The Influence of Online Shopping Convenience on Consumer Loyalty in Social E-Commerce: A Study of Tiktok Shop Using Linear Regression Methodology

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Abstract, Purposes - The primary purpose of this study is to examine the influence of online shopping convenience on consumer loyalty within the social commerce platform TikTok Shop. The research seeks to explore how ease of transactions and user interface impacts consumer retention and satisfaction in the digital marketplace. Methodology - A quantitative research design was employed, utilizing a survey method to collect data from 77 respondents who frequently use TikTok Shop. The survey measured the convenience of online shopping as the independent variable and consumer loyalty as the dependent variable. Data were analyzed using multiple linear regression to determine the significance and strength of the relationship between the two variables. Findings - The results indicate a significant positive relationship between online shopping convenience and consumer loyalty in TikTok Shop. The linear regression model reveals that increased shopping convenience leads to higher consumer loyalty, with the model explaining 59.3% of the variance in loyalty. Features such as ease of navigation and a user-friendly interface were identified as key factors in enhancing consumer retention. Novelty - This study contributes to the growing literature on social commerce by specifically focusing on the convenience of online shopping as a predictor of consumer loyalty in the context of TikTok Shop, an area that has been relatively underexplored in prior research. Research Implications - The findings suggest that e-commerce platforms, particularly social commerce like TikTok Shop, should prioritize optimizing the shopping experience to improve consumer loyalty. This study provides practical insights for businesses to enhance user engagement and retention through improved convenience features.

Keywords: Social commerce, online shopping convenience, consumer loyalty, TikTok Shop, digital consumer behavior, e-commerce retention strategies.

1. INTRODUCTION

The rapid evolution of digital technology has significantly altered the retail landscape, shifting consumer behavior towards online shopping. Social commerce has emerged as a novel trend, blending social media and e-commerce to facilitate both social interaction and commercial transactions. One prominent example of social commerce in Indonesia is TikTok Shop, which leverages live streaming and short videos to engage potential buyers. This personalizes the shopping experience by enabling direct interaction between sellers and consumers. Despite the growing body of research on e-commerce, the role of shopping convenience in fostering consumer loyalty in social commerce environments like TikTok Shop remains underexplored. This study aims to bridge that gap by examining the effect of online shopping convenience on consumer loyalty.

2. LITERATURE REVIEW

Several studies have explored various factors influencing consumer behavior in e-commerce and social commerce, specifically within the context of TikTok Shop. According to

Aisyah et al. (2022), service quality plays a significant role in achieving customer satisfaction. Their study found that when consumers receive services that meet their expectations, it positively influences their satisfaction. The purpose of their research was to analyze the impact of TikTok Shop's service quality on customer satisfaction, and the results indicated a strong positive and significant relationship between service quality and customer satisfaction, emphasizing the importance of excellent service in e-commerce.

Similarly, Ritonga et al. (2023) investigated the effects of product quality, price, and service security on customer satisfaction in TikTok Shop. Using a survey of 100 respondents and employing multiple linear regression, their study found that while product quality did not significantly impact customer satisfaction, price and service security did. This highlights the importance of considering security and competitive pricing in retaining customers.

Another study by Nurchasanah et al. (2023) examined the influence of product quality, price, and promotion on purchasing decisions in the TikTok Shop app. Utilizing a survey of 75 respondents, the researchers found that product quality partially influences purchasing decisions, while customers' expectations of TikTok Shop were significantly related to their purchasing decisions and satisfaction. This research underscores the importance of aligning product quality with consumer expectations to enhance decision-making and satisfaction.

Rahmawati (2023) explored the effects of trust, product quality, and shipping on consumer purchase intention in TikTok Shop, collecting data from 156 respondents through a Google Forms survey. Her findings revealed that while product quality significantly influenced purchase intention, trust and shipping had a positive but non-significant effect. This suggests that while consumers prioritize the quality of products, other factors like trust and logistics play a supplementary role.

