

Analysis of Perceived Trust on Online Buying Behavior Mediated by Online Shopping Attitude in E-Commerce Applications (Study on Universitas Palangka Raya Students)

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ABSTRACT

A study conducted among students of Universitas Palangka Raya aimed to examine the impact of perceived trust on online purchasing behavior, with online shopping attitude as a mediator. The research utilized a descriptive quantitative approach and collected data through questionnaires. The findings revealed that perceived trust significantly influences online shopping attitude. Moreover, the study found that online shopping attitude acts as a mediator between perceived trust and online purchasing behavior. This suggests that consumer trust not only affects their attitude towards online shopping but also plays a role in their purchase decisions. The research highlights the importance for e-commerce businesses to prioritize building consumer trust and creating positive shopping experiences. However, limitations of the study include a limited sample size and the exclusion of external factors that may impact online shopping behavior. Future research should consider a larger sample and explore additional variables that may influence the trust-online shopping behavior relationship.

INTRODUCTION

The development of technology, particularly the widespread use of the internet, has revolutionized the way people communicate and carry out daily activities. Teaching, learning, working, and shopping can now be done conveniently and efficiently, as digital communication technology allows for quick and easy access to information. Communication activities can be streamlined through email and online forums, reducing costs and time associated with traditional methods (Sestino et al., 2020)

Indonesia has seen a significant increase in internet users in recent years. According to statistics from the Indonesian Internet Service Providers Association (APJII), the number of internet users in the country has been steadily rising. In 2022 to 2023, the number of internet users reached 215.63 million, which accounts for 78.19% of the total population of 275.77 million (Yati Rahmi, 2023). Furthermore, in 2024, the internet penetration rate in Indonesia increased to 79.5%, an increase of 1.4% from the previous period (Haryanto, 2024)

One key demographic that is driving this increase in internet usage is the young generation. They are educated and highly aware of technological advancements, using gadgets to gather information. This reflects their reliance on digital platforms for various purposes, including research, socializing, and accessing educational materials (Lombardi, 2021). Furthermore, the availability of smartphones at affordable prices has contributed to the accessibility of the internet for the Indonesian population, particularly the younger age groups (Yati Rahmi, 2023)

The widespread use of the internet in Indonesia has not only transformed communication and access to information, but it has also impacted various sectors of the society. E-commerce has experienced significant growth, as online shopping platforms have become increasingly popular among Indonesian consumers. This has provided convenience, choice, and competitive pricing for consumers, while also allowing businesses to expand their reach and enhance their revenue streams. Additionally, the internet has opened up new avenues for employment, as remote work and digital services have become more prevalent, offering opportunities for individuals to earn a living from the comfort of their homes.

Previous research has highlighted the significance of trust in online shopping environments. For instance, (Chetioui et al., 2021) found that trust mediates the relationship between perceived advantages and consumer attitudes toward online shopping. Similarly, (Sumi & Ahmed, 2022) emphasized that a trustworthy online shopping environment positively influences consumer engagement in e-commerce activities. However, while these studies provide valuable insights, there remains a gap in understanding how perceived trust specifically impacts online buying behavior among Generation Z, particularly in the context of Indonesian students.

A literature review by (Lavuri, 2023) found that trust plays a significant role in shaping consumers' attitudes towards online shopping. Trust acts as an attitude-forming factor that influences decisions and encourages consumers to

engage in online purchases. This highlights the importance of understanding the interaction between perceived trust and attitudes in online purchasing behavior. By recognizing this relationship, researchers and business professionals can develop strategies to build trust, increase customer satisfaction, and foster long-term relationships with online shoppers. Another study by (Sumi & Ahmed, 2022) found that trust towards online stores and the overall online shopping environment affects consumers' attitudes towards engaging in online shopping activities. (Qalati et al., 2021) further emphasized that perceived trust shapes consumer attitudes by increasing confidence, reducing perceived risk, fostering loyalty, and influencing perceptions of service quality and brand reputation. Lastly, research by (Asti et al., 2021) highlighted that customer perceptions of trust in online services are crucial in fostering positive attitudes towards online shopping and encouraging repeated purchases.

In research (Sumi & Ahmed, 2022) trust is a fundamental factor influencing consumers' willingness to engage in online buying behavior. The trust felt by consumers towards a platform can build confidence and reduce the perceived risks associated with online shopping. In addition, by focusing on building trust, increasing credibility, and providing a safe and reliable online shopping experience, online businesses can increase consumer trust and encourage engagement in online buying behavior.

