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The Use of Artificial Intelligence (AI) Technology and Visual Design of Campaign Billboards on The Decision to Vote For Presidential Candidates in Generation Z

Nuriyati Samatan[1], Marwan Londol[2], Nurhasanah[3], Robingah[4], Muzakky Abdurrahman[5]
[1]Universitas Nasional, Jakarta, Indonesia, nuriyatisamatan@gmail.com
[2]AMIK NURMAL, Luwuk-Banggai, Indonesia, londolmarwan@gmail.com
[3]Universitas Nasional, Jakarta, Indonesia, savana62@yahoo.co.id
[4]Universitas Gunadarma, Jakarta, Indonesia, robingah411@gmail.com
[5]Universitas Gunadarma, Jakarta, Indonesia, muzakkyabdurrahman@gmail.com

Corresponding Author: nuriyatisamatan@gmail.com[1]

Abstract: This research aims to determine the effect of the use of Artificial Intelligence (AI) technology and the visual design of campaign billboards on the decision to vote for presidential candidates in Generation Z. In addition, this research seeks to understand how these two elements interact and influence each other on the choice of Presidential candidates in Generation Z. This research focuses on how the use of Artificial Intelligence (AI) technology and visual design of billboards in political campaigns to encourage the level of decision to vote for presidential candidates in Generation Z. The research was conducted using quantitative methods and the data collection process was carried out by distributing questionnaires. The sampling technique used in determining the research sample is Probability Sampling, with the Simple Random Sampling technique, the determination of respondents is based on the Slovin Formula with a margin of error level of 0.5% with a sample number of 400 respondents. Data processing in this research was carried out by multiple linear regression analysis using the SPSS (Statistical Product and Service Solutions) version 29 statistical program. The results showed that each of the X variables had a positive and significant influence on the Choice Decision variable (Y).

Keywords: Artificial Intelligence, Visual Design, 2024 Presidential Election, Prabowo Subianto, Generation Z

INTRODUCTION

In every election process, political advertising plays a very important role. Political advertisements are able to inform the public about the presence of prospective leaders who are worthy of being elected or not elected. Political advertisements appear in political media that are so rapidly developing during political campaigns. Since its first appearance in campaigns

in the 1950s, political advertising has evolved into the dominant form of communication between candidates and voters (Kaid L, 2006).

As time goes by, technology in the world is evolving. There is a process of digitalization in almost all areas of life. In 2024, we have reached a point called the industrial revolution 5.0 with various technologies such as big data, cloud computing, and one of the most sophisticated developments today, Artificial Intelligence (AI), which was established due to the discovery of machine learning (Oswal et al., 2021).

In the 2024 election campaign in Indonesia, there are various types of political advertisements that use outdoor media. One of these outdoor media political advertisements is a campaign advertisement through billboards by presidential and vice-presidential candidates Prabowo Subianto and Gibran Rakabuming Raka. The Prabowo - Gibran candidate pair's outdoor media political advertisements are interesting to examine because they are unique and differentiating, namely using images generated with Artificial Intelligence (AI) technology.

Artificial Intelligence (AI) is an effort that utilizes technological developments to design a machine or computer that is able to imitate the mindset and work system of the human brain. This includes decision-making, the ability to learn, how to behave, and even produce things. Intelligent means having the knowledge, experience, and reasoning to solve a problem (John McCarthy, 1956).

Visual design is a science that studies how to present information with visual depictions (Kusrianto, 2007). Visual design is a discipline that aims to study the concepts of communication and creative expression through various media to convey messages and ideas visually by managing graphic elements in the form of images, letter arrangements, and color composition and layout.

In the context of political campaigns, visual design is needed, for example, to design campaign billboards. Billboards are outdoor media and are installed high according to the placement situation of the billboards. Billboards are usually installed in open places that are heavily traveled by people, in strategic places such as highways that are heavily traveled by vehicles and on green lanes of main roads. Billboards include outdoor media that are temporary (not for a long period of time).

Visual elements in billboard design play an important role in shaping the image of the campaign, as well as building an attractive visual identity, and creating a good impression in the minds of voters. Therefore, artificial intelligence offers the capability to produce art using computer automation processes.