Further, Widyastuti et al. (2023) investigated the impact of perceived ease of use and service quality on the decision to use TikTok Shop among students at STIAMI Institute. Their study showed that both ease of use and service quality had significant effects on consumers' decisions to use TikTok Shop, with perceived ease of use accounting for 54.6% of the variance and service quality explaining 47.8%. Together, these factors significantly influenced consumer decision-making, indicating that social commerce platforms must prioritize user-friendly features and high-quality services to appeal to younger generations.

Lastly, Umami et al. (2023) examined the influence of advertisements and ease of shopping on purchase intention among university students using TikTok. Their research found that both advertising and shopping convenience had a significant and positive effect on purchase intention, with advertising accounting for 48.4% of the influence on consumer

behavior. These results suggest that effective advertising and a seamless shopping experience are critical to driving consumer engagement and purchase behavior in digital environments. Collectively, these studies demonstrate the multifaceted factors—ranging from service quality and ease of use to advertising and product quality—that influence consumer satisfaction, loyalty, and purchase decisions in e-commerce and social commerce platforms like TikTok Shop.

The research titled "Analysis of TikTok Application Utilization to Increase Sales of SMEs in the Culinary Sector in Makassar" by Nur Afiah et al. examines the crucial role of marketing in the culinary business context. In the era of the Covid-19 pandemic, which accelerated digital advancements, the study explores the use of TikTok as an essential marketing strategy. The study aimed to assess the effectiveness of TikTok in increasing sales for culinary SMEs in Makassar. Using a qualitative descriptive approach with field research methods, primary and secondary data were collected through observation, interviews, and literature review. The findings identified TikTok as an effective promotional tool for increasing sales, providing insight into the potential of TikTok to support the growth of culinary SMEs in Makassar.

Another study, titled "The Influence of Trash Talk in TikTokers Meyden's Live Streaming on Consumer Purchase Intention" by Sadad Ali Aulabi et al., investigates the effect of live streaming on TikTok, specifically focusing on the use of "trash talk" by content creator Meyden. This research aims to explore the impact of trash talk during live streams on consumer purchase intention. Given the development of TikTok's live streaming feature, many content creators have used this strategy to attract consumers. Meyden, in particular, uses trash talk during live streams to drive sales. This quantitative study used purposive sampling, involving 100 of Meyden's followers who had watched at least three of her live streams. Data were collected between May 15 and June 12, 2023. The hypothesis testing showed that trash talk significantly and positively influenced consumer purchase intention, with a t-value (12.222) greater than the critical value (1.659). The study concluded that trash talk in Meyden's live streams effectively increases consumer purchase intention by building consumer trust through this unique communication strategy.

The study titled "The Influence of Shopping Lifestyle and Skincare Product Promotion on Impulse Buying through TikTok Shop" by Siti Hadidjah Ahmad et al. aimed to evaluate the impact of shopping lifestyle and skincare product promotions on impulse buying behavior via TikTok Shop. This research also explored the simultaneous effects of shopping lifestyle and skincare promotions on impulse buying through the platform. Purposive sampling was used, with 165 respondents participating. Data were collected through questionnaires and analyzed

using multiple linear regression. The findings revealed that shopping lifestyle and skincare product promotions significantly influence impulse buying behavior through TikTok Shop. The F-test results showed a significant simultaneous effect, with an F-value of 106.276, which is greater than the critical value of 3.05 at a 0.05 significance level. The coefficient of determination (R Square) was 57.5%, indicating that shopping lifestyle and skincare promotions explain a substantial portion of the variance in impulse buying behavior, while the remaining 42.5% is influenced by other factors not explored in this study.

3. RESEARCH METHODOLOGY

This study employs a quantitative research design using a survey method. Data were collected from 77 respondents who are regular users of TikTok Shop. The survey measured two main variables: online shopping convenience (independent variable) and consumer loyalty (dependent variable). Responses were recorded on a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The data were analyzed using multiple linear regression to assess the relationship between the independent and dependent variables.

Data analysis is the process of examining and interpreting the collected data to answer research questions or test hypotheses. The goal of data analysis is to uncover patterns, relationships, and insights within the data, providing a deeper understanding of the studied phenomenon. In this study, the data analysis began with validity and reliability testing, followed by multiple linear regression analysis.