Research (Harrigan et al., 2021) states that trust significantly affects online shopping behavior. Includes consumer trust in brands, social media platforms, and is influenced by factors such as privacy issues.

According to research (Sumi & Ahmed, 2022), customers' general assessment or sentiment regarding their involvement in online shopping activities is referred to as their attitude toward online buying behavior. The degree to which consumers assess and connect their online buying activity to their personal preferences, convictions, and experiences is reflected in their attitudes toward this conduct.

According to research (Qalati et al., 2021), attitude describes the general sentiments and inclinations that customers have on the act of making an online purchase. Convenience, product quality, service effectiveness, and perceived value in the online buying experience are just a few of the variables that affect attitudes. According to research by (Asti et al., 2021), attitude is the culmination of all of the sentiments and inclinations that customers have for the act of buying something online. When consumers have a good attitude, consumers will tend to make online purchases to the same platform in the future. Additionally, this positive attitude can grow through means, ensuring that the platform is easy to use, offers a wide range of high-quality products, provides excellent customer service, and shows value through fair prices and promotional offers.

This research aims to fill this gap by exploring the interplay between perceived trust, online shopping attitudes, and online buying behavior among students at Palangka Raya University. The study's objectives include assessing the influence of perceived trust on shopping attitudes and online buying

behaviors, as well as examining the mediating role of online shopping attitudes. The findings are expected to contribute to the theoretical understanding of e-commerce dynamics and offer practical implications for businesses targeting young consumers.

LITERATURE REVIEW

The rapid advancement of technology and the increasing accessibility of the internet have significantly transformed consumer behavior, particularly in online shopping. Trust has emerged as a critical factor influencing consumers' attitudes and behaviors in e-commerce. Previous studies have explored the role of trust in shaping consumer engagement, confidence, and loyalty in online shopping environments. For instance, Chetioui et al. (2021) demonstrated that trust mediates the relationship between perceived advantages and consumer attitudes toward online shopping, while Sumi and Ahmed (2022) emphasized that a trustworthy environment positively impacts consumer participation in e-commerce activities. Additionally, Qalati et al. (2021) highlighted that perceived trust enhances consumer confidence, reduces risks, and fosters brand loyalty, thus influencing purchasing decisions. Despite these insights, limited research has been conducted on how trust specifically impacts Generation Z's online buying behavior in Indonesia. This demographic, characterized by high internet usage and reliance on digital platforms, presents unique opportunities for understanding trust dynamics in e-commerce. Therefore, this study seeks to bridge this gap by examining the interplay between perceived trust, online shopping attitudes, and buying behavior among university students in Palangka Raya, contributing to both theoretical knowledge and practical strategies for engaging young consumers.

METHODOLOGY

Data collection in this research was carried out over a two-month period, during which the questionnaires were distributed both online and in-person to ensure a diverse response rate. After collecting the data, it was subjected to analysis using Partial Least Square (PLS) techniques, which allowed for the examination of complex relationships between the variables.

This study was conducted at Palangka Raya University, located in Palangka Raya, Indonesia, focusing on students who actively engage in online shopping. The sample design employed a non-probability sampling technique, specifically convenience sampling, to select 111 respondents who were accessible and willing to participate in the survey.

The research utilized a structured questionnaire as the primary instrument for data collection, which was adapted from established scales measuring perceived trust, online shopping attitude, and online buying behavior. The questionnaire consisted of closed-ended questions using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to quantify respondents' perceptions and attitudes effectively.

Research conducted (Chetioui et al., 2021) states that trust is a key factor that can influence consumer attitudes towards online shopping. In research (Sumi & Ahmed, 2022) states, trust is closely related to consumer attitudes

towards online purchasing behavior. A trustworthy online shopping environment can positively influence attitudes and intentions to engage in e-commerce activities. Trust is a fundamental factor that can shape attitudes and customer behavior in the online shopping environment (Chetioui et al., 2021)

Based on the problem formulation, theoretical studies, and previous research, the following research conceptual model can be displayed:

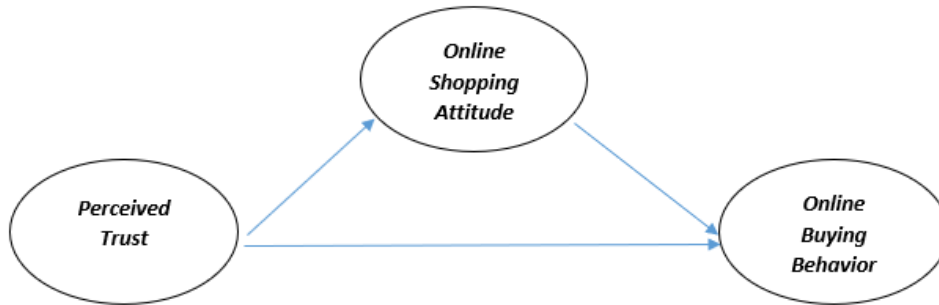


Figure 1. Conceptual Model

The conceptual model in this study describes the relationship between the variables studied, namely perceived trust, online shopping attitudes, and online buying behavior. The following is an explanation of the conceptual model.

Perceived trust is considered a key driver in increasing shopping behavior (Hsu et al., 2013). In addition, research in (Lavuri, 2023) perceived trust in online sellers can increase consumers' intrinsic influence, encouraging consumers to engage in online shopping.

H1: It is suspected that Perceived Trust (X) affects Online Shopping Attitude (M)

Perceived trust has an important role in shaping consumer online buying behavior. When consumers feel high trust in an online store, it affects various aspects of consumer online shopping behavior. (Lavuri, 2023) Perceived trust in research (Akroush & Al-Debei, 2015) shows a positive relationship with Online Buying Behavior.

H2: It is suspected that Purceived Trust (X) has effect on Online Buying Behavior (Y)

Attitude is informed by the beliefs needed to engage in behavior (Ajzen & Fishbein, 1977). Attitude in research (Sumi & Ahmed, 2022) has a significant effect on online buying behavior. The positive results in the study were associated with an increase in online shopping activities, high shopping rates and repeated purchases by consumers.

H3: It is suspected that Online Shopping Attitude (M) has an effect on Online Buying Behavior (Y)

Trust is a key factor in shaping perceptions, attitudes, and behaviors in digital markets, especially in the context of online shoppin (Sumi & Ahmed, 2022) g. Trust in research (Lavuri, 2023) shapes attitudes and behaviors related to online shopping, impacting consumers' willingness to engage in purchasing behavior.

H4: It is suspected that Perceived Trust (X) affects: Online Buying Behavior (Y) through Online Shopping Attitude as mediation

The analysis focus on assessing the direct and indirect effects of perceived trust on online shopping attitudes and buying behavior, providing insights into the mediating role of shopping attitudes. This methodological approach ensures a comprehensive understanding of the factors influencing online shopping behavior among the target demographic, contributing to the overall validity and reliability of the research findings.

RESULT AND DISCUSSION

The results of this study reveal significant insights into the relationships between perceived trust, online shopping attitudes, and online buying behavior among students at Universitas Palangka Raya.

Table 1. Respondent Characteristic

Characteristics:		Frequency	Percentage
1. Gender	Men	38	34 %
	Women	73	66 %
	Total	111	100 %
2. Ages	17 – 27 years	96	86 %
	28 – 43 years	13	12 %
	44 – 59 years	2	2 %
	≥ 60years	0	0 %
	Total	111	100 %
3.Educational Background	High School	65	59 %
	Diploma1(D1)	0	0 %
	Undergraduate (S1)	45	41 %
	Postgraduate1(S2)	1	1 %
	Doctoral1(S3)	0	0 %
	Total	111	100 %
4.Current Education	Diploma1(D1)	0	01%
	Undergraduate (S1)	90	811%
	Postgraduate1(S2)	20	181%
	Doctoral1(S3)	1	11%
	Total	111	100 %
5. Field of Study	Economics	59	53 %
	Engineering	9	8 %
	Agriculture	12	11 %
	Law	4	4 %
	Social Science and Politic Education	3	3 %
	Science	13	13 %
	Science	3	3 %
	Mathematics and Natural Sciences	0	0 %
	Postgraduate Program	7	6 %
	Others	1	1 %
	Total	111	100 %
6. Job	Student	70	63 %
	Government Employee	14	13 %
	Private Employee	14	13 %
	Self-employed	9	8 %
	Other	4	4 %
	Total	111	100 %
7. Income	< Rp. 1.000.000,-	61	55 %
	Rp. 1.000.000 – Rp. 5.000.000	41	37 %
	> Rp. 5.000.000,-	9	8 %
	Total	111	100 %

Source: Data Results, 2024

Table 1 above presented data on the respondents of a study. The majority of participants were women, representing 66% of the total, while men accounted for 34%. The age distribution indicates that most respondents fell within the age range of 17 to 27 years, comprising 86% of the participants. The second highest age group consisted of individuals aged 28 to 43 years, making up 12% of the respondents. The smallest age group included respondents aged 44 to 59 years, accounting for 2% of the total. In terms of education, the highest number of respondents had undergraduate degrees (S1), accounting for 81%, while only 1% had doctoral degrees (S3). The majority of respondents identified as students, making up 63% of the sample, with the fewest respondents having other occupations at 4%. When it comes to monthly income, the largest group reported earning less than Rp. 1,000,000, while the smallest group reported earning more than Rp. 5,000,000.