Figure 1. Prabowo - Gibran campaign billboards generated using AI technology
Source: https://www.inilah.com/, accessed, March 20th 2024

Self-image is a general picture of oneself that one wants to show in order to get an assessment or appreciation from others and the surrounding environment (Rejeki, Komalawati, & Indriyanti, 2020). Knowing this, presidential candidate Prabowo Subianto and vice-

presidential candidate Gibran Rakabuming Raka appeared more relaxed. For example, Figure 1 shows a Prabowo - Gibran campaign billboard utilizing artificial intelligence in image design. The billboard shows the figures of Prabowo and Gibran with cartoon faces and looks like a child. The visual design of the billboards led to the emergence of the term "gemoy" as a pun on the word "gemas" which is now attached to the image of the candidate pair Prabowo Subianto and Gibran (Maulana, 2023).

In general, a choice decision can be defined as the process of selecting or determining the best option among several alternatives. This process involves elements of analysis and evaluation to achieve the desired goal (Stoner, 2006). The choice decision is a complex process that involves various aspects, from problem identification to evaluation and selection of the best alternative. More than just choosing, this process is a journey to achieve goals by considering various factors and possibilities.

According to official data from the Central Bureau of Statistics (BPS), there are an estimated 8.6 million young voters from Generation Z aged 17-26 years who will participate in the elections in the Greater Jakarta area. Of the total 8.6 million voters from Gen Z, 7 million are voters from DKI Jakarta, 416 thousand are voters from Bogor City, 294 thousand are voters from Depok City, 339 thousand are voters from Tangerang City, and 580 thousand are voters from Bekasi City. The majority of first-time voters and young voters are students (high school), university students and young workers who have just started working.

The term Generation Z itself refers to the generation born between 1998 and 2007 (Stillman, 2017). This is the generation that grew up with the internet and mobile technology. Generation Z is also known as the "digital generation", as they are more adept at using social media, online platforms, and the latest technology (Noordiono, 2016). Compared to previous generations, Generation Z is considered more critical and independent in seeking information and making decisions. They care about social and environmental issues, and are active in social and political movements (Rini and Sukanti, 2016). The focus of this research is on the use of Artificial Intelligence technology in the process of making visual design of campaign billboards on the decision to vote for presidential candidates for novice voters, namely Generation Z.

The theory used in this research is the Stimulus Organism Response (SOR) theory. This theory explains that the cause of behavior change depends on the quality of the stimuli that communicate with the organism. This theory comes from psychology. The material object of psychology and communication is the same, namely the human soul which includes components: attitudes, opinions, behavior, affection cognition and conation. (Effendy, 2003: 254).

Based on previous research conducted by Agil Rakhmansyah, M. Al Musadieq, and Heru Susilo (2014) which examines the Effect of Information Technology Use on Performance (Study on Employees of Pt. PLN Madiun Area), this research uses the same X variable, namely Technology Use, but the technology field used in this study is different, namely information technology. The results showed that the use of information technology had a positive effect on employee performance. Furthermore, research conducted by Aryanti (2022) examined the Effect of E-WOM Through Twitter Social Media in the 2020 Pilkada on Voting Decisions in Followers of the @Cnnindonesia Twitter Account. The results showed that E-WOM through twitter social media had a significant influence on voting decisions on followers of the @cnnindonesia twitter account.

METHOD

The type of quantitative research conducted is survey research, which is a method of collecting information about the opinions of a group, actions, and characteristics of

representative respondents who are considered as a population by using a questionnaire as the main tool for collecting data, usually to test hypotheses (Samatan, 2018: 115).

The paradigm applied to this research is positivism. A purposive sampling technique was used for sampling. A questionnaire was used for data collection. The researchers compiled a list of statements in accordance with the problem and study variables, namely the impact of the use of Artificial Intelligence (AI) technology and the visual design of campaign billboards on the decision to vote for presidential candidates in Generation Z. Then, the researchers distributed the questionnaire online through Google Forms distributed through social media.

