Research Article

The Influence *of Scarcity on Flash Sale* Against *Impulsive Buying* and *Shopping Enjoyment* with *Attitude to Wards Flash Sale* as a Mediating Variable on Shopee Users

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Abstract: This study aims to examine the influence of scarcity on flash sales on impulse buying and shopping enjoyment, with attitude toward flash sales as a mediating variable. The research was conducted on 130 Shopee customers in Padang City who had previously participated in flash sale programs. Data collection was carried out through a survey by distributing questionnaires via Google Forms. The data analysis technique used is Structural Equation Modeling (SEM). Based on the hypothesis testing stages, it was found that attitude toward flash sales and scarcity on flash sales did not have a significant effect on impulse buying. Furthermore, in the direct effect testing stage, scarcity on flash sale was found to have a positive and significant effect on attitude toward flash sale and shopping enjoyment. The hypothesis testing results also show that shopping enjoyment has a positive effect on impulse buying. Meanwhile, in the indirect effect testing, shopping enjoyment was found to mediate the relationship between scarcity on flash sales and impulse buying.

Keywords: Scarcity on Flash Sale, Shopping Enjoyment, Attitude Toward Flash Sale, Impulse Buying

1. Introduction

The development of science and technology has encouraged various creative works that make it easier for humans to meet their needs. One of the results of human innovation is the discovery of e-commerce services. The increasing routines carried out by humans encourage them to like various practical things, one of which is shopping through e-commerce services. The development of communication technology encourages significant developments in internet services, and this is one of the bases for the growth of e-commerce services in the world in general and Indonesia in particular [1].

The beginning of the development of e-commerce services in Indonesia was marked by the launch of Lippo Shop in 2001, initiated by the Lippo Group. Lippo Shop focuses on selling products online, especially products related to daily needs and consumer goods with various categories. Lippo Shop became the forerunner of e-commerce services in Indonesia [2]. 2003 was the year of the emergence of Multiply.com, which then encouraged the birth of other services such as Tokobagus (2005), which is affiliated with OLX and has continued to grow for a relatively long time [3].

A decade later, new e-commerce services emerged such as Lazada, Elevenia, Bukalapak, Tokopedia, and Shopee. The tight competition between e-commerce has encouraged consumers to be more selective. According to Top Brand Indonesia, Shopee recorded the highest market share in the last five years, although it decreased from 59.50% in 2022 to 41.20% in 2024. Followed by Lazada (25.10%) and Blibli (14.30%) [4].

Table 1. Development of Market Share of E-commerce Services in Indonesia 2020 – 2024 (In Percentage Units)

Marketplace Name	In Percentage Units				
	2020	**2021**	**2022**	**2023**	**2024**
Blibli.com	13.20	5.70	5.10	6.60	14.30
Shopee .com	19.50	52.50	59.50	48.40	41.20
Bukalapak.com	5.30	4.17	3.20	2.89	2.30
Tokopedia.com	8.00	4.80	10.20	4.10	4.10
Lazada	41.00	23.70	21.80	22.50	25.10
Other	13.00	9.13	0.20	15.51	13.00

