

How Flexible Time Increases Customer Visits: The Role of Shopping Enjoyment in e-Commerce Platforms

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Abstract

In the fast-paced digital era, time flexibility is an important factor influencing consumer behavior in online shopping. This study aims to determine the effect of time flexibility on shopping enjoyment and customer visits to e-commerce platforms. This study uses the Partial Least Squares Structural Equation Modeling approach and the SOR (Stimulus-Organism-Response) theory to explain the relationships among variables. Data were collected using a snowball sampling technique. The results show that time flexibility significantly increases shopping enjoyment and the frequency of customer visits to e-commerce sites. Users tend to use their free time flexibly to explore and search for products, which ultimately increases their engagement with the platform. In addition, a high preference for using mobile devices also strengthens the relationship between time flexibility and online shopping behavior. These findings recommend optimizing mobile features and personalizing the user experience to encourage increased shopping activity and sustained customer loyalty.

Keywords: flexible time, shopping enjoyment, consumer visits

1. Introduction

The presence of e-commerce platforms has become an integral part of people's daily lives. With increasing internet penetration and smartphone adoption, consumers have found it increasingly easy to visit various e-commerce sites. However, several factors also reduce consumer satisfaction with e-commerce sites, such as high user traffic. This can lead to slow access speeds or even website downtime. Other issues, such as inefficient shipping processes, can result in delays in delivery. According to a study (Srinivasan, Rutz, & Pauwels, 2015), Factors influencing consumer visits to e-commerce sites are the quality of website navigation, page loading speed, and ease of product search. Customer visits are also closely related to promotions or discounts offered by the platform, which motivate consumers to visit the platform regularly (Sari, Indriastuti, & Rahmawati, 2025).

One increasingly visible trend in modern consumer behavior is the increase in free time spent accessing digital platforms outside of work hours or other primary activities. This free time is often used by consumers to browse e-commerce sites. With easy internet access, they feel more relaxed and can spend more time exploring products and making purchases. Research shows that the time consumers spend reading product information on e-commerce sites has a significant influence on purchasing decisions. Research shows that more flexible access times and navigation speed can improve user experience and reduce the negative impact of high latency (Berkery & Morley, 2020). Thus, flexible free time allows consumers to visit e-

commerce websites more frequently. Consumers with more free time tend to visit e-commerce sites more often to explore products, compare prices, and take advantage of existing promotions. This free time often occurs outside of work hours or on weekends, when consumers have more freedom to engage in digital activities.

Besides free time, shopping enjoyment is a key factor driving consumers to visit e-commerce sites. Shopping enjoyment is the internal drive consumers feel to fulfill their shopping desires, reflected in real-time interactions, ease of website navigation, and flexibility in accessing the platform at any time (Indriastuti et al., 2024). Shopping enjoyment is a key factor influencing consumers' decisions to make a purchase, due to the convenience and time constraints of fulfilling their shopping needs.

The purpose of this study is to bridge the gap between time flexibility in customer visits and shopping enjoyment. By understanding this causal relationship, e-commerce platforms can more effectively design flexible time-based marketing strategies to enhance the consumer shopping experience and encourage more visits and transactions.

2. Literature Review

2.1. Stimulus-Organism-Response Theory (SOR Theory)

The SOR model is a theoretical framework used to understand how external stimuli (S) influence an individual's internal state or organism (O), ultimately eliciting a specific response (R). Research (Chan et al., 2017) On consumer visit resonance on online platforms was conducted by examining external factors such as website features, marketing strategies, and product availability, as well as internal factors such as hedonic motivation, impulsivity, and informational social influence. The situational factor of consumers having free time becomes a stimulus for consumers' affective and cognitive perceptions, which refers to the buyer's cognitive and affective emotional state, encompassing the processes of thinking, feeling, and perception, referred to as the "organism." (Do, Shih, & Ha, 2020).

Organismal factors refer to customers' emotional, affective, and cognitive states, and how real-time flexibility influences consumer visit behavior on e-commerce platforms (Gao, Chen, Gao, & Yu, 2022) Affective reactions are emotional responses that arise during interactions with the surrounding environment, while cognitive reactions are the mental processes of analyzing information related to a product.

2.2 Flexible Time

Time flexibility in the context of digital marketing and e-commerce refers to consumers' ability to organize and choose the most suitable time for them to shop, access information, or interact with brands online. Time flexibility is one of the key factors that increases consumer satisfaction on e-commerce platforms, because it gives them greater control over their shopping decisions (Chan et al., 2017). Consumers tend to prefer digital platforms that allow them to make purchases at their preferred time, for example, in the evening after work or in between other activities (Jin & Oriaku, 2013).(Mukherjee, Yun, & Gershoff, 2025) emphasized that in the digital space, time flexibility encourages the formation of individual strategies in managing

consumption activities. Time flexibility is as follows: freedom to choose the time (Bjärntoft, Hallman, Mathiassen, Larsson, & Jahncke, 2020), availability of time outside of main activities (Moussaoui, Banovic, Tarrega, & Chaya, 2026), control over time (Shagvaliyeva and Yazdanifard, 2014).

