SHOPEE VS TIKTOK SHOP? INDEPENDENT SAMPLE T-TEST ON PURCHASE DECISION

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ABSTRACT

The purpose of this research is to determine the comparative level of purchase decision between Shopee and TikTok Shop among student of Catholic University of De La Salle Manado. This research was carried out using IBM Statistical Package for Social Sciences (SPSS) to analyzed the data with data analysis method of Independent Sample T-Test. Data collected using questionnaires distributed among student of Catholic University of De La Salle Manado. Based on the research conducted, the mean difference value is negative which means that the purchase decision using Shopee is lower than purchase decision using TikTok Shop. Data variances between Shopee and TikTok Shop is homogenic or similar and there is no significant difference between Shopee and TikTok Shop among the student of Catholic University of De La Salle Manado. It is recommended for business to focus on using TikTok Shop as the platform for e-commerce, considering the platform's user-friendly and famous among student of Catholic University of De La Salle Manado. Even though, the usage of Shopee is still okay, considering there is no significant difference in purchase decision of student between Shopee and TikTok Shop.

Keywords: Purchase Decision, TikTok Shop, Shopee.

INTRODUCTION

The advancement of digitalization is particularly evident in Indonesia. The increasing digital literacy among various segments of society has facilitated the widespread adoption and growth of digital technologies across all levels of corporate and community activities. Consequently, this digital transformation has significantly altered lifestyles, shifting from manual processes to more instantaneous solutions (Ikasari, 2020). This shift in lifestyle within the community is a direct result of the ongoing digitalization process (Wahab & Junaedi, 2021). Indonesia is among the 10 Asian countries with the highest internet usage (Masse, 2017). The Indonesian Internet Service Users Association (Prasetiyo et al., 2024) said that currently around 77% of Indonesia's population already uses the internet. Before the pandemic, the number of internet users in Indonesia was only 175 million, but after the pandemic, the number of internet users in Indonesia has increased, which requires people to access anything from home resulted in a jump to 210 million out of a total population of 272,682,600 Indonesians in 2021, meaning there is an addition of about 35 million people.

Figure 1. Internet User in Indonesia
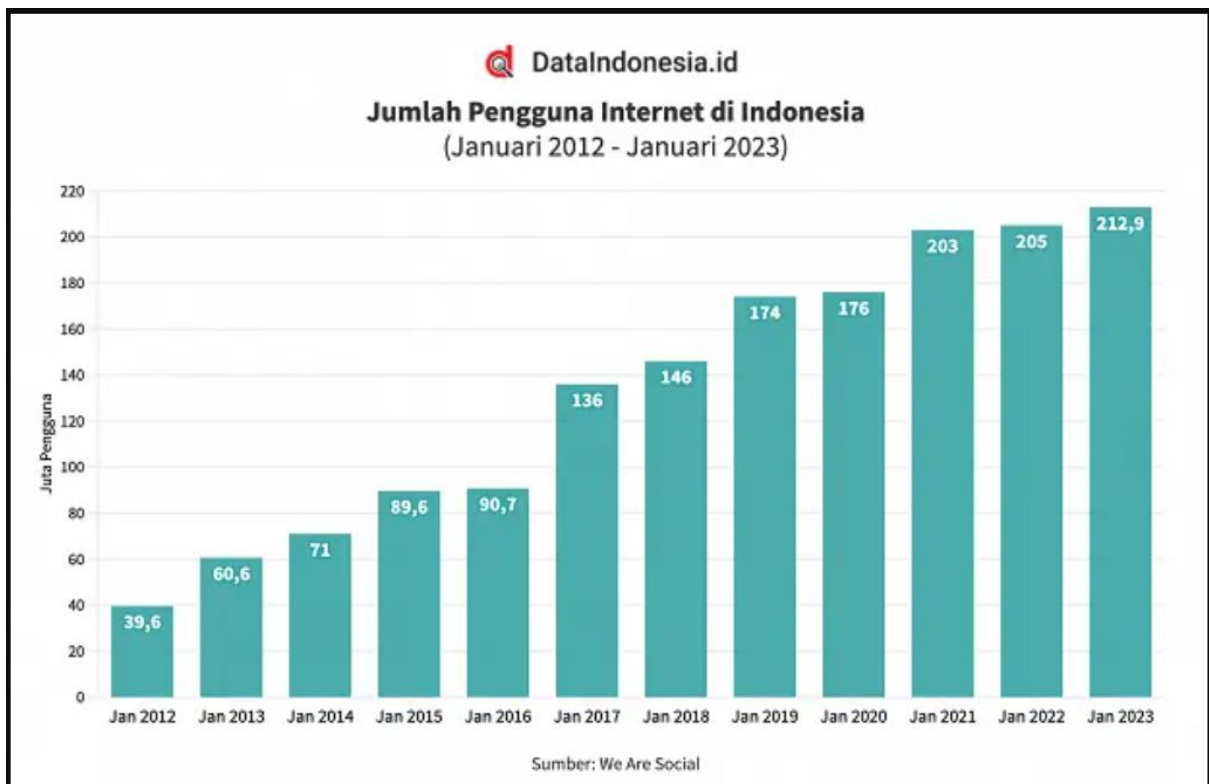
Source: Asosiasi Penyelenggara Jasa Internet Indonesia (2023)