According to data from the Ministry of Communication and Information in 2024, e-commerce service users in Indonesia continued to increase from 38.72 million users in 2020 to around 65.65 million in 2024 [5]. This increase has encouraged the emergence of impulse buying behavior in online shopping activities. Febrilia et al. [6] stated that people are currently very creative in shopping; their routine of accessing e-commerce gives rise to impulse buying because of the information on specifications, prices, and promotions offered.
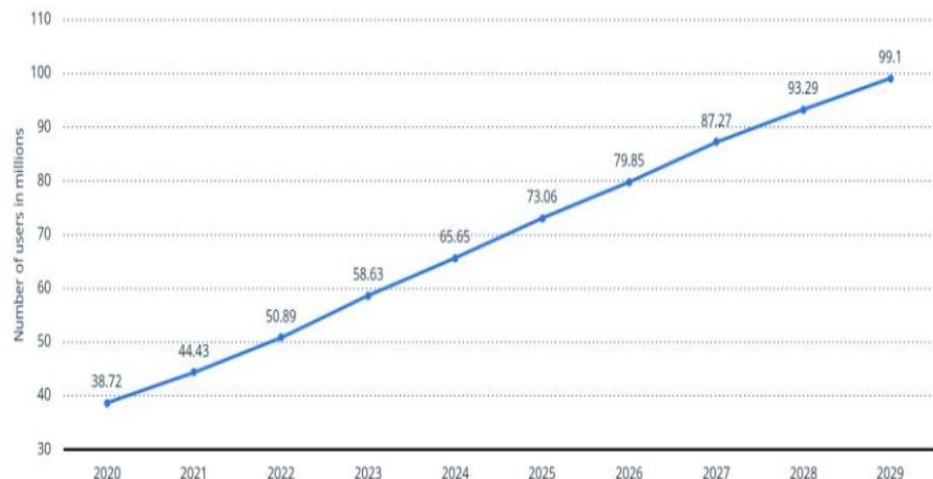
Figure 1. Development and Prediction of E-commerce Service Users in Indonesia 2020 – 2029 (In Million People)

The graph shows that e-commerce users are projected to increase significantly from 38.72 million in 2020 to more than 65 million in 2024, and are estimated to reach more than 99 million in 2029. This shows the increasingly deep digital penetration into the shopping behavior of the Indonesian people, including the emergence of the impulse buying phenomenon.

In a pre-survey of 30 consumers in Padang City, most admitted that they bought products spontaneously because of the flash sale program. As many as 27 respondents stated that they bought products that they did not intend to buy initially, while 21 respondents stated that the flash sale program was a trigger for impulse buying.

According to Kotler and Keller [7], impulse buying is a spontaneous purchase without planning. Lamis et al. [8] stated that impulse buying is influenced by scarcity on flash sales and attitude toward flash sales. Vannisa et al. [9] added that the shopping enjoyment variable also influences this behavior.

Scarcity on flash sale is a situation created by the seller to show that the product and time in the flash sale program are limited, which is usually accompanied by attractive price offers [10]. Lamis et al. [8], Vannisa et al. [9], and Fathia & Vania [11] found that scarcity on flash sale has a positive and significant effect on impulse buying.

Shopping enjoyment, namely the comfort and happiness when shopping online, is also a cause of impulse buying. When shopping activities are carried out with a feeling of pleasure, observations of products will be more thorough and encourage unplanned purchases [12].

The results of research by Vannisa et al. [9], Renita & Astuti [13], and Dsilva & Nerry [14] confirm that shopping enjoyment has a significant effect on impulse buying.

Flash sales also create a positive consumer attitude towards the program, known as attitude toward flash sales. Consumers feel that this program provides benefits because they can buy quality products at low prices. Vannisa et al. [9], Renita & Astuti [13], Azizah & Indrawati [15], and Asadiyah & Vania [16] found that attitude toward flash sales has a positive effect on impulse buying.

Shopping enjoyment and attitude toward flash sale have also been proven as mediating variables between scarcity on flash sale and impulse buying. Research by Lamis et al. [8], Fathia & Vania [11], and Siregar & Firdausy [2] proves that both are able to bridge the influence of scarcity on impulse buying.

Based on this phenomenon, researchers are interested in modifying the model from Lamis et al. [8] by adding shopping enjoyment variables as mediation. This study is entitled: *The Effect of Scarcity on Flash Sale on Impulse Buying and Shopping Enjoyment with Attitude Toward Flash Sale as a Mediating Variable on Shopee Users.*

2. Literature Review

Scarcity on Flash Sale

Scarcity on flash sale is a promotional strategy that is oriented towards the limited products offered, both in terms of quantity and time. Scarcity is a condition that shows an imbalance between demand and supply due to the limited products offered. This strategy aims to create psychological pressure on consumers so that they are encouraged to make purchases immediately [17].