H1: The higher the flexible time, the higher the customer visits.

H2: The higher the flexible time, the higher the shopping time.

2.3 Shopping Enjoyment

A study (Wang & Lee, 2020) stated that perceived enjoyment is the result of the interaction between a person's experience and their surrounding environment, leading to a sense of satisfaction or happiness. The subjective experience of perceived enjoyment is pleasant and satisfying, and generates positive reinforcement that can strengthen the desire to make impulsive purchases for self-gratification. Empirical studies consistently show that increased consumer satisfaction with online shopping is positively correlated with their purchase intentions and the development of favorable consumer attitudes (Punuindoong, Syah, & Anindita, 2020) and (Wen, Prybutok, & Xu, 2011). Consumer behavior can be influenced by both subjective enjoyment and the emotional components of perceived enjoyment. One example is how customer satisfaction can modify or enhance the correlation between current engagement levels and impulse buying tendencies.

H3: The higher the shopping enjoyment, the higher the customer visit rate.

2.4 Customer Visit

In the context of e-commerce, a customer visit can be defined as a visit made by a customer to a company's digital platform or website to explore the products or services offered. These visits can be non-transactional, such as browsing products or reading reviews, or transactional, involving a purchase or other interaction relevant to the buying and selling process (Kepa, Castander, Rebón, & Alzua-sorzabal, 2015).

With technological advancements, customer interactions with e-commerce have also undergone significant changes. One recent innovation is the integration of mobile technology and social media, which allows customers to access e-commerce websites or applications anytime and anywhere. Mobile commerce and the presence of multiple devices have increased flexibility and convenience for customers in accessing products or services online (Kandampully & Zhang, 2015). In the context of this research, the increase in customer visits is examined using the SOR Model, Web Usage Behavior Theory, and Online Purchase Pathways. The use of the Stimulus-Organism-Response (SOR) model in the context of increasing customer visits in e-commerce helps understand how various factors can stimulate customer visits, change their perceptions and motivations, and ultimately encourage them to visit e-commerce sites. Figure 1 Research Conceptual Framework



Figure 1. Conceptual model between flexible time, shopping e.

3. Research Method

The research was conducted quantitatively, with 119 data points collected from g-forms distributed via WhatsApp using a snowball sampling technique. The data were screened. The research was conducted in Indonesia, using the snowball sampling technique. Data analysis used SEM-PLS, due to the data range of 100–200 (Memon et al., 2020). Measurement using a Likert scale from 1, very dislike to 5, very like.

Flexible time is defined as consumer behavior to shop on e-commerce platforms without time constraints, supported by indicators of freedom to choose time, availability of free time outside of work hours, convenience, and personal control over time (Effendi, Akbar, and Murni, 2023; Moussaoui et al., 2023). Shopping Enjoyment is defined as the pleasure that drives consumers to shop on e-commerce platforms, expressed by user visits to the e-commerce site within a specific period, supported by indicators of urgency to buy, emotional urges, discounts and promotions, and personal online shopping preferences (Moussaoui et al., 2026). Visiting Customer is a user's visit to an e-commerce site within a certain period, with indicators of visit frequency, visit time, visit duration, and user interaction (Sychoy & Bakaev, 2020).

4. Finding and Discussion

Descriptive data analysis was conducted on online shoppers on Indonesian e-commerce platforms such as Shopee, Lazada, Blibli, and Tokopedia. The majority of shoppers were women (52%) and men (48%). Respondent characteristics by age range: the majority of participants in this study were in the productive age group, namely 26–35 years, which covers 48% of the total respondents. This age generally represents the young adult generation who are already economically active and have a high level of technological adaptation, so it is very relevant in the context of research related to online shopping behavior on e-commerce platforms. The 36–50 age group covers 30% of respondents (36 people). Respondents aged 18–25 years contributed 22% (26 people), which reflects the young age segment that tends to actively explore digital platforms, even though their purchasing power is not as high as the older age group. 34 people or 28% are civil servants, private workers also contributed significantly at 21% (25 people), freelancers and hybrid/remote workers each at 17% (20 people). This indicates the diversity of work patterns that can affect time flexibility in online shopping. Others are 18%, students. Preferences for opening e-commerce platforms: 44 people (37%) stated that they open e-commerce every day; 41 respondents (34%) use e-commerce

several times a week; 35 respondents (29%) are in the category of users who rarely open e-commerce.