E-commerce is defined as an arrangement of activities related to transactions of goods or services within the country and beyond national borders with the aim of transferring rights to goods or services to obtain rewards or compensation through a series of electronic devices and procedures (Rahman et al., 2022). Not inferior to face-to-face sales, e-commerce also provides many benefits for its users, especially for consumers. One of the benefits is that it can save time when shopping. By using e-commerce, consumers can save time when shopping because they don't have to bother going to the store to get what they need because they only need to access e-commerce through

digital devices at home. Consumers can also shop at any time and there is no time limit because e-commerce is always available at any time, making it easier for consumers when they want to buy their needs at any time. Consumers can also compare products more accurately. The large selection of stores that sell the same and similar products will make it easier for consumers to compare the price or quality of the items they are looking for. So that the goods purchased can be as desired.

Of the many e-commerce that have sprung up in Indonesia, the TikTok application takes this business opportunity by becoming one of the digital marketing media that is also widely used by business people. TikTok is a social media and music video application that emerged in September 2016 by Toutiao founder Zhang Yiming from China. TikTok provides a place for its users as a medium to express themselves through videos that they create themselves (Abdulhakim, 2019). However, due to the content in it, the Ministry of Communication and Information Technology (KOMINFO) had to block the application (Direktorat Jenderal Pemasyarakatan, 2021). In April 2021, TikTok began to develop itself into e-commerce and also became a promotional media. TikTok is no longer just dancing content but there are many positive things that users can get (Simanjorang & Nawawi, 2022). TikTok reappeared with a new look and attracted public interest at the same time as the Covid-19 outbreak in Indonesia which resulted in people having to stay at home for a long time. From the emergence of the TikTok application until April 2022, TikTok Indonesia's active users reached 99.1 million people. That number is the second largest in the world after the United States. The United States as the highest TikTok user reached 136.4 million people. While Brazil is in third place with 73.6 TikTok users (Rizaty, 2022).

TikTok Shop is a new feature developed by Tiktok whose function is used for buying and selling transactions that can be done directly in the Tiktok application. At Tiktok Shop buyers can shop directly without having to visit the website provided by the store or even download another application. Starting from the product catalogue, chat service with the seller to payments made directly in the TikTok application.

Another leading e-commerce platform is Shopee. Shopee is an online marketplace that mediates between buyers and sellers to facilitate online buying and selling transactions through online devices or mobile phones. Shopee is the most visited marketplace with an average of 216 million visits and also generates the highest turnover of 65% located above other marketplaces. In the purchase decision process, there are four factors that can influence consumer behaviour, namely personal, psychological, cultural, and social factors (Nurhalim, 2022).

Shopee was founded by Forrest Li in 2015. Shopee has succeeded in becoming one of the largest online shopping sites in Indonesia, as seen from the many awards it has received, one of which is the Selular Award 2021 as 'Best E-Commerce' (Kompas.com, 2021). Shopee provides a variety of products, electricity bill payments, water, and others. Shopee also provides Shopeepay as a payment transaction, and Shopee supermarket. Shopee recently presented the Shopee food service where food is delivered through the Shopee application.

Consumers as the main focus of these two platforms, is the final decision maker in making purchase. Economic decision is the main reason of conducting this research, to provide overview on which platform is more preferred by consumers.