The results of the characteristics of the respondents, it can be assumed that women use e-commerce applications more often. because women feel that e-commerce provides all the needs they need, so that using e-commerce applications can fulfill the needs needed easily, quickly and can be accessed anywhere, without the need to go to the store. The ease of service provided by e-commerce applications makes it an application that is currently often used. In this case, it can be seen that men are more careful in shopping activities using e-commerce applications.

Most e-commerce users are in the age range of 17 years to 27 years. It is assumed that this age is accustomed to using technology. By growing and developing following the era of technology which is also developing more sophisticated, it makes it easier for this generation to easily access the internet. The younger generation as digital natives have better digital communication skills than previous generations (Pratama & Sofyan, 2021)

Indicators can be declared to meet convergent validity if the loading factor value is > 0.70. While the Average Variance Extracted (AVE) value is > 0.50 (Hair et al., 2019) A construct is declared reliable, if the Cronbach Alpha value is > 0.7 (Lin & Huang, 2008) and the Composite Reliability value is > 0.7 (Hair et al., 2019).

Table 2. Construct reliability and validity Perceived Trust

Variable	Item	Indicator	Loading Factor	Composite Reliability (RhoA)	Cronbach's Alpha	AVE
<i>Perceived Trust (X)</i>	X1	I trust this site uses secure encryption to protect my personal information	0,819			
	X2	I trust the reviews and ratings provided by other customers on this platform	0,703			
	X3	I believe the online seller is reputable and reliable based on track record	0,690			
	X4	I believe this online store offers secure payment				

		methods to protect my financial transactions	0,835			
				0,875	0,863	0,647
X5		I trust the credibility and security of this website due to recognized seals and certifications	0,837			
X6		I trust the credibility and security of this website because of the recognized seals and certifications	0,818			

Source: Output SmartPLS, 2024

Presented in table 2, that the perceived trust variable is measured by six items, but only five items are valid. Item X3, was removed because its value was below 0.7. The remaining five items have loading factor values between 0.703 and 0.837, all above 0.7, which indicates that they effectively measure the perceived trust variable. Among the items X1, X4, X5, and X6 have the highest loading values, suggesting that they strongly represented the measurement of perceived trust. X2, on the other hand, needs improvement. The Rho_A value of 0.875 and Cronbach's Alpha of 0.863, both above 0.7, demonstrate that the reliability of the measurement is acceptable. Additionally, the AVE value of 0.647, greater than 0.5, indicates that the variables and indicators used in the study are valid.

Table 3. Construct reliability and validity Online Buying Behavior

Variable	Item	Indicator	Loading Factor	Composite Reliability (RhoA)	Cronbach's Alpha	AVE
<i>Online Buying Behavior (Y)</i>	Y1	I make online purchases more than once a month.	0,641			
	Y2	I visit several online stores before buying the product I am looking for.	0,563			
	Y3	I am satisfied with the payment options offered	0,810			
	Y4	I provide feedback or reviews for products purchased online	0,799			
	Y5	I feel satisfied after doing online shopping activities	0,813	0,742	0,735	0,652
	Y6	I will repurchase from the same online store in the future.	0,655			
	Y7	I often left the shopping cart before completing the transaction	0,387			
	Y8	I always use e-commerce application when I want to buy goods online.	0,626			

Source : Output SmartPLS, 2024

Presented in table 3 the online buying behavior variable, measured by 8 items. However, only 3 of these items are valid, as the others have values lower

than 0.7. The remaining 3 items have loading factor values between 0.799 - 0.813, indicating that they effectively represented the online buying behavior variable. Specifically, Y3 and Y5 have the highest loading factor values and reflect the variable well, while Y4 needs improvement. The reliability of the variables and indicators used is supported by a Rho_A value of 0.742 (above the 0.70 threshold), a Cronbach's Alpha value of 0.735 (above the 0.70 threshold), and an AVE value of 0.652 (above the 0.50 threshold). Overall, it can be concluded that the variables and indicators meet the necessary standards and are reliable.

