Department of Digital Business
Journal of Artificial Intelligence and Digital Business (RIGGS)
Homepage: https://journal.ilmudata.co.id/index.php/RIGGS
Vol. 4 No. 2 (2025) pp: 4549-4555
P-ISSN: 2963-9298, e-ISSN: 2963-914X

The Influence of Digital Marketing Strategy and Risk Perception on Generation Z's Online Purchasing Behavior

Candra
[1]Administrasi Bisnis, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Muhammadiyah Mataram
[1]candra.can1295@gmail.com

Abstract

This study aims to analyze the effect of digital marketing strategies and risk perceptions on Generation Z's online purchasing behavior in Mataram City. The approach used is quantitative with the type of causal-comparative research. A sample of 97 respondents was obtained through purposive sampling technique based on the criteria of Generation Z who actively shopped online in the last three months. Data were collected using a 5-point Likert scale questionnaire and analyzed using multiple linear regression with the help of SPSS. The results showed that digital marketing strategy ($\beta = 0.216$) and risk perception ($\beta = 0.564$) had a positive and significant effect on online purchasing behavior, with a joint influence contribution of 52.8% ($R^2 = 0.528$). The research instrument is declared valid and reliable based on the results of the construct validity test and the Cronbach's Alpha value> 0.6. This study concludes that understanding of digital strategy and risk perception are important factors in determining Generation Z's online shopping behavior. The findings provide implications for digital marketers to further emphasize an adaptive approach to the behavior of young generations who are tech-savvy and sensitive to the risks of online transactions.

Kata kunci: Digital Marketing Strategy, Risk Perception, Online Purchasing Behavior, Generation Z's

1. Introduction

Digital marketing strategies encompass a variety of approaches that utilize digital technology to promote products or services. It involves using social media, email marketing, search engine optimization (SEO), and other digital content to effectively reach consumers (Chaffey & Ellis-Chadwick, 2019). Perceived risk in the context of online purchasing refers to consumers' concerns about potential losses, such as financial risk, privacy risk, and product risk (Bauer, Grether, & Leach, 2002). The online purchasing behavior of Generation Z, born between 1997 and 2012, is influenced by these factors, given that they grew up in the digital age and have high expectations of a safe and personalized online shopping experience (Williams et al., 2012).

Research by Vinerean et al. (2024) shows that platforms such as Instagram, TikTok, and YouTube have a significant influence on Generation Z's purchasing decisions, especially through visual content and collaboration with influencers. In addition, artificial intelligence (AI)-based content personalization has been shown to increase consumer engagement with brands (Elesi et al., 2024). In Indonesia, digital marketing strategies that optimize the use of social media and authentic content have successfully captured the attention of Generation Z, who value two-way interactions and personalized shopping experiences (Digima, 2025).

Risk perception remains an important factor in online purchasing decisions. Research by Santosa (2021) found that product risk, financial risk, and privacy risk have a significant negative influence on online purchase intentions on platforms such as Zalora. Similarly, a study by Dary and Pudjihardjo (2022) showed that trust and risk perception influence Generation Z's purchasing decisions in using services such as Spaylater. Aziz (2019) also highlighted that risk perception and lifestyle influence the decision to purchase clothes online through platforms such as Blackberry Messenger.

Generation Z is showing unique online purchasing behavior, influenced by attitudes, beliefs, value motives, and social motives (Hodžić, 2024). Harsono et al. (2023) found that these factors influence Generation Z's online purchase intention in Indonesia. In addition, research by Tsamaroh and Sicily (2022) shows that Generation Z consumer behavior affects online shopping interest in digital cooperatives, although the contribution

is relatively small. Utama et al. (2022) also identified that e-commerce features such as special offers and product reviews contribute to increased impulsive buying behavior in Generation Z.

The interaction between digital marketing strategies and risk perception in influencing Generation Z's online purchase behavior has been the focus of several studies (Zhang, 2023). Sela (2023) found that Generation Z's perceived online purchase benefits and disadvantages had a positive effect on repurchase intentions, with psychological ownership as a moderating variable. In addition, a study by Kholizah and Sulton (2025) showed that lifestyle, perceived convenience, and financial literacy influence the consumptive behavior of Shopee Pay Later users in Generation Z. These studies emphasize the importance of understanding the interaction between various factors in influencing Generation Z's online purchasing behavior.