THEORETICAL FRAMEWORK AND HYPOTHESES

Purchase Decision

Purchase Decision is an integration process that combines knowledge attitudes to evaluate two or more alternative behaviours, and choose one of them (Nugroho, 2018). Purchase Decision is the next stage after the intention or desire to buy. Purchase decisions will occur if the desire to buy or purchase interest has been collected. Purchase decisions are one part of consumer behaviour. Consumer behaviour is an action that is directly involved in obtaining, determining products and services, including the decision-making process that precedes and follows these actions (Setyaningsih, 2021).

Purchase Decision Indicators:

According to Kotler & Keller (2021) there are several indicators in purchasing decisions as follows:

- The existence of a product stability, a purchasing decision can also be made by consumers by looking for this information.
- There are buying habits, getting recommendations from suppliers who are important information, that an indicator of a purchase decision is very interesting.
- Recommendations from others, can convey information from other people so that they can be interested in making this purchase.
- The existence of repeat purchases, this is very important in your business, so there is a reason then consumers also repurchase a product.

RESEARCH METHOD

This research is a quantitative descriptive study that uses data on Shopee and TikTok Shop purchasing decisions from students who have made purchases on the two platforms. The sampling technique used in this research is purposive sampling, considering that the respondent must have made a purchase on the Shopee or TikTok Shop platform.

The total number of samples in this study was determined using the Lemeshow formula due to an unknown or infinite population. The following is the calculation of the sample size based on the Lemeshow formula:

$$n = \frac{Z^2 1 - \alpha/2 P(1 - P)}{d^2}$$

Description:

n = Sample Size

Z = Z Score on confidence level 95% = 1,96

P = Maximum estimation = 0,5

d = Alpha (0,10) or *sampling error* = 10%

Based on the formula above, the total sample used in this research could be determined below:

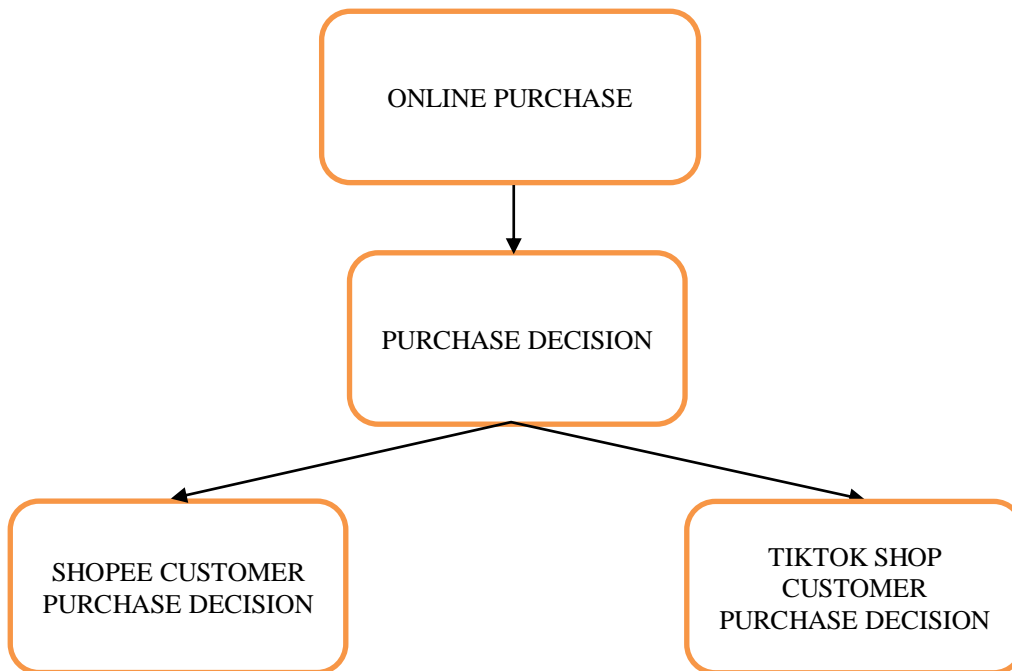$$n = \frac{1,96^2 \cdot 0,5/2 \cdot 0,5(1 - 0,5)}{0,1^2}$$

$$n = \frac{3,8416 \times 0,25}{0,01}$$

$$n = 96,04 = 100$$

Based on the calculation above, the minimum sample used in this research is 96 respondents, and researcher optimized the sample up to 146 respondents.