Validity testing was conducted to ensure that the instruments used to measure the research variables were valid, meaning they accurately measured the intended variables. Reliability testing was used to assess the consistency of the instrument in producing the same results if repeated under similar conditions.

After conducting validity and reliability tests, the next step was to perform multiple linear regression analysis. This method was applied to examine the relationship between the independent variable (shopping convenience at TikTok Shop) and the dependent variable (consumer loyalty in TikTok Shop social e-commerce). Using multiple linear regression analysis, we aimed to identify the extent to which the independent variable significantly contributed to the dependent variable. A total of 77 data points were collected for this analysis.

4. RESULT AND DISCUSSION

Reliability Statistics

Cronbach's Alpha	N of Items
,946	10

From the output table, it is shown that the number of items (questions in the survey) is 10, with a Cronbach's Alpha value of 0.946. Since the Cronbach's Alpha value of 0.946 is greater than 0.60, based on the decision criteria for reliability testing, it can be concluded that all 10 survey items are reliable or consistent.

Item-Total Statistics

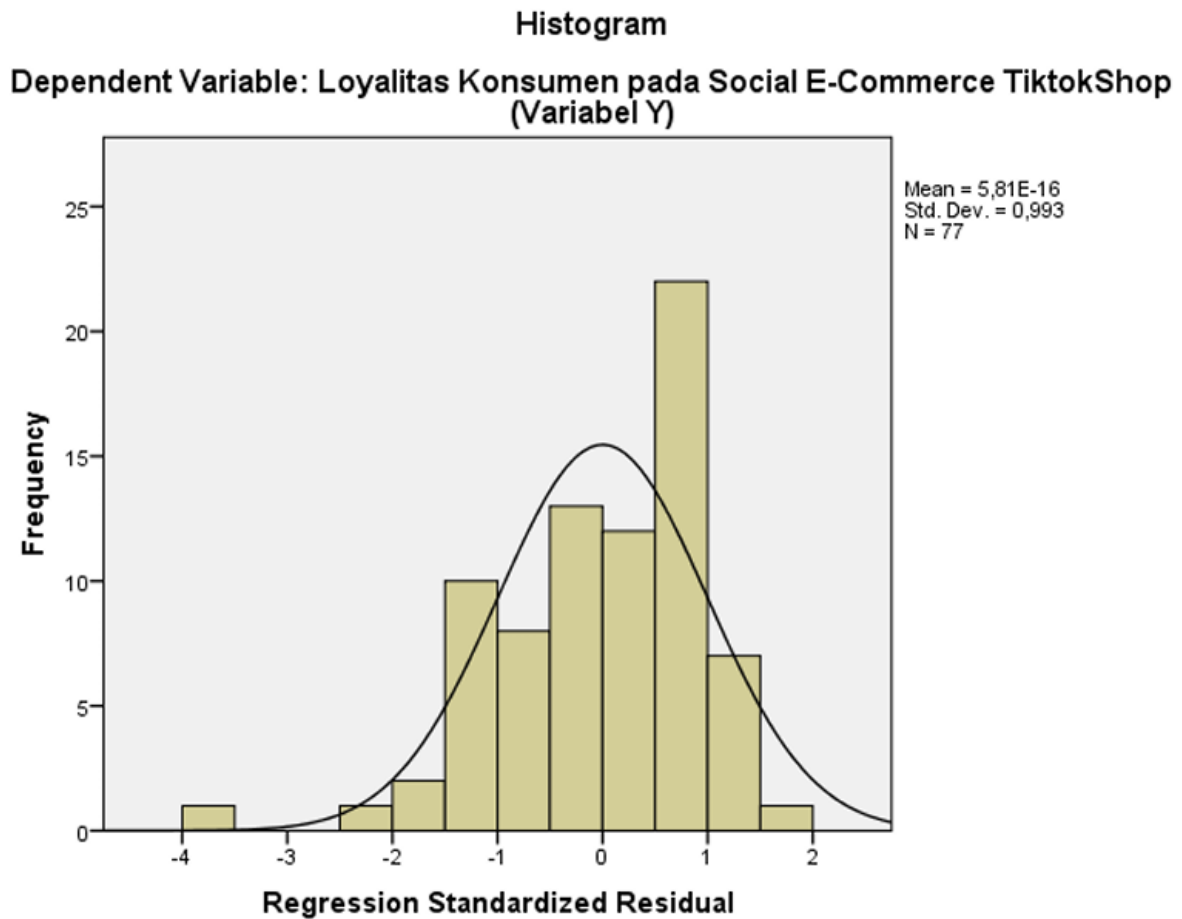|	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1	31,88	44,605	,644	,946
X2	32,06	42,614	,777	,940
X3	32,08	43,415	,797	,940
X4	32,00	42,632	,800	,939
X5	31,97	43,657	,800	,940
Y1	32,51	42,359	,763	,941
Y2	32,38	42,264	,817	,938
Y3	32,51	40,201	,838	,938
Y4	32,78	40,990	,764	,941
Y5	32,31	42,796	,780	,940