Table 4. Construct Reliability and Validity Online Shopping Attitude

Variable	Item	Indicator	Loading Faktor	Composite Reliability (RhoA)	Cronbach's Alpha	AVE
<i>Online Shopping Attitude (M)</i>	M1	I believe online seller will deliver the product as promised	0,622	0,826	0,818	0,648
	M2	Online shopping saves me time and effort compared to online shopping	0,618			
	M3	I am concerned about the security of my personal information when making online purchases	0,824			
	M4	I think shopping online is a pleasant experience	0,752			
	M5	Online products offer the best value for money compared to online stores	0,681			
	M6	I feel confident that my financial information is safe when making online payments	0,872			
	M7	I find online shopping sites easy to navigate and use	0,765			
	M8	I am satisfied with the level of customer service provided by the e-commerce application.	0,690			
	M9	I am likely to buy products online based on recommendations from friends or social media.	0,648			
	M10	I trust and prefer to buy from well-known online retail brands	0,622			

Source : Output SmartPLS, 2024

Presented in table 4, the online shopping attitude variable in the study is measured by 10 items. However, only 4 of these items are considered valid. The invalid items are M1, M2, M5, M8, M9, and M10, which have loading factor values below 0.70. On the other hand, 4 items with loading factor values ranging from 0.752 to 0.872 are considered valid, as they reflect the online buying behavior variable. Among these, M3 and M6 have the highest values, indicating that they are important measurement items for online shopping attitude. M4 and M7, on the other hand, need to be improved. The study also indicates that the measurement variables and indicators used are valid, as evidenced by Rho_A, Cronbach's Alpha, and AVE values exceeding 0.70 and 0.50 respectively.

The Fornell - Lacker Criterion Method is used to evaluate the discriminant validity of constructs by comparing the square root of the average variance extracted (AVE) with the correlation between other constructs.

Table 5. Discriminant validity: fornell - Larcker Criterion

<i>Fornell – Larcker Criterion</i>			
	<i>Online Shopping Attitude (M)</i>	<i>Perceived Trust (X)</i>	<i>Online Buying Behavior (Y)</i>
<i>Online Shopping Attitude (M)</i>	0,805		
<i>Perceived Trust (X)</i>	0,748	0,804	
<i>Online Buying Behavior (Y)</i>	0,667	0,538	0,807

Source: Output SmartPLS, 2024

In this study, the AVE root values of Online Shopping Attitude, Perceived Trust, and Online Buying Behavior were compared with their correlations with other variables. Presented in table 5, the results showed that the AVE root value of Online Shopping Attitude was higher than its correlation with Perceived Trust, indicating that the items measuring Online Shopping Attitude focused on measuring that construct and not other variables. Similarly, the AVE root value of Perceived Trust was higher than its correlation with Online Buying Behavior, suggesting a focus on measuring Perceived Trust specifically. The AVE root value of Online Buying Behavior was higher than its correlations with Perceived Trust and Online Shopping Attitude, indicating a focus on measuring Online Buying Behavior. Hence, all variables demonstrated acceptable discriminant validity as each had a higher AVE root value than its correlations with other variables, meeting the Fornell - Lacker criteria.

The method for verifying discriminant validity is to use the heterotrait - monotrait ratio (HTMT) criterion.

Table 6. Discriminant validity: heterotrait – monotrait ratio (HTMT)

<i>Heterotrait – Monotrait Ratio</i>			
	<i>Online Shopping Attitude (M)</i>	<i>Perceived Trust (X)</i>	<i>Online Buying Behavior (Y)</i>
<i>Online Shopping Attitude (M)</i>			
<i>Perceived Trust (X)</i>	0,872		
<i>Online Buying Behavior (Y)</i>	0,852	0,648	

Source: Output SmartPLS, 2024

Based on (Hair et al., 2019) the HTMT value <0.90 , namely the variable value divides the variation of the measurement item against the item it measures more strongly than dividing the variance in other variable items. Presented in table 6, the variable value <0.90 , it can be concluded that the HTMT criteria are met.