According to Wirtz and Lovelock, scarcity strategy is often done in the form of flash sale, where the seller offers products in limited quantities and relatively attractive prices [18]. The seller creates information that the products and time available in the flash sale program are very limited, encouraging consumers to scramble to get the product. This scarcity concept is developed into two indicators, namely limited quantity scarcity and limited time scarcity [19].

Previous research shows that scarcity in flash sales has a positive and significant effect on impulse buying, where the higher the perception of product limitations, the greater the tendency for consumers to make unplanned purchases [20].

Shopping Enjoyment

Shopping enjoyment is a pleasant experience felt by consumers when doing shopping activities, especially through online services. This feeling of happiness can encourage consumers to observe more detailed product information and tend to make purchases even though they were not planned in advance [21].

According to Keller, shopping enjoyment shows the quality of consumer feelings that feel happy in shopping activities, so that observations of products become more detailed and encourage the emergence of spontaneous buying desires [22]. Shopping enjoyment is measured through several indicators such as relaxation, continuity to visit website, entertaining, and favorable [23].

A number of studies confirm that shopping enjoyment has a positive and significant influence on impulse buying, both directly and as a mediating variable in the relationship between scarcity on flash sales and impulse buying [24].

Attitude Toward Flash Sale

Attitude toward flash sale refers to the positive attitude or assessment that consumers have towards flash sale programs conducted by online sellers. Flash sale programs are seen as profitable because they allow consumers to obtain quality products at low prices and for a limited time [25].

Kotler and Armstrong stated that attitude toward flash sale is formed from positive past experiences, as well as expectations that this program will continue in the future [26]. This positive attitude encourages consumers to actively wait and follow flash sale. Attitude toward flash sale is measured through indicators such as informativeness, pleasure and easy, and supporting program [27].

Previous research found that attitude toward flash sales has a direct influence on impulse buying, and is also able to be a mediating variable between scarcity on flash sales and impulse buying [28].

Impulsive Buying

Impulse buying is the act of buying a product without prior planning, driven by sudden needs and emotional urges [29]. Consumers who make impulse purchases do not consider rational aspects such as price or long-term needs, but rather because of visual temptation, promotions, or mood at that time [30].

According to Schiffman and Kanuk, impulse buying can occur because of information and promotions that are considered interesting, so that consumers make spontaneous purchases [31]. Indicators of impulse buying include spontaneously, unplanned, not initially want to buy, and not initially intend to buy [32].

The results of the study show that impulse buying is very relevant in the context of flash sales and e-commerce, because the two main triggers are time constraints and a pleasant shopping experience [33].

3. Method

This type of research is quantitative research that aims to explain the relationship between variables statistically. This research was conducted using a causal associative approach, namely to see the influence or causal relationship between variables in the established model. The data analysis technique used is *Structural Equation Modeling* (SEM) based on *Partial Least Squares* (PLS) using the help of SmartPLS 4.0 software. This method is suitable for testing the relationship between latent constructs and is able to accommodate complex models and data that is not normally distributed [34].

This study was conducted on active users of the Shopee application who had participated in the flash sale program. The research period was carried out for three months, from March to May 2024, and the location of data collection was in Padang City. The population in this study were all Shopee users in Padang City who had participated in the flash sale. Because the population is not known for certain, the sampling technique used was purposive sampling, which is a sampling technique based on certain criteria. The criteria used are: (1) aged 18–35 years, (2) active Shopee users, and (3) have participated in the Shopee flash sale program. The number of samples determined in this study was 160 respondents. Determination of the number of samples refers to the opinion of Hair et al. [35], that the minimum number of samples is five times the number of indicators in the model, and it is recommended to be 5–10 times the number of indicators.

Data collection was conducted using a questionnaire distributed online to respondents who met the criteria. The questionnaire was compiled in the form of a Likert scale of 1–5 which was used to measure the research variables, namely Scarcity on Flash Sale, Shopping Enjoyment, Attitude Toward Flash Sale, and Impulse Buying. The questionnaire has been tested for validity and reliability through an initial test before being widely distributed.

