwanto, A., & Sudargini, Y. (n.d.-b). Partial Least Squares Structural Suation Modeling (PLS-SEM) Analysis for Social and Management Research : A Literature Review. *Journal of Industrial Engineering & Management Research*, 2(4). <https://doi.org/10.7777/jiemar.v2i4>
- Ramadhani, B., & Hermawan, A. (n.d.). E-Commerce dan Kelestarian Lingkungan: Analisis Dampak dan Upaya Berkelanjutan. *Riset Ilmu Manajemen Bisnis Dan Akuntansi*, 3(2), 229–240. <https://doi.org/10.61132/rimba.v3i2.1760>
- Refina Armelda Sari, & Hapzi Ali. (2024). Pengaruh Strategi Promosi, Loyalitas Pelanggan dan Diferensiasi Produk terhadap Keberlanjutan Bisnis. *Jurnal Greenation Sosial Dan Politik*.
- Saputri, C. C., She, Y., Dharasta, M. A., Manajemen, D., Udara, T., Teknologi, S. T., & Abstrak, K. (2023). PENGARUH PROMOSI DAN DISKON TERHADAP KEPUTUSAN PEMBELIAN TIKET PESAWAT MELALUI TRAVELOKA (STUDI PADA TARUNA/ SEKOLAH TINGGI TEKNOLOGI KEDIRGANTARAAN YOGYAKARTA). In *Media Online) Jurnal Flight Attendant Kedirgantaraan* (Vol. 5, Issue 1).
- Shukla, A. (2025). *Expectation Confirmation Theory : A review*. <https://open.ncl.ac.uk>
- Silvia Choirun Nissa, & Ihwan Susila. (2025). The Effect of Online Promotion on the Decision to Purchase Airline Tickets with the Digital Era as a Mediating Variable in E-Ticketing

- Applications. *International Journal of Economics, Commerce, and Management*, 2(4), 59–78. <https://doi.org/10.62951/ijecm.v2i4.963>
- Uma Sekaran and Roger Bougie. (2010). *RESEARCH METHODS FOR BUSINESS - A SKILL BUILDING APPROACH*.
- Vijay, J., & Mohan Kumar, P. (2025). *GAP BODHI TARU A GLOBAL JOURNAL OF HUMANITIES THE EXPECTATION CONFIRMATION THEORY: A SERVICE PERSPECTIVE*. <https://www.gapbodhitaru.org/>
- Volyn Visya Handini, Nur Fadhila Maulana Akhyar, Lulu Lusy Irawati, Nadya Lailatunnajwa, & Arifudin Arifudin. (2024). Pengaruh Promosi Cashback Pada Shopee Dan Harga Terhadap Perilaku Konsumen. *SANTRI : Jurnal Ekonomi Dan Keuangan Islam*, 2(3), 80–90. <https://doi.org/10.61132/santri.v2i3.567>
- Yiyis Dwi Setyorini. (2020). *PENGARUH PROMOSI, KEMUDAHAN AKSES, DAN DISKON TERHADAP KEPUTUSAN PEMBELIAN IMPULSIF PENGGUNA APLIKASI SHOPEE PADA MAHASISWA JURUSAN EKONOMI SYARIAH INSTITUT AGAMA ISLAM NEGERI TULUNGAGUNG*.
- Yovita, M., Pandin, R., Prisilia, S., Pribadi, A. F., Larissa, C., Akuntansi, P. S., Ekonomi, F., & Bisnis, D. (2023). ANALYSIS OF THE IMPLEMENTATION OF THE TRIPLE BOTTOM LINE AS THE KEY TO SUSTAINABILITY FOR FOOD AND BEVERAGE COMPANIES. *Journal of Social and Economics Research*, 5(2). <https://idm.or.id/JSER/index>.