The output table provides an overview of the statistical values for the 10 survey items. The "Cronbach's Alpha if Item Deleted" values indicate that for all 10 items, Cronbach's Alpha is greater than 0.60. Thus, it can be concluded that the 10 survey items are reliable.

5. NORMALITY TEST

The normality test is a statistical procedure used to determine whether the data in a sample follows a normal distribution. A normal distribution is symmetric, bell-shaped, and characterized by certain parameters such as the mean and standard deviation.

Normality testing is crucial in statistical analysis because many inferential techniques assume that the data originates from a normal distribution. Examples of such techniques include parametric hypothesis tests like the t-test, ANOVA, and linear regression. If the data

does not follow a normal distribution, the application of these techniques may be invalid or lead to misinterpretation of the results.

Histogram

Dependent Variable: Loyalitas Konsumen pada Social E-Commerce TiktokShop (Variabel Y)

Mean = 5,81E-16
Std. Dev. = 0,993
N = 77

Regression Standardized Residual

To interpret the results of a histogram, observe the shape of the data distribution. If the histogram shows a symmetrical pattern with a bell-shaped peak (resembling a normal distribution), it can be concluded that the data tends to be normally distributed. However, if the histogram shows an asymmetrical pattern, such as skewness or a peak that does not resemble a bell shape, it indicates that the data is not normally distributed.

In this case, the histogram shows a symmetrical bell-shaped pattern, suggesting that the data follows a normal distribution. Normal distribution is crucial in statistical analysis because many statistical methods, such as parametric hypothesis tests, regression analysis, and variance analysis, require the assumption of normality.

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Loyalitas Konsumen pada Social E-Commerce TiktokShop (Variabel Y)
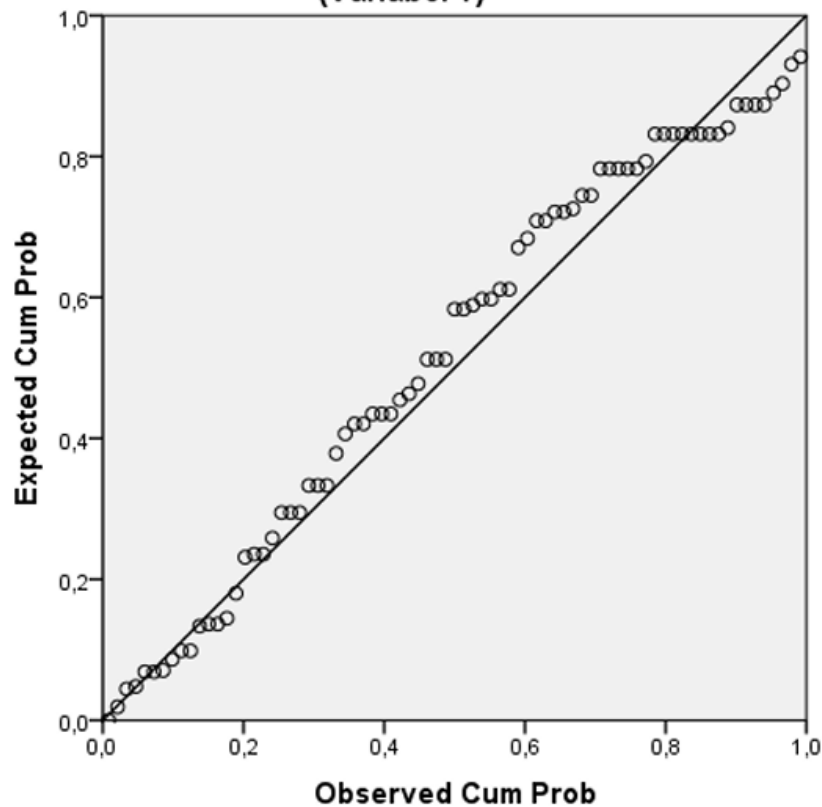
A QQ plot (Quantile-Quantile plot) is a graphical method used to evaluate whether the distribution of data aligns with a normal distribution. In a QQ plot, the horizontal axis represents the expected values from a normal distribution, while the vertical axis displays the actual observed values from the data.