Variable Operational Definition

Operational is a guide that explains the method for measuring variables. According to Sugiyono (2019: 69), the operational definition of variables is important in order to determine the scale, indicators, and types of variables in a study, so that hypothesis testing using statistical tools can be carried out accurately.

Table 1. Variable Operational

Variable	Indicators	Statement	Scale
The use of AI Technology (X1)	*Technological Modernity*	1. I feel that the use of AI technology in the creation of campaign billboards shows that the campaign team is very up-to-date with the latest technological developments. 2. I feel that the use of AI in the creation of campaign billboards shows that the campaign team is very innovative and keeps up with the latest trends. 3. I feel that the use of AI in the creation of campaign billboards shows that the campaign team is brave enough to try new things.	Likert
	Reality and details output	4. I feel that the images produced by AI look so realistic that they almost resemble the original photo 5. I feel that the details in AI-generated images are amazing 6. I can easily recognize that the picture is the work of AI	Likert
	First impression	7. I find these AI-generated billboards very eye-catching and make me want to know more. 8. I feel that the billboards produced by AI are very unique and different from other campaign billboards. 9. I feel that the billboards produced by AI look very professional and high quality.	Likert
	Memory	10. Saya dapat mengingat dengan jelas elemen elemen visual yang terdapat pada baliho kampanye yang dihasilkan AI tersebut 11. I can clearly remember the message conveyed in the AI-generated campaign billboards. 12. I feel that the campaign billboards produced by AI can trigger certain emotions in me and can improve my memory of the message conveyed.	Likert
Visual Design (X2)	Typography	13. I feel that the use of fonts, sizes, and styles on the AI-generated campaign billboards makes the message clearer. 14. I feel that the use of fonts, size, and style of letters on the campaign billboards produced by AI is very easy to read from a far distance. 15. I feel that the use of fonts, size, and style of letters on the campaign billboards produced by AI is proportional.	Likert
	Color	16. I feel that the use of colors on the campaign billboards produced by AI is very interesting and not boring. 17. I feel that the use of colors on the campaign billboards produced by AI gives a positive impression.	Likert

		18. I feel that the use of color on the AI-generated campaign billboards makes the message clearer.	
	Pictures and photos	19. I feel that the visual appearance of the AI-generated campaign billboards makes the message easier to understand. 20. I feel that the visual appearance of the campaign billboards produced by AI is relevant to the message conveyed. 21. I feel that the visual appearance of the campaign billboards produced by AI can convey the message well.	Likert
	Harmony	22. I feel that all the visual elements on the billboards produced by AI complement each other and form a harmonious unity. 23. I feel that all the visual elements on the AI-generated billboards are balanced. 24. I feel that all the visual elements on the AI-generated billboards are comfortable to see.	Likert
Choice Decision (Variabel Y)	Needs recognition	25. I feel that the messages conveyed in the campaign billboards are very relevant to my needs. 26. I feel that the campaign billboards motivate me to find solutions to the problems I am facing. 27. I felt that the campaign billboard offered the right solution to my problem.	Likert
	Information Seeking	28. I feel interested in finding out more about the background of the presidential candidates after seeing the campaign billboards. 29. I feel that I want to find out more about the presidential candidates' work programs and vision and mission after seeing the campaign billboards. 30. I feel like finding out what other people on social media think about the presidential candidate after seeing the campaign billboard.	Likert
	Evaluation	31. I feel that the campaign billboards make it easier for me to compare the options of presidential candidates. 32. I feel that the message conveyed by the campaign billboard succeeded in considering my choice. 33. I feel that my assessment of the presidential candidates has become more positive after seeing the campaign billboards.	Likert
	Voting Decision	34. I feel that the campaign billboards succeeded in improving my awareness to participate in the election. 35. I feel that the campaign billboards succeeded in convincing me to vote for the presidential candidate. 36. I feel that the campaign billboards succeeded in persuading me to change my previous choice.	Likert
	Post-voting Behavior	37. I will persuade my friends to vote for the presidential candidate who put up the billboard. 38. I plan to participate in the presidential candidate's campaign event. 39. I will share information about the presidential candidate on social media,	Likert