Data analysis techniques are carried out through two stages: outer model testing and inner model testing. The outer model aims to evaluate the validity and reliability of indicators against latent constructs, with measurements through loading factor values, Average Variance Extracted (AVE), Cronbach's Alpha, and Composite Reliability. While the inner model is used to test the relationship between latent variables by looking at the R-square, f-square, Q-square values, and hypothesis testing using T-statistic and P-value [36].

4. Results and Discussion

Analysis of Research Results

Data analysis was carried out in two stages, namely testing the outer model and inner model using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. Initial evaluation of the outer model showed that all variable indicators in this study had outer loading values above 0.70, which indicated that convergent validity had been met. However, there were three indicators, namely OSE1, OSE2, and OSE3, which had values below 0.70, so these indicators were removed because they did not fit the model.

Table 2. Cross Loading Results

	Attitude Toward Flash Sale	*Impulse Buying*	*Scarcity* on *Flash Sale*	*Shopping Enjoyment*
ATFS2	0.796	0.512	0.631	0.639
ATFS3	0.878	0.578	0.740	0.746
ATFS4	0.882	0.449	0.738	0.683
ATFS5	0.901	0.459	0.763	0.700
ATFS6	0.831	0.507	0.735	0.680
ATFS7	0.857	0.536	0.795	0.760
ATFS8	0.871	0.489	0.811	0.718
IB1	0.524	0.895	0.507	0.616
IB2	0.415	0.865	0.422	0.526
IB3	0.484	0.909	0.504	0.621
IB4	0.592	0.819	0.592	0.702
SE1	0.727	0.525	0.838	0.764
SE2	0.781	0.521	0.871	0.820
SE4	0.591	0.607	0.561	0.788
SE5	0.555	0.531	0.546	0.788
SE6	0.688	0.674	0.680	0.887
SE7	0.651	0.662	0.685	0.862
SOFS1	0.823	0.479	0.835	0.753
SOFS2	0.595	0.364	0.721	0.655
SOFS3	0.612	0.439	0.797	0.630
SOFS4	0.759	0.510	0.911	0.746
SOFS5	0.771	0.549	0.911	0.780
SOFS6	0.813	0.580	0.923	0.812
SOFS7	0.779	0.517	0.897	0.764
SOFS8	0.786	0.584	0.870	0.780

Discriminant validity has also been tested through cross loading values and the Fornell-Larcker method, which shows that each construct has good discriminant validity. Reliability tests using Cronbach's Alpha and Composite Reliability values show results >0.70 on all variables, which means the construct has high internal reliability.

Furthermore, in testing the inner model, a determination coefficient (R^2) analysis was carried out to see how much the exogenous variables can influence the endogenous variables in the model.

Table 3. Results of the Determination Coefficient (R2)

	R-square	*R-square adjusted*
Attitude Toward Flash Sale	0.754	0.752
Impulse Buying	0.518	0.506
Shopping Enjoyment	0.745	0.743

The R^2 value of the Attitude Toward Flash Sale variable is 0.754, meaning that the variable can be explained by Scarcity on Flash Sale by 75.4%. The Shopping Enjoyment variable has an R^2 of 0.745, meaning that it can be explained by Scarcity on Flash Sale by 74.5%. Meanwhile, Impulse Buying has an R^2 of 0.518, meaning that 51.8% of the variation can be explained by the Attitude Toward Flash Sale, Scarcity on Flash Sale, and Shopping Enjoyment variables.

To see the predictive ability of the model further, a Q-square analysis was conducted. The Q² values of the Attitude Toward Flash Sale, Shopping Enjoyment, and Impulse Buying variables were 0.551, 0.477, and 0.369, respectively. These values are above the threshold of 0.30, indicating that the model has good predictive quality.

Table 4. Results of the Determination Coefficient (R2)

	Q-square
Attitude towards flash sale	0.551
Impulse buying	0.369
Shopping enjoyment	0.477

The next stage is direct effect hypothesis testing using the bootstrapping method. The test results show that Scarcity on Flash Sale has a positive and significant effect on Attitude Toward Flash Sale ($\beta = 0.868$, $p < 0.001$), and also on Shopping Enjoyment ($\beta = 0.863$, $p < 0.001$). Shopping Enjoyment has a significant effect on Impulse Buying ($\beta = 0.792$, $p < 0.001$), while Attitude Toward Flash Sale does not have a significant effect on Impulse Buying ($p = 0.571$). In addition, Scarcity on Flash Sale also does not have a direct effect on Impulse Buying ($p = 0.426$).