If the points in the QQ plot closely follow the diagonal line, it indicates that the data tends to follow a normal distribution. In other words, the overall data distribution is consistent with the expected normal distribution.

However, if the QQ plot shows significant deviations from the diagonal line, such as curved patterns or groups of points falling outside the diagonal, this suggests that the data does not follow a normal distribution. For example, a longer tail or a flatter peak in the QQ plot would indicate significant spread or asymmetry in the data distribution.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		77
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	2,64684970
Most Extreme Differences	Absolute	,100
	Positive	,073
	Negative	-,100
Test Statistic		,100
Asymp. Sig. (2-tailed)		,056[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Scatterplot

Dependent Variable: Loyalitas Konsumen pada Social E-Commerce TiktokShop (Variabel Y)
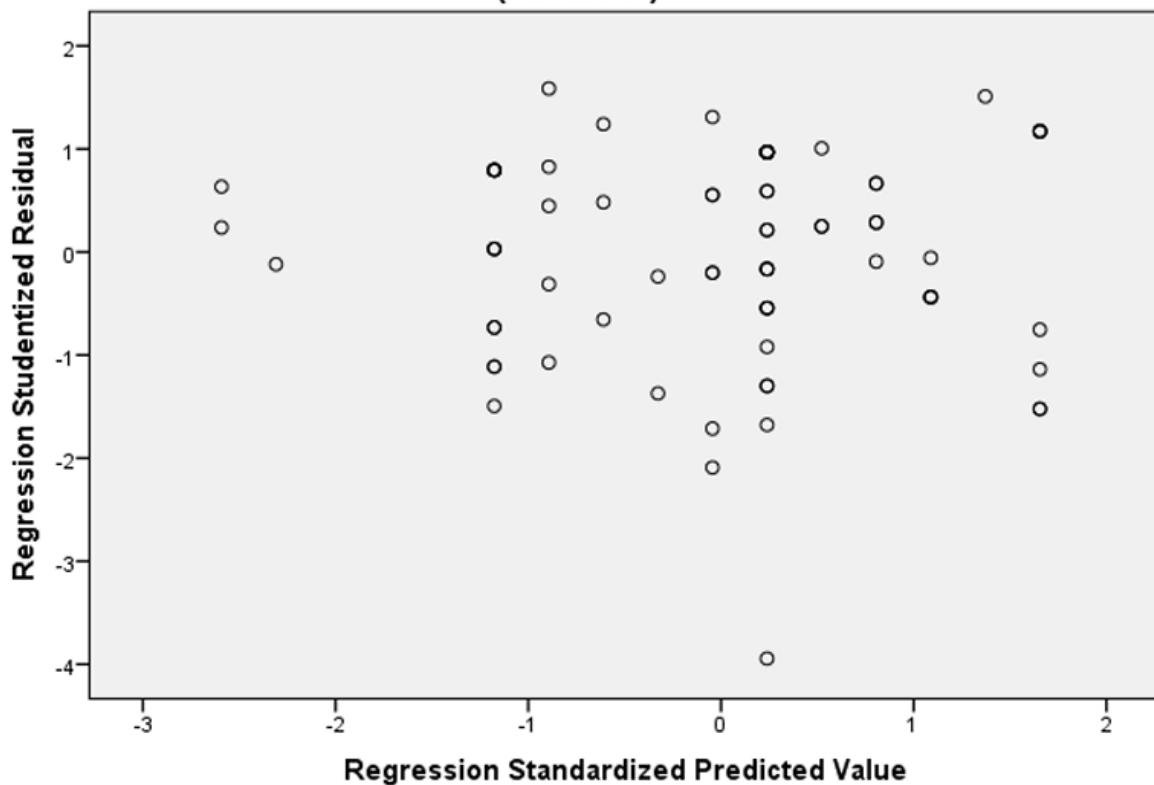
The homoscedasticity plot, using a scatter plot, is employed to analyze whether the assumption of homoscedasticity is met in the regression model. This scatter plot shows the