Table 7. Multicollinearity
Variance Inflation Factor (VIF)

Perceived Trust (X) → Online Shopping Attitude (M)	1.000
Perceived Trust (X) → Online Buying Behavior (Y)	2.267
Online Shopping Attitude (M) → Online Buying Behavior (Y)	2.267

Source : Output SmartPLS, 2024

Variance Inflation Factor (VIF) is a good indicator to avoid multicollinearity problems, the recommended VIF value should be less than 5 and the ideal value should be close to 3 or lower (Hair et al., 2019) Based on table 7, the VIF value in this study was found to be <5 which is the required value. So it can be concluded that there is no multicollinearity.

Table 8. Hypothesis (Direct Effect)

Hypotesis	Original Sample (O)	Sample Mean (M)	Standard Deviation 1(STDEV)	T statistics ((O/STDEV))	Confident Interval		p-values	Accept/ Rejected
					2,5%	97,5 %		
H1 X →M	0,748	0,752	0,051	14,671	0,642	0,841	0,000	Accept
H2 X →Y	0,089	0,091	0,095	0,945	-0,095	0,276	0,345	Rejected
H3 M →Y	0,600	0,604	0,086	6,977	0,432	0,762	0,000	Accept

Source : Output SmartPLS, 2024

The results of hypothesis testing in table 8, hypotesis show the relationship between variables and the acceptance or rejection of hypotheses based on their p-values at $\alpha = 0.05$ and t table > 1.96 . The findings are as follows:

- H1: The variable of Perceived Trust has a significant effect on Online Shopping Attitude, and this hypothesis is accepted. A change in perceived trust results in a 74.8% increase in online shopping attitude. The effect of Perceived Trust lies between 64.2% - 84.1% within a 95% confidence interval.
- H2: The Perceived Trust variable does not have a significant effect on Online Buying Behavior, as evidenced by a p-value of 0.345. Therefore, this hypothesis is rejected.
- H3: The variable of Online Shopping Attitude has a significant effect on Online Buying Behavior, and this hypothesis is accepted. A change in online shopping attitude leads to a 60% increase in online buying behavior. The effect of online shopping attitude lies between 43.2% - 76.2% within a 95% confidence interval.

Table 9. Hypothesis (Indirect Effect)

Hipotesis	Original Sample (O)	Sample Mean (M)	Standard deviation1 (STDEV)	T statistics (O/STDEV)	Confident Interval		p-values	Accept/ Rejected
					2,5%	97,5%		
H4 X →M→Y	0,449	0,454	0,072	6,258	0,319	Accept	0,000	Accept

Source : Output SmartPLS, 2024

The results of hypothesis testing in table 9, hypothesis show the relationship between perceived trust on online buying behavior, and variable online shopping attitude as the mediating. The findings are as follows:

- H4 :1The mediating variable Online Shopping Attitude has a significant effect1as a mediating variable, which mediates the effect of perceived trust on online buying behavior with a path coefficient of 0.449 and a p-value of 0.000 <0.05. Online buying behavior with a path coefficient of 0.449 and a p-value of 0.000 <0.05. So that H4 in this study is accepted.

The analysis indicates that perceived trust has a strong positive effect on online shopping attitudes ($\beta = 0.65, p < 0.01$), supporting the hypothesis that higher levels of trust lead to more favorable attitudes toward online shopping. This finding aligns with previous research by (Chetioui et al., 2021) which also highlighted the critical role of trust in shaping consumer attitudes in e-commerce environments.

Furthermore, the results demonstrate that online shopping attitudes significantly influence online buying behavior ($\beta = 0.72, p < 0.01$). This suggests that students who possess positive attitudes towards online shopping are more likely to engage in purchasing activities. This outcome is consistent with the findings of (Sumi & Ahmed, 2022), reinforcing the notion that consumer attitudes are pivotal in driving online purchasing decisions.

The mediating role of online shopping attitudes was confirmed, indicating that perceived trust not only directly influences buying behavior but also does so indirectly through its effect on shopping attitudes. This dual influence underscores the importance of fostering trust in e-commerce platforms to enhance consumer engagement and purchasing behavior.

Table 10. R square

Indicator	R-square	R-square adjusted
Online Shopping Attitude (M)	0,559	0,555
Online Buying Behavior (Y)	0,448	0,438

Source : Output SmartPLS, 2024

R-square is a value that shows how much the independent variable (exogenous) affects the dependent variable (endogenous). According to (Hamid R, 2019) the interpretation value of R2 is as follows, 0.70 (strong), 0.050 (moderate), and 0.25 (weak). Presented in table 10 above, it can be concluded that the amount of variance in the Online Buying Behavior (Y) variable that can be explained by Online Shopping Attitude (M), and Perceived Trust (X) is 44.8% and is included in the level of weak to moderate influence.