Table 5. Hypothesis Testing Results (Direct Effect)

	Original sample	T statistics	P values	Results
Attitude Toward Flash Sale -> Impulse Buying	0.078	0.567	0.571	Not Significant
Scarcity on Flash Sale -> Attitude Toward Flash Sale	0.868	31,568	0.000	Significant
Scarcity on Flash Sale -> Impulse Buying	-0.162	0.796	0.426	Not Significant
Scarcity on Flash Sale -> Shopping Enjoyment	0.863	41,431	0.000	Significant
Shopping Enjoyment -> Impulse Buying	0.792	4.766	0.000	Significant

Meanwhile, the indirect effect test shows that Scarcity on Flash Sale → Attitude Toward Flash Sale → Impulse Buying is not significant ($p = 0.574$), but Scarcity on Flash Sale → Shopping Enjoyment → Impulse Buying is significant ($\beta = 0.684$, $p < 0.001$), which indicates the mediating role of Shopping Enjoyment.

Table 6. Hypothesis Testing Results (Direct Effect)

	Original sample	T statistics	P values	Results
Scarcity on Flash sale -> Attitude toward flash sale -> Impulse buying	0.068	0.563	0.574	Not Significant
Scarcity on Flash sale -> Shopping enjoyment -> Impulse buying	0.684	4,667	0.000	Significant

Discussion

The results of the study indicate that *the Scarcity on Flash Sale variable* has a positive and significant effect on *Attitude Toward Flash Sale* . These results support previous studies by Lamis et al. [8], Fathia and Vania [11], and Siregar and Firdausy [2] which state that the perception of limited time and number of products in a flash sale program can encourage consumers to develop a positive attitude towards the program. This means that the higher the consumer's perception of limited time and number of products, the higher the consumer's positive attitude towards the flash sale program.

In addition, *the Scarcity on Flash Sale variable* also has a positive and significant effect on *Shopping Enjoyment* . This is in accordance with the results of research from Vannisa et al. [9]

and Renita & Astuti [13] which states that the perception of scarcity can increase the pleasure of shopping. When consumers realize that the products offered are only available in limited quantities and time, they feel a sense of challenge and satisfaction when they succeed in getting the product, which ultimately creates its own pleasure in the online shopping process.

Meanwhile, the influence of *Attitude Toward Flash Sale* on *Impulse Buying* in this study showed insignificant results. This result is different from the research of Vannisa et al. [9], Azizah & Indrawati [15], and Asadiyah & Vania [16] which previously stated that a positive attitude towards flash sales can encourage impulsive buying. This discrepancy is suspected because even though consumers have a positive attitude towards flash sales, they still consider other aspects such as needs and financial conditions before making a purchase. A positive attitude towards the program does not always mean a behavioral commitment to buy impulsively.

the Shopping Enjoyment variable shows a significant influence on *Impulse Buying* . This finding is in line with the research of Dsilva & Nerry [14], which emphasizes that the feeling of pleasure during the shopping process can trigger unplanned purchasing actions. Consumers who feel happy while shopping tend to observe more products, linger in the application, and are finally encouraged to buy products outside the planned shopping list.

In testing the direct influence between *Scarcity on Flash Sale* on *Impulse Buying* , the results were not significant. This finding shows that scarcity does not necessarily encourage consumers to immediately buy products impulsively. This can happen because of rational considerations from consumers or because of other factors such as price and needs that are not relevant at that time. This result is not in line with previous research by Lamis et al. [8], which found that scarcity has a direct influence on impulse buying.