relationship between the predicted values (fitted values) on the x-axis and the residuals on the y-axis.

In this plot, the distribution of points is crucial for evaluating homoscedasticity. If the points are randomly scattered around the horizontal line (in this case, the red line), then the assumption of homoscedasticity is satisfied. This indicates that the variance of residuals remains relatively constant across all levels of predicted values.

Conversely, if the scatter plot shows a specific pattern, such as a megaphone shape, a cone shape, or other distinct patterns, it suggests the presence of heteroscedasticity. Heteroscedasticity indicates that the variance of residuals is not constant across different levels of predicted values.

Therefore, by examining the homoscedasticity plot, you can determine whether heteroscedasticity exists in your regression model.

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Loyalitas Konsumen pada Social E-Commerce TiktokShop (Variabel Y)	Between Groups	(Combined)	825,385	12	68,782	9,142	,000
		Linearity	774,441	1	774,441	102,938	,000
		Deviation from Linearity	50,944	11	4,631	,616	,809
*	Within Groups		481,498	64	7,523		
Kemudahan Berbelanja di TikTok Shop (Variabel X)	Total		1306,883	76			

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,637	1,685		-,378	,706
	Kemudahan Berbelanja di TikTok Shop (Variabel X)	,904	,087	,770	10,445	,000

a. Dependent Variable: Loyalitas Konsumen pada Social E-Commerce TiktokShop (Variabel Y)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,770[a]	,593	,587	2,664

a. Predictors: (Constant), Kemudahan Berbelanja di TikTok Shop (Variabel X)

b. Dependent Variable: Loyalitas Konsumen pada Social E-Commerce TiktokShop (Variabel Y)

The results of the linear regression analysis show a significant positive relationship between online shopping convenience and consumer loyalty. The coefficient for shopping convenience is 0.904, indicating that for each unit increase in shopping convenience, consumer loyalty increases by 0.904 units. The model explains 59.3% of the variance in consumer loyalty, suggesting that other factors outside of shopping convenience also contribute to loyalty. The study also found that the user-friendly interface and ease of navigation on TikTok Shop were particularly influential in fostering consumer loyalty. These findings align with prior research that emphasizes the importance of ease of use and convenience in digital platforms.

6. CONCLUSION

This study provides empirical evidence that online shopping convenience plays a critical role in enhancing consumer loyalty in social commerce settings such as TikTok Shop. The significant positive relationship between shopping convenience and consumer loyalty highlights the need for e-commerce platforms to focus on optimizing the user experience to retain customers. Future research could explore additional factors influencing consumer loyalty, such as trust, product quality, and social engagement features in social commerce.

7. RESEARCH IMPLICATIONS AND FUTURE RECOMMENDATIONS

The findings have important implications for businesses operating in the social commerce space. By improving the ease of shopping, platforms can increase customer retention and loyalty. Future studies should investigate the long-term impact of shopping convenience on consumer behavior across different social commerce platforms. Furthermore, qualitative research could provide deeper insights into the consumer decision-making process in social commerce environments.

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