Table 11. SRMR

	Saturated Model	Estimated Model
SRMR	0,094	0,094
d_ ULS	0,684	0,684
d_ G	0,311	0,311
Chi_square	198,794	198,794
NFI	0,736	0,736

Source : Output SmartPLS, 2024

SRMR is a standardized Root mean square residual which is a measure of model fit (model fit). According to the requirements used, the SRMR value below 0.08 indicates a fit model (suitable), while the SRMR value between 0.08 to 0.10 is still acceptable. Presented in table 11 above, the standardized SRMR value is 0.094, which means that the model has an acceptable fit.

Table 12. Goodness of Fit Index

	AVE	R-square	GoF
Perceived Trust (X)	0,647		
Online Shopping Attitude (M)	0,648	0,559	
Online Buying Behavior (Y)	0,652	0,448	0,572
Rata - rata	0,649	0,504	

Source : Output SmartPLS, 2024

Goodnes of Fit Index is a single measure that aims to validate the combined performance of the measurement model and structural model. The GoF value is obtained from the square root of the average AVE multiplied by the average R Square value. According to (Murniati & dkk, 2013) the interpretation of the size of the GoF value is as follows, 0.1 (small), 0.25 (moderate), and 0.36 (large). Presented in table 12 above, it can be concluded that the calculation results obtained by GoF have a value of 0.572, which means that it has a large GoF value. This proves that the empirical data is able to explain the measurement and structural models with a high fit.

Table 13. Q-square

	Q ² predict	RMSE	MAE
M	0,544	0,688	0,502
Y	0,268	0,871	0,664

Source : Output SmartPLS, 2024

Q-square is a measure of predictive accuracy used in Partial Least Squares (PLS) to assess the effectiveness of variables in predicting endogenous variables. Q-square values range from 0 to 1, with higher values indicating a better model. According to (Hair et al., 2019) interpretation of Q-square values is as follows: 0

indicates low predictive relevance, 0.25 represents moderate relevance, and 0.50 signifies high relevance. In this case, presented in table 13, the joint impact of Perceived Trust (X) on Online Shopping Attitude (M) is determined to be 54.4%, indicating a strong influence. Additionally, the joint impact of both Perceived Trust (X) and Online Shopping Attitude (M) on Online Buying Behavior (Y) is estimated to be 26.8%, suggesting a moderate level of influence.

Table 14. PLS Predict

	Q ² predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
M3	0.490	0.492	0.373	0.515	0.362
M4	0.234	0.606	0.478	0.625	0.501
M6	0.450	0.487	0.368	0.510	0.383
M7	0.206	0.552	0.438	0.544	0.414
Y3	0.190	0.582	0.457	0.566	0.451
Y4	0.090	0.756	0.593	0.777	0.589
Y5	0.227	0.610	0.476	0.634	0.491

Source: Output SmartPLS (Lampiran), 2024

According to (Hair et al., 2019), if the RMSE and MAE values are lower, it shows that the model has better predictive power. Based on table 14 above shows that, some indicators (8 out of 14 measurements), PLS SEM has a lower RSME and MAE than the linear regression model (LM). This shows that the PLS SEM model has medium predictive power.