From the various studies that have been discussed, it appears that digital marketing strategies and risk perception individually influence Generation Z's online purchasing behavior. However, there is a lack of research that comprehensively examines the interaction between these two variables in the context of Generation Z in Indonesia. This gap suggests the need for research that integrates digital marketing strategy and risk perception to understand their influence on Generation Z's online purchasing behavior in greater depth. This study aims to fill this gap by analyzing the influence of digital marketing strategies and risk perception on the online purchasing behavior of Generation Z consumers in Indonesia, so as to provide more comprehensive insights for marketing practitioners and policy makers in designing effective strategies.

2. Research Methods

This research uses a quantitative approach with a causal-comparative research type, which aims to examine the influence of digital marketing strategies and risk perceptions on Generation Z's online purchasing behavior. The quantitative approach was chosen because it is able to measure the relationship between variables objectively and systematically through numerical data (Creswell, 2014). This research focuses on hypothesis testing through statistical analysis of data collected from Generation Z respondents in Mataram City who actively make online purchase transactions.

The data source in this study is primary data obtained directly from respondents through distributing questionnaires. The sampling technique uses purposive sampling and the number of samples is determined by Lemeshow's theory because the population is difficult to identify, after calculating with Lemeshow's formula (Yu et al., 2017), 97 respondents were obtained, with the criteria that respondents are individuals belonging to Generation Z (born 1997-2012), domiciled in the city of Mataram, and have experience shopping online in the last three months. The research instrument is a questionnaire developed from the indicators in this study, namely digital marketing, risk perception and Generation Z online purchasing behavior and has been validated by previous similar studies, using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The validity and reliability of the instrument were tested using construct validity test and Cronbach's Alpha coefficient.

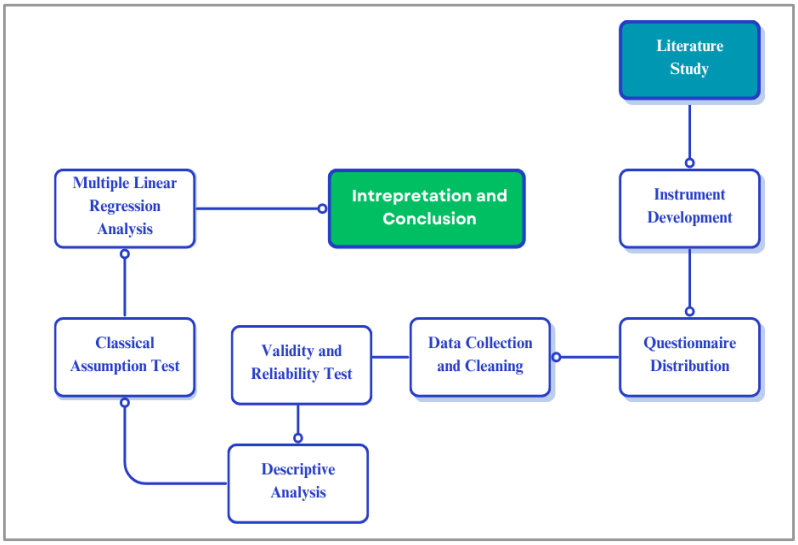

Figure 1. Research Procedure

The research procedure began with a literature study to develop a conceptual framework and instrument development. Next, an online questionnaire was distributed through social media and digital survey platforms to

DOI: https://doi.org/10.31004/riggs.v4i2.1056

respondents who fit the criteria. The collected data will be selected and data cleaning is carried out to ensure that only valid data is analyzed. Then, testing the validity and reliability of the instrument is carried out, followed by descriptive analysis, classical assumption test, and multiple linear regression analysis to test the effect of the independent variable on the dependent variable.

Data analysis techniques are carried out using statistical software such as SPSS or SmartPLS. The analysis is carried out in stages, starting from descriptive tests to see data distribution, normality, multicollinearity, and heteroscedasticity tests as part of the classical assumption test, and regression model testing to see the magnitude and significance of the influence of digital marketing strategies and risk perceptions on online purchasing behavior. The results of the analysis will then be interpreted to answer the problem formulation and research objectives.

3. Results and Discussions

a. Distribution of Respondents

The distribution of respondents is illustrated in Figure 2.