The research framework of this research is shown below:

Figure 2. Research Framework

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        ┌─────────────────────┐
        │   ONLINE PURCHASE   │
        └─────────────────────┘
                  │
                  ▼
        ┌─────────────────────┐
        │  PURCHASE DECISION  │
        └─────────────────────┘
            ╱             ╲
           ▼               ▼
┌──────────────────┐  ┌──────────────────┐
│ SHOPEE CUSTOMER  │  │  TIKTOK SHOP     │
│ PURCHASE         │  │  CUSTOMER        │
│ DECISION         │  │ PURCHASE DECISION│
└──────────────────┘  └──────────────────┘
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RESULT AND DISCUSSION

Respondents Description

The total population in this research are students who already made a purchase using e-commerce platform which are Shopee and/or TikTok Shop.

Figure 3. Respondents Description
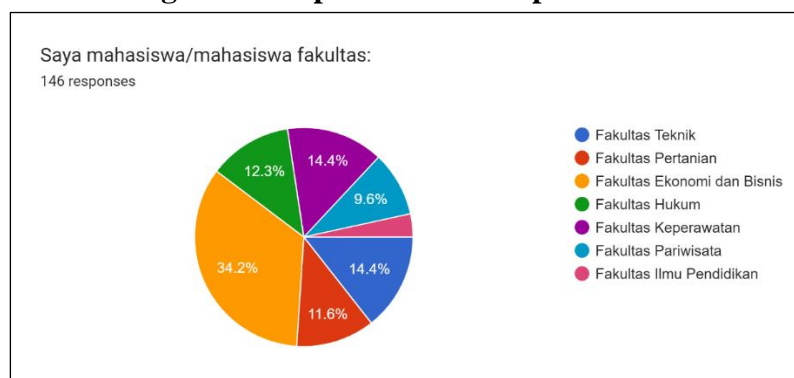
Source: Data Processed, 2024

Based on the figure above, we can see the percentage of respondents is dominated by student from Faculty of Economics and Business with the total of 50 responses, or up to 34.2%. Next, there are two faculties, which are Faculty of Nurseries and Faculty of Engineering with the total of 21 responses, or up to 14.4%. Next, Faculty of Law covers the total of 18 responses, or up to 12.3%. Faculty of Tourism got the next position with 14 responses, or 9.6%. At the last position, Faculty of Education got 5 responses or 3.4%.

Figure 4. Respondent's Platform Used
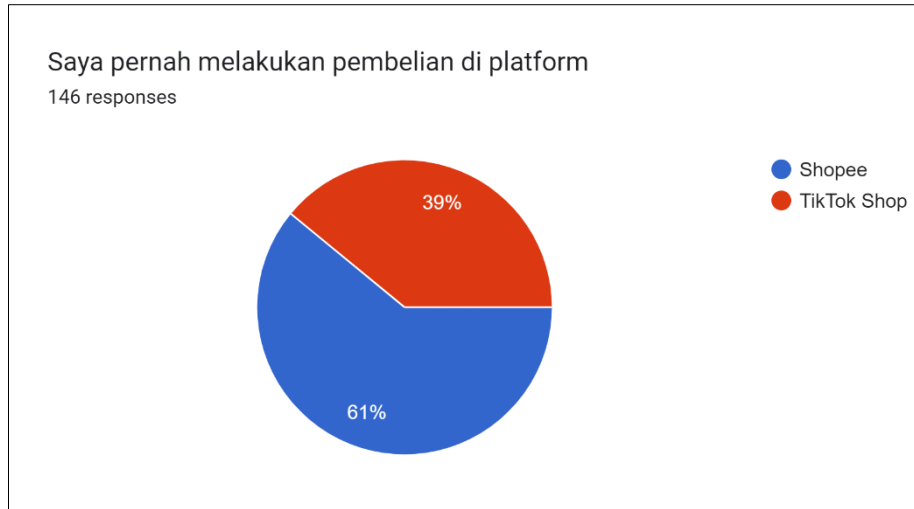
Source: Data Processed, 2024

Independent Samples T-Test

Analysis technique used in this research is Independent Samples T-Test. Independent samples t-test evaluates the difference between the means of two independent or unrelated groups. It evaluates whether the means for two independent groups are significantly different from each other. The independent samples t-test is commonly referred to as a between-groups design and can also be used to analyze a control and experimental group. A t-test is any statistical hypothesis test in which the test statistic follows a student's t distribution when the null hypothesis is supported. It is most commonly used when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistic follows a student's t distribution. Independent samples t-test consists of several test result:

- Descriptive Statistics is a statistical test used to provide information about the characteristics of the main research variables. Descriptive statistics provide an overview or description of the data seen by the average (mean, standard deviation, maximum and minimum).