However, the indirect effect test shows that *Scarcity on Flash Sale* has a significant effect on *Impulse Buying* through *Shopping Enjoyment* . This proves that shopping enjoyment is an important mediation in bridging the effect of scarcity on impulse buying. Consumers who feel the scarcity of a product will experience pleasure when shopping and are ultimately driven to make impulsive purchases. This result is in line with the research of Fathia & Vania [11] which states that pleasure in shopping is an important pathway in forming spontaneous purchasing behavior.

Meanwhile, the indirect effect of *Scarcity on Flash Sale* on *Impulse Buying* through *Attitude Toward Flash Sale* is proven to be insignificant. This shows that although consumers have a positive attitude towards flash sale, the attitude is not strong enough to encourage them to make impulsive purchases without other factors such as emotional drive or a pleasant shopping experience.

Overall, the results of this study indicate that *Shopping Enjoyment* plays a significant partial mediation role in the relationship between *Scarcity on Flash Sale* and *Impulse Buying* , while *Attitude Toward Flash Sale* does not have a significant mediation role in this model.

5. Conclusion

Based on the results of the research and discussion that have been conducted, it can be concluded that *Scarcity on Flash Sale* has a positive and significant effect on *Attitude Toward Flash Sale* and *Shopping Enjoyment* . However, *Scarcity on Flash Sale* does not have a direct effect on *Impulse Buying* . *Shopping Enjoyment* is proven to have a positive and significant effect on *Impulse Buying* , while *Attitude Toward Flash Sale* does not have a significant effect on *Impulse Buying* . In the indirect effect test, *Scarcity on Flash Sale* has a significant effect on *Impulse Buying* through *Shopping Enjoyment* , but not through *Attitude Toward Flash Sale* . These results indicate that *Shopping Enjoyment* is an effective mediation in bridging the effect of scarcity on impulsive buying, while *Attitude Toward Flash Sale* does not have a strong mediation role.

Based on these findings, researchers suggest that Shopee and business actors who utilize the platform can continue to improve the enjoyable experience for users when shopping, especially during flash sales. This can be done by presenting an attractive application interface, responsive customer service, and a challenging but fair flash sale mechanism. In addition, sellers need to strengthen the perception of scarcity strategically without giving the impression of being manipulative, in order to encourage consumers to respond positively and continue to enjoy the shopping process. Finally, it is important to note that building a positive attitude towards promotional programs such as flash sales is not necessarily enough to trigger impulsive buying actions without support from emotional aspects and the overall user experience.

International Journal of Economics and Management Research 2025 (December), vol. 3, no. 3, Utami, et al.

358 from 358

Reference

[1]. Asadiyah & R. Vania. 2022. "Sikap Konsumen terhadap Flash Sale dan Dampaknya." Jurnal Pemasaran dan Inovasi, 8(2): 45–51.

[2]. Fathia & R. Vania. 2021. "Peran Shopping Enjoyment dalam Pembelian Impulsif." Jurnal Pemasaran Digital, 6(2): 67–75.

[3]. H. Pratiwi. 2022. "Perkembangan E-commerce di Indonesia." Jurnal Teknologi dan Informatika, 5(1): 34–41.

[4]. Hidayat. 2021. "Scarcity on Flash Sale dan Dampaknya terhadap Impulse Buying." Jurnal Marketing Insight, 13(2): 101–108.

[5]. M. Sari & R. H. Anwar. 2021. "Shopping Enjoyment sebagai Mediasi." Jurnal Psikologi Konsumen Indonesia, 6(3): 115–124.

[6]. D. Dsilva & N. Nerry. 2021. "Impulsive Buying Behavior in Flash Sale Context." International Journal of Business Research, 19(3): 22–30.

[7]. D. H. Solomon. 2017. Consumer Behavior: Buying, Having, and Being. 12th ed. Pearson.

[8]. D. Santosa. 2021. "Indikator Pembelian Impulsif." Jurnal Ekonomi Konsumen, 6(1): 21–29.

[9]. F. Wijaya. 2020. "Kesenangan Belanja dan Perilaku Konsumen." Jurnal Ekonomi Digital, 7(1): 63–70.

[10]. Ghozali & L. H. Latan. 2015. Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan SmartPLS 3. Semarang: Badan Penerbit Universitas Diponegoro.