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-17 years	22	22.7	22.7	22.7
	18-20 years	31	32.0	32.0	54.6
	21-23 years	23	23.7	23.7	78.4
	24-26 years	18	18.6	18.6	96.9
	27 years	3	3.1	3.1	100.0
	Total	97	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	38	39.2	39.2	39.2
	Female	59	60.8	60.8	100.0
	Total	97	100.0	100.0	

Figure 2. Distribution of Respondents by Gender and Age

Figure 2 illustrates that female gender distribution accounted for the majority of respondents in this study at 60.8% while male respondents comprised 39.2%. This indicates that the respondents in this study are predominantly female but the number of male respondents remains proportional so that there is no overly dominant imbalance. In addition, the majority of respondents were in the age range of 18-20 years, which amounted to 32% of the total respondents. This shows that teenagers and young people are the dominant group in this study, who are likely to be more familiar with technology and online shopping. So that it can represent an accurate response about online shopping or purchasing. Data on respondents based on their educational background and occupation can be seen in Figure 3.

Last Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Senior High School	16	16.5	16.5	16.5
	Bachelor	58	59.8	59.8	76.3
	Postgraduate	23	23.7	23.7	100.0
	Total	97	100.0	100.0	

Job

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	17	17.5	17.5	17.5
	Private Employee	32	33.0	33.0	50.5
	Non Job	6	6.2	6.2	56.7
	Civil Servants	21	21.6	21.6	78.4
	Self-Employed	21	21.6	21.6	100.0
	Total	97	100.0	100.0	

Figure 3. Distribution of Respondents by Education and Job

Figure 3 shows the distribution of respondents based on the latest education classification illustrates that undergraduate respondents are the most respondents in this study, namely 58 people or 59.8%, followed by postgraduate as many as 23.7% and the least respondents come from respondents who are still at the high school education level. On the other hand, the distribution of respondents based on occupation shows the results that the most respondents from respondents who work as private employees in Mataram City are 32 people or 33% of the total respondents. Meanwhile, respondents who work as civil servants and self-employed are both 21 people or 21.6% of the total respondents. Respondents without work in the study were the least number of respondents, namely 6 people or 6.2%. So it can be interpreted that the respondents in this study already understand about digital marketing strategies and perceptions of risk that can determine decisions in making online purchases and from the work of the respondents, they are dominant from people who have income and

DOI: https://doi.org/10.31004/riggs.v4i2.1056

are classified as having the ability to make transactions or shop online. Respondents based on their experience in doing online shopping can be seen in table 4 below:

Experience Online Purchasing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<1 tahun	18	18.6	18.6	18.6
	1 tahun	14	14.4	14.4	95.9
	2-3 tahun	32	33.0	33.0	81.4
	4-5 tahun	29	29.9	29.9	48.5
	>5 tahun	4	4.1	4.1	100.0
	Total	97	100.0	100.0	

Figure 4. Distribution of Respondents by Experience Online Purchasing

The majority of respondents in this study have experience in doing online shopping, namely the most respondents based on online shopping experience are the most of those who have experience for 2-3 years and 4-5 years as many as 32 people and 29 people or 33% and 29.95%, followed by those with experience for less than 1 year and 1 year respectively as many as 18 people and 14 people or 18.6% and 14.4% of the total respondents.

b. Validity and Reliability Test

For the validity test results can be seen in table 5 below:

Variable	No	Statement/Item	r-table	r-count	Information
Strategi Pemasaran Digital	1	X1.1	0.200	0.578	Valid
	2	X1.2	0.200	0.623	Valid
	3	X1.3	0.200	0.600	Valid
	4	X1.4	0.200	0.660	Valid
	5	X1.5	0.200	0.627	Valid
Persepsi Risiko	1	X2.1	0.200	0.627	Valid
	2	X2.2	0.200	0.674	Valid
	3	X2.3	0.200	0.610	Valid
	4	X2.4	0.200	0.632	Valid
	5	X2.5	0.200	0.650	Valid
Perilaku Pembelian Online Generasi Z	1	Y1	0.200	0.914	Valid
	2	Y2	0.200	0.920	Valid
	3	Y3	0.200	0.964	Valid
	4	Y4	0.200	0.926	Valid
	5	Y5	0.200	0.964	Valid

DOI: https://doi.org/10.31004/riggs.v4i2.1056

Source:Processed with spss 25

When referring to the table above, the total Item Correlation or the value of r count>r (table) is greater than 0.200. So, based on the above criteria and the test findings in this test, the researcher can conclude that the questionnaire of all statements or objects in this analysis is accurate, and can then be used as a testing instrument in obtaining field evidence that has passed the validity test in accordance with the research methodology mechanism. The results of the reliability test can be seen in table 6 below:

Reliability Statistics

Cronbach's Alpha	N of Items
.969	15

Figure 6: Reliability Test

In the table above, it can be seen that all indicators in the study as outlined in the questionnaire for the dependent and independent variables have a significant test result value of 0.969 and greater than the Cronbach alpha standard value of 0.6. Therefore, each variable in this study is reliable and trustworthy.

c. Descriptive Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Digital Marketing Strategy	97	5	25	18.19	5.040
Risk Perception	97	5	25	17.48	4.897
Online Purchasing Behavior	97	5	25	17.24	5.174
Valid N (listwise)	97				

Figure 7: Descriptive Test

Based on the descriptive test results above, the distribution of data obtained by researchers can be described, namely: Variable Digital Marketing Strategy (X1), from the data above it can be described that the minimum value is 5 while the maximum value is 25, for the average for Digital Marketing Strategy it is 18.19 and for the standard deviation of 5,040. For the Risk Perception Variable, the minimum value is 5, the maximum value is 25, the average is 17.48 and the standard deviation value is 4.897. As for Online purchasing behavior, the minimum value is 5, the maximum value is 25, the average is 17.24 and for the standard deviation value is 5,174.

DOI: https://doi.org/10.31004/riggs.v4i2.1056

d. Classical Assumption

1. Normality Test

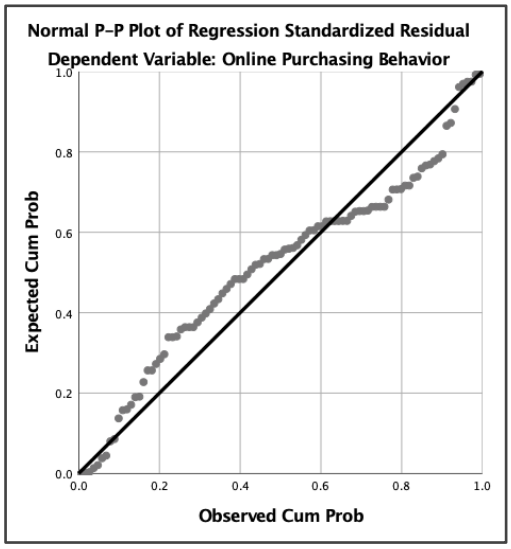

Figure 8: Normality Test

The dots on the output graph above continue to follow and approach the diagonal line. As a result, the residual values for regression analysis can be satisfied, indicating that the independent variable has a positive influence on the dependent variable.

2. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	3.451	1.404		2.457	.016		
	Digital Marketing Startegy	.216	.156	.211	1.385	.169	.217	4.602
	Risk Perception	.564	.161	.534	3.510	.001	.217	4.602

a. Dependent Variable: Online Purchasing Behavior

Figure 9: Multicollinearity Test

The VIF value for Strategy Digital Marketing (X1) and Perception of Risk (X2) is 4,602 < 10. As well as the Tolerance value of Strategy Digital Marketing (X1) and Perception of Risk (X2) each 0.217> 0.1, so the data in this study does not occur multicollinearly.

e. Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.451	1.404		2.457	.016
	Digital Marketing Startegy	.216	.156	.211	1.385	.169
	Risk Perception	.564	.161	.534	3.510	.001

a. Dependent Variable: Online Purchasing Behavior

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727[a]	.528	.518	3.593

a. Predictors: (Constant), Risk Perception, Digital Marketing Strategy

b. Dependent Variable: Online Purchasing Behavior

Figure 10: Multiple Linear Regression Test

DOI: https://doi.org/10.31004/riggs.v4i2.1056

The value of 3.451 is a constant or a state when the online purchasing behavior variable has not been influenced by other variables, namely digital marketing strategy (X1) and risk perception (X2). If the independent variable does not exist, the online purchasing behavior variable will not change. The digital marketing strategy (X1) regression coefficient value is 0.216, indicating that the digital marketing strategy variable has a positive influence on online purchasing behavior, which means that every 1 unit increase in the digital marketing strategy variable is 0.216, assuming that other variables are not examined in this study. On the other hand, the regression coefficient value of risk perception (X2) is 0.564, which shows that the risk perception variable has a positive influence on online purchasing behavior, which means that every 1 unit increase in the risk perception variable is 0.564, assuming that other variables are not examined in this study. In addition, it is influenced by the R square (R2) value of 0.528 or 52.8%, so it can be concluded that the magnitude of the influence of the digital marketing strategy variable and risk perception on online purchasing behavior is 0.528 (52.8%).