Testing was carried out with the outer model to test validity and reliability, and the inner model to test the hypothesis, which will be shown in Table 1.

Table 1. Construct Validity

Variable & Indicators	Loading Factors	AVE	CR	α -Cronbach
Flexible Time - freedom to choose time - availability of free time -outside of work hours, convenience, - personal control over time	0.780 0.823 0.809 0.729	0.618	0.841	0.716
Shopping Enjoyment urgency to buy emotional urges discounts and promotions, personal online shopping preferences	0.796 0.890 0.781 0.809	0.672	0.895	0.825
Customer Visit visit frequency visit time visit duration user interaction	0.809 0.840 0.790 0.681	0.612	0.840	0.712

Source: *own calculation, 2026*

Measurement can be said to have convergent validity if the loading factor value is more than 0.7 and the AVE value is more than 0.5. Measurement of discriminant validity is determined by looking at the cross-loading of each variable. Measurement can be said to have discriminant validity if it has a cross-loading value of more than 0.7. All statement items from the flexible time, shopping enjoyment, and customer visit variables in this research are declared valid because they have a loading factor value > 0.7 . This shows that variable indicators that have a loading factor value > 0.7 have high validity, thus fulfilling the Convergent Validity test.

The AVE value of each variable has a value of > 0.5 , which means that it is fulfilling the validity requirements based on AVE. Based on the results of the outer loading and AVE values, it can be concluded that the flexible time, shopping enjoyment, and customer visit variables in this research have fulfilled the requirements of convergent validity.

It shows that all indicators that form each variable in this research have a cross-loading value > 0.7 , which means that they have fulfilled the discriminant validity requirements, namely, the cross-loading value > 0.7 . All variables in this research have fulfilled the requirements, namely

the Composite Reliability value > 0.7 . And, it shows that all variables in this research have fulfilled the requirements, namely, the Cronbach's Alpha value > 0.7 . Thus, it can be said that all latent variables have a good level of reliability.

The result of the shopping enjoyment variable has a value of 0.431, which means that the shopping enjoyment variable can be influenced by the flexible time variable by 43.1%, and the remaining 56.9% is influenced by other variables outside of this research. Furthermore, the impulsive buying variable has a value of 0.584, which means that the impulsive buying variable can be influenced by the real-time interactivity and perceived enjoyment variables by 58.4%, and the remaining 41.6% is influenced by other variables outside of this research.

Hypothesis Testing. Hypothesis testing is the result of the correlation between constructs, which is measured by looking at the significance value, p-value, and t-statistic. In the bootstrap resampling method in this study, the hypothesis is accepted if the p-value is ≤ 0.05 and has a t-statistic value > 1.96 . Explained in Table 2

Table 2. Hypothesis Testing

Hypothesis Testing Variables	Original Sample (O)	T Statistics	P Value	Results
Flexible Time $\rightarrow$ Shopping enjoyment	0.656	11.858	0.000	Significant
Flexible Time $\rightarrow$ Customer Visit	0.321	3.039	0.002	Significant
Shopping enjoyment $\rightarrow$ Customer Visit	0.515	5.136	0.000	Significant

Source: *own calculation, 2026*

The analysis shows that the direct effect of Flexible Time on Customer Visit yields a path coefficient of 0.457, indicating a positive directional relationship. The associated t-statistic of 4.981 far exceeds the critical value of 1.96 (at $\alpha = 0.05$ for a two-tailed test), with a p-value of 0.000, which is well below the 0.05 significance threshold. These results confirm that the effect is statistically significant. Accordingly, the hypothesis stating that Flexible Time has a significant effect on Customer Visit is supported. The significance test further reveals that the path coefficient from Flexible Time to Shopping enjoyment is 0.787, with a t-statistic of 15.351 and a p-value of 0.000. This exceptionally high t-value and extremely low p-value provide strong evidence of a statistically significant and robust relationship between the two variables. Hence, it can be concluded that Flexible Time significantly and positively influences

consumers' Shopping enjoyment, thereby supporting the second hypothesis. Moreover, the test results show that the path coefficient between Shopping enjoyment and Customer Visit is 0.398, with a t-statistic of 4.015 and a p-value of 0.000. Given that the t-statistic exceeds the critical value of 1.96 and the p-value is well below 0.05, this effect is statistically significant. These findings indicate a meaningful contribution of Shopping enjoyment to the frequency of consumer visits. Therefore, the hypothesis stating that Shopping enjoyment has a significant effect on customer visits is accepted.