- T-test is a theory in statistics that is used to test whether a certain value (given as a comparison) is significantly different or not from the average of a sample. The t-test can only use quantitative data.

- Independent sample t-test. The type of T-test that will be used is the Independent Sample T-test. Through this test, the significance of the difference in the means of unrelated sample groups can be determined.

- The basis for decision making in the independent sample t-test in this research is as follows:

  - If the value of Sig. (2-tailed) is more than (>) 0.05, there is no significant difference between the purchase decision in using e-commerce Shopee and TikTok Shop.

  - If the value of Sig. (2-tailed) is less than (<) 0.05, there is a significant difference between the purchase decision in using e-commerce Shoppe and TikTok Shop of student of Catholic University of De La Salle Manado.

Table 1. Respondents Statistics Descriptive

Group Statistics

	Platform	N	Mean	Std. Deviation	Std. Error Mean
Keputusan Pembelian	SHOPEE	89	36.90	8.806	.933
	TIKTOK SHOP	57	37.44	8.910	1.180

Source: Data Processed, 2024

From table above, we can see the total respondents in this research is 146 respondents, consists of 89 respondents made purchase using e-commerce Shopee and 57 respondents made purchase using e-commerce TikTok Shop. The mean of Shopee is 36.90 which is lower than TikTok Shop that up to 37.44.

Table 2. Independent Sample T-Test Result

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Keputusan Pembelian	Equal variances assumed	.009	.926	-.360	144	.720	-.540	1.501	-3.506	2.427
	Equal variances not assumed			-.359	118.473	.720	-.540	1.505	-3.519	2.440

Source: Data Processed, 2024

Based on table above, we can see that the Sig. Levene's Test for Equality of Variances is 0.926 > 0.05, so we can conclude that data variances between Shopee and TikTok Shop is homogenic or similar. This result will put our interpretation of output table in independent sample t-test is based on the value on "Equal Variances Assumed" table.

Based on the Equal Variances Assumed table, we can see that the value of Sig. (2-tailed) is 0.720 > 0.05, so we can conclude that there is no significant difference between Shopee and TikTok Shop among the student of Catholic University of De La Salle Manado.

The mean difference value which is -0.540 means that the Purchase Decision of Shopee is lower than the Purchase Decision of TikTok Shop.

Discussion

The result of this research shows that the mean of TikTok Shop is higher that Shopee. This would mean that the user of TikTok Shop experiences a better shopping experience that made them want to make a purchase using TikTok Shop. Even though from this result we can conclude that the difference is not significant, but this would mean that TikTok Shop is providing the buyer with better purchasing experience.

Based on the researcher observation, there are several factors that could cause this phenomenon:

1. TikTok Shop is more user-friendly and suit the young people well because they could use the same apps for social media too. The multi-tasking is better when you could multi-task from the same space.

2. The object of this research, the students of Catholic University of De La Salle Manado are doing their activities around Manado City area. A few months ago, there are several bad and negative news and cases related to Shopee Express as the shipment service by Shopee that cause a lot of backlashes to Shopee. These incidents lead to negative brand image, and finally affect customer image is using Shopee as their e-commerce.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the research conducted, the mean difference value is negative which means that the purchase decision using Shopee is lower than purchase decision using TikTok Shop. Data variances between Shopee and TikTok Shop is homogenic or similar and there is no significant difference between Shopee and TikTok Shop among the student of Catholic University of De La Salle Manado.

Recommendation

Based on the result of this research, it is recommended for business to focus on using TikTok Shop as the platform for e-commerce, considering the platform's user-friendly and famous among student of Catholic University of De La Salle Manado. Even though, the usage of Shopee is still okay, considering there is no significant difference in purchase decision of student between Shopee and TikTok Shop.

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