[11]. J. Cialdini. 2007. Influence: The Psychology of Persuasion. Harper Business.

[12]. J. F. Hair, G. T. M. Hult, C. M. Ringle, & M. Sarstedt. 2017. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). 2nd ed. Thousand Oaks: SAGE.

[13]. K. L. Keller. 2013. Strategic Brand Management. 4th ed. Pearson Education.

[14]. Kementerian Komunikasi dan Informatika RI. 2024. "Data Pengguna E-commerce Indonesia Tahun 2020–2024."

[15]. L. Azizah & T. Indrawati. 2021. "Attitude Toward Flash Sale dan Dampaknya pada Loyalitas." Jurnal Manajemen Strategis, 10(1): 78–85.

[16]. L. G. Schiffman & L. L. Kanuk. 2010. Consumer Behavior. 10th ed. Pearson Education.

[17]. L. T. Mahadewi. 2021. "Aspek Emosional dalam Pembelian Impulsif." Jurnal Psikologi, 9(1): 44–51.

[18]. M. A. Ghani. 2020. "Scarcity Marketing dan Psikologi Konsumen." Jurnal Ilmu Manajemen, 11(1): 19–25.

[19]. M. Anggraeni. 2022. "Impulse Buying dan E-commerce." Jurnal Inovasi Ekonomi, 4(3): 99–106.

[20]. M. Sarstedt, C. Ringle, & J. Hair. 2014. "Partial Least Squares Structural Equation Modeling." Journal of Marketing Theory and Practice, 19(2): 139–152.

[21]. N. Vannisa, A. Wibowo, & R. P. Putra. 2022. "Shopping Enjoyment dan Attitude sebagai Mediasi dalam Flash Sale." Jurnal Ilmu Ekonomi dan Bisnis, 9(1): 44–52.

[22]. P. Kotler & G. Amstrong. 2018. Principles of Marketing. 17th ed. Pearson Education.

[23]. P. Kotler & K. L. Keller. 2016. Marketing Management. 15th ed. Pearson Education.

[24]. R. Adi & M. Khairunnisa. 2021. "Sikap terhadap Flash Sale dan Pembelian Impulsif." Jurnal Ilmu Manajemen dan Akuntansi Terapan, 10(2): 72–80.

[25]. R. Febrilia, F. Anggraini, & D. C. Wibowo. 2022. "Pengaruh Promosi dan Harga Terhadap Impulse Buying." Jurnal Riset Ekonomi dan Manajemen, 4(2): 89–96.

[26]. R. Siregar & A. Firdausy. 2021. "Strategi Scarcity Marketing terhadap Impulse Buying Konsumen." Jurnal Manajemen dan Bisnis, 10(2): 58–66.

[27]. S. A. Lamis, A. Firdausy, & R. Lestari. 2021. "Pengaruh Scarcity on Flash Sale Terhadap Impulse Buying dengan Mediasi Attitude." Jurnal Manajemen Indonesia, 8(3): 112–121.

[28]. S. D. Andriani. 2021. "Sejarah Perkembangan Marketplace di Indonesia." Jurnal Bisnis Digital, 7(1): 23–30.

[29]. S. Renita & R. Astuti. 2022. "Pengaruh Shopping Enjoyment terhadap Perilaku Konsumen." Jurnal Psikologi Konsumen, 5(2): 39–47.

[30]. S. Y. Rahmawati. 2021. "Limited Time dan Limited Quantity dalam Flash Sale." Jurnal Bisnis Elektronik, 4(1): 30–38.

[31]. T. Hartanto. 2020. "Shopping Enjoyment dan Website Visit Continuity." Jurnal Sistem Informasi, 11(2): 87–93.

[32]. Top Brand. 2024. "Top Brand Index E-Commerce 2024." [Online]. Available: https://www.topbrand-award.com

[33]. Y. Mulyadi. 2021. "Kepuasan dan Sikap terhadap Flash Sale." Jurnal Komunikasi Pemasaran, 8(1): 59–66.