Indirect Effect. The results of the bootstrapping test of indirect effects using Smart PLS 4 in this study can be seen in the following test results, shown in Table 3

Tabel 3. Indirect Effect

Indirect Effect Pathway	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values	Explain
Flexible Time -> Shopping Enjoyment -> Customer Visit	0.313	0.306	0.078	4.034	0.000	Significant

Source: own calculation, 2026

As shown in the table, the indirect effect test using the bootstrapping procedure indicates a statistically significant indirect relationship between Flexible Time and Customer Visit, mediated by Shopping enjoyment. The path coefficient for this indirect effect is 0.313, with a t-statistic of 4.034 and a p-value of 0.000. The t-value, which far exceeds the critical threshold of 1.96, and the p-value, which falls well below the 0.05 level of significance, confirm that this mediation pathway is statistically significant. These findings suggest that Shopping enjoyment serves as an effective mediator, bridging the relationship between flexible time availability and the frequency of consumer visits. Thus, the hypothesis stating that Shopping enjoyment mediates the effect of Flexible Time on customer visits is empirically supported.

The structural model exhibits strong predictive power for the endogenous constructs, particularly the Customer Visit variable, which has an R^2 value of 0.653. This indicates that 65.3% of the variance in the Customer Visit construct can be explained by the exogenous constructs within the model, demonstrating a high level of predictive contribution

The effect size test (f^2) is employed to determine the magnitude of each independent variable's contribution to the dependent variable within the structural model. The f^2 values in the structural model indicate that all constructs exhibit substantial effects on their respective dependent variables. The f^2 value of 1.629 for the relationship between Flexible Time and Shopping enjoyment reflects a large effect size, well above the threshold of 0.35, suggesting that Flexible Time contributes significantly to explaining the variance in Shopping enjoyment. Similarly, the effect of Flexible Time on Customer Visit yields an f^2 value of 0.229, which also falls within the large effect size category. Moreover, the f^2 value of 0.174 for the relationship between

Shopping Need and Customer Visit further supports previous findings, confirming that Shopping enjoyment plays a key role in explaining the variance in Customer Visit.

The test results in this research indicate that flexible time has a positive and significant effect on consumers' shopping enjoyment when using an e-commerce platform. Shopping enjoyment has a significant positive effect on customer visits, and flexible time has a positive and significant effect on customer visits. Flexible time also indirectly has a positive and significant effect on customer visits through shopping enjoyment. This can be seen from the t-statistic value and p-value in this variable relationship, which shows significant results, and the original sample (O) value, which shows positive results.

In this research, flexing time serves as a stimulus that prompts consumers to make a customer visit. When consumers engage directly in shopping platforms, such as chatting with streamers or discussing products, flexible time stimulates cognitive and emotional responses (Do et al., 2020). Shopping enjoyment, in turn, represents the emotional and cognitive state of consumers in response to this stimulus. It arises from the enjoyable experience during interaction, signifying a heightened level of engagement and emotional attachment to the products or services (Kuciapski, 2020) and (Lee, Gan, & Liew, 2023). Customer visits, as a response, occur when consumers, influenced by the stimulus of flexible time and the organism of shopping enjoyment, make purchase decisions without thorough consideration, driven by emotional impulses (Marzuki, Abdullah, Bahri, & Kamal, 2016). This illustrates how the Stimulus-Organism-Response theory elucidates the connection between flexible time, shopping enjoyment, and customer visits in e-commerce platforms (Moreno, Fabre, & Pasco, 2022).

5. Conclusion

The contribution of this research is to analyse the relationship between flexible time and customer visits when consumers view on e-commerce platforms. Customer visit behaviour will increase because consumers feel enjoyment when deciding to shop, unconsciously this behaviour is influenced by S-O-R Stimuli-Organism-Response by influencing the cognitive - affective - emotional strength of consumers who visit.

The results show that shopping enjoyment can bridge the gap that occurs between flexible time and customer visit behaviour due to the pleasure of watching the e-commerce platform and the feeling of happiness when interested in the items on the platform.

It is hoped that businesses in the future will be able to create and attract more visitors by creating more attractive platforms, better products, and affordable prices, making them feel addicted and needing to keep visiting the e-commerce platform even if they don't buy anything.

This research has limitations: 52% of participants consistently access the platform, and 44% do so daily. Next time, this could be done for male customers and specifically for a specific generation, for example, only Generation Z.

Business implications could focus on improving the quality of platforms and making customers not only visit the platforms but also increasing visitor traffic, as well as customers feeling enjoyment when opening the platform, and sales must be more creative so that customers also

make purchases based on their shopping preferences.

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