4. Conclusion

This study concludes that digital marketing strategy and risk perception have a positive and significant influence on Generation Z's online purchasing behavior. This result is reinforced by the regression coefficient value of each independent variable, which is 0.216 for digital marketing strategy and 0.564 for risk perception, as well as an R^2 value of 52.8%, which indicates that the two variables together explain more than half of the variation in online purchasing behavior. Similar findings were found in Lazuardi & Usman's research (2025) examining the effect of digital marketing strategies in the form of FOMO marketing and eWOM on Gen Z impulse buying behavior. The results show a significant positive influence through perceived value, supporting the contribution of digital strategies to young consumer purchases. In addition, the demographic characteristics of respondents who are predominantly young, highly educated, and experienced in online shopping indicate that generation Z has a good understanding of digital marketing and is able to evaluate risks in online transactions

REFERENCE

[1] Bauer, H. H., Grether, M., & Leach, M. (2002). Building customer relations over the Internet. *Industrial Marketing Management*, 31(2), 155-163.
[2] Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital Marketing* (7th ed.). Pearson Education.
[3] Elesi, D., et al. (2024). The Role of Digital Marketing in Shaping Gen Z Consumer Behaviour. *Academy of Marketing Studies* Journal, 28(1).
[4] Harsono, S., Haripraditya, N. T., & Soleh, M. A. R. (2023). Perilaku belanja online dan niat beli pada generasi "Z" di Indonesia. Journal *of Business & Banking*, 12(1), 1-12.
[5] Hodžić, A. (2024, January 1). *Impact of Generation Z values and attitudes on their consumer behavior*.
[6] Kholizah, A. N., & Sulton, M. (2025). Pengaruh Gaya Hidup, Persepsi Kemudahan Dan Literasi Keuangan Terhadap Perilaku Konsumtif Pengguna Shopee Pay Later Pada Gen Z. *YUME: Journal of Management*, 8(1).
[7] Santosa, F. I. (2021). Pengaruh Pengalaman Belanja Online dan Persepsi Risiko Konsumen Terhadap Niat Pembelian Produk Fashion di Toko Online Zalora. *E-Journal Universitas Atma Jaya Yogyakarta*.
[8] Sela, J. N. (2023). Pengaruh Persepsi Terhadap Niat Pembelian Kembali dengan Kepemilikan Psikologis sebagai Variabel Moderasi (Studi Pada Generasi Z Pengguna Shopee). *E-Journal Universitas Atma Jaya Yogyakarta*.
[9] Tsamaroh, Y., & Sisilia, K. (2022). Analisis Minat Beli Online dan Minat Berkoperasi Digital pada Generasi Z. *YUME: Journal of* Management, 5(3).
[10] Utama, N. F., Santosa, N. S., Honesta, J., Sonbai, J. S. Y., Koesnadi, V. L., & Jonathan, E. (2022). Pengaruh E-Commerce Terhadap Perilaku Impulsive Buying pada Generasi Z. *Jurnal Manajemen dan Pemasaran Digital*, 2(3).
[11] Vinerean, S., et al. (2024). The Role of Digital Marketing in Shaping Gen Z Consumer Behaviour. *Academy of Marketing Studies* Journal, 28(1).
[12] Williams, K. C., Page, R. A., Petrosky, A. R., & Hernandez, E. H. (2012). Multi-generational marketing: Descriptions, characteristics, lifestyles, and attitudes. *The Journal of Applied Business and Economics*, 13(3), 21-36.
[13] Yu, W., Xu, W., & Zhu, L. (2017). A modified Hosmer–Lemeshow test for large data sets. *Communications in Statistics - Theory* and *Methods*, *46*(23), 11813–11825. https://doi.org/10.1080/03610926.2017.1285922
[14] *Zhang*, J. (2023). E-commerce promotional strategies, digital generation buying behavior and purchase intention: Inputs to online shopping platform improvement model. *International Journal of Research Studies in Management*, *11*(6). https://doi.org/10.5861/ijrsm.2023.1065
[15] *Lazuardi*, K. Z., & Usman, O. (2025). The Influence of FOMO Marketing and eWOM on Impulsive Buying Behavior of Gen Z through Perceived Value. *ISC-BEAM*, 3(1), 2223–2241. DOI:10.21009/ISC-BEAM.013.165

DOI: https://doi.org/10.31004/riggs.v4i2.1056