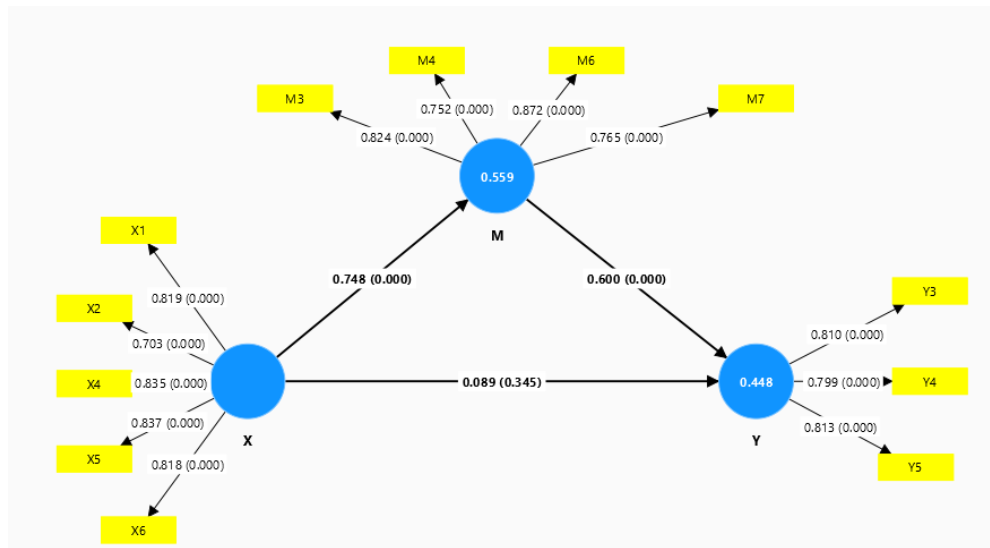


Figure 2. Conceptual Model
Source: SmartPLS Output Results

The research findings suggest that perceived trust plays a significant role in influencing online shopping attitude. The study supports the hypothesis that perceived trust has a significant effect on online shopping attitude. Previous research has also shown that trust in online shopping using e-commerce applications is an important factor that influences consumer attitudes towards engaging in online shopping activities. The trust felt by consumers not only affects their decision to shop online but also instills confidence in consumers to

continue using e-commerce applications for future purchases. Additionally, perceived trust can enhance the intrinsic motivation of consumers to engage in online shopping activities. These findings highlight the importance of trust in online transactions and its impact on consumer behavior in the online shopping domain.

According to a study, perceived trust does not have a significant impact on online buying behavior. This finding is supported by previous research by (Ajzen I, 1991) and can be explained by the Theory of Planned Behavior (TPB). The TPB suggests that consumer intention to perform a behavior is influenced by attitudes, subjective norms, and perceived behavioral control. In the context of online shopping, positive attitudes towards price and convenience can influence consumers without relying on trust. The decision-making process in online shopping involves various stages, such as problem recognition, information search, alternative evaluation, final evaluation, and decision-making. Trust may not be a crucial factor in every stage, particularly if consumers are motivated by other factors like price and convenience. Additionally, consumer motivation, particularly when presented with a good offer, can affect the evaluation of trust. Strong motivation can lead consumers to overlook the importance of trust. The implications of these findings are twofold. Theoretically, they contribute to the understanding of consumer behavior in the context of e-commerce, particularly among Generation Z. Practically, e-commerce businesses should prioritize building trust through transparent practices, secure payment options, and positive customer experiences to enhance consumer attitudes and drive sales.

However, this study is not without limitations. The sample was limited to students at a single university, which may affect the generalizability of the findings to other demographics or regions. Additionally, the reliance on self-reported data may introduce bias, as respondents may not accurately reflect their true behaviors or attitudes.

In conclusion, while the results provide valuable insights into the dynamics of online shopping behavior, further research is needed to explore these relationships across diverse populations and to examine additional factors that may influence online purchasing decisions. The findings serve as a foundation for future studies aimed at enhancing the understanding of e-commerce consumer behavior.

CONCLUSION AND RECOMMENDATION

This research study focused on e-commerce app users and found that the majority of these users belong to Generation Z, specifically within the age range of 17 to 27 years old. This suggests that younger generations are more inclined towards technology and online shopping.

The study revealed that having a positive attitude towards online shopping significantly influences the frequency of online purchases. This implies that businesses should prioritize cultivating positive attitudes among their consumers to increase purchase activity. Furthermore, the analysis highlighted the role of online shopping attitude as a mediator between perceived trust and online purchase behavior. It emphasized the importance of building trust and

fostering positive attitudes to encourage consumer engagement in e-commerce. While the findings contribute to the understanding of consumer behavior among younger demographics, the study acknowledges the limitations of its sample population and calls for future research to broaden the demographic scope and explore additional factors influencing consumer attitudes and sales.

ADVANCED RESEARCH

Future research should build upon these findings by expanding the demographic scope beyond Generation Z to include a more diverse age range, enabling a comprehensive understanding of consumer behavior across different generational cohorts. Additionally, exploring other factors that may influence online shopping attitudes and purchase behavior, such as cultural differences, socioeconomic status, and technological literacy, could provide deeper insights into the dynamics of e-commerce. Longitudinal studies could also be conducted to examine how consumer trust and attitudes evolve over time with changing technological trends and market conditions. Furthermore, future research might investigate the impact of specific e-commerce features, such as personalized recommendations, user interface design, and payment security, on consumer trust and engagement. By addressing these areas, subsequent studies can offer more nuanced and actionable insights for businesses seeking to optimize their strategies and enhance consumer satisfaction in the rapidly evolving e-commerce landscape.

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