Source: Researcher's Data Processing Results, 2024

This research uses 2 Independent variables (Variable X) and 1 Dependent variable (Variable Y), respectively: The use of Artificial Intelligent Technology as Variable X1; and Visual Design as Variable X2. The Dependent Variable or variable Y in this research is the Needs to Vote (Variable Y). Each variable is equipped with indicators, the measurable indicators in this research are:

Indicators of Variable X1 [The Use of Artifial Intelligent Technology]: (1) Technology Novelty; (2) Reality and details output; (3) First Impression; and (4) Memory. Indicator Variable X2 [Visual Design], consists of: (1) Typography; (2) Color; (3) Images and Photos; (4) Harmony. Meanwhile, the indicator of Variable Y [Voting Decision], with indicators: (1)

Needs Recognition; (2) Information Seeking; (3) Evaluation; (4) Choosing Decision; and (5) Choosing Behavior. Each indicator is reduced to a statement, which consists of 39 statement items. The alignment of these indicators is measured using a Likert scale.

RESULT AND DISCUSSION

The Validity Test

The Validity Test intends to ensure the accuracy of research results from the perspective of researchers, participants, or readers (Samatan, 2018). This test was conducted to assess the feasibility of the questionnaire distributed by the researcher as a research instrument. In this research, the validity test was carried out using SPSS version 29. Researchers conducted validity tests on 30 respondents with a significance level of 5%, based on the following decision-making criteria:

1. If rcount> rtable, it is considered valid.
2. If rcount < rtable, it is considered invalid.

The following are the results of the validity test that has been carried out by the researcher using SPSS for the variables of the use of AI technology (X1), visual design (X2), and the decision to vote (Y):

Table 2. Results of the Validity Test of the Variable Use of AI Technology (X1)

No.	R Count	R Table	Description
X1.1	0,743	0,361	Valid
X1.2	0,833	0,361	Valid
X1.3	0,816	0,361	Valid
X1.4	0,749	0,361	Valid
X1.5	0,833	0,361	Valid
X1.6	0,363	0,361	Valid
X1.7	0,824	0,361	Valid
X1.8	0,777	0,361	Valid
X1.9	0,784	0,361	Valid
X1.10	0,551	0,361	Valid
X1.11	0,836	0,361	Valid
X1.12	0,545	0,361	Valid

Source: Research data processing results through SPSS 2024

Table 3. Visual Design Variable Validity Test Results (X2)

No.	R Count	R Table	Description
X2.1	0,875	0,361	Valid
X2.2	0,835	0,361	Valid
X2.3	0,881	0,361	Valid
X2.4	0,907	0,361	Valid
X2.5	0,784	0,361	Valid
X2.6	0,721	0,361	Valid
X2.7	0,850	0,361	Valid
X2.8	0,394	0,361	Valid
X2.9	0,870	0,361	Valid
X2.10	0,860	0,361	Valid
X2.11	0,869	0,361	Valid
X2.12	0,903	0,361	Valid

Source: Research data processing results through SPSS 2024

Table 4. Results of the Validity Test of the Voting Decision Variable (Y)

No.	R Count	R Table	Description
Y.1	0,808	0,361	Valid
Y.2	0,846	0,361	Valid
Y.3	0,864	0,361	Valid

Y.4	0,712	0,361	Valid
Y.5	0,746	0,361	Valid
Y.6	0,597	0,361	Valid
Y.7	0,714	0,361	Valid
Y.8	0,741	0,361	Valid
Y.9	0,870	0,361	Valid
Y.10	0,751	0,361	Valid
Y.11	0,873	0,361	Valid
Y.12	0,769	0,361	Valid
Y.13	0,776	0,361	Valid
Y.14	0,762	0,361	Valid
Y.15	0,847	0,361	Valid

Source: Research data processing results through SPSS 2024

From Tables 2, 3, and 4, it can be concluded that the acquisition of validity testing for each statement on variables X1, X2, and Y indicates that the statement is valid. This is because the acquisition of the rcount for each statement is higher than the acquisition of the rtable (rcount> rtable 0.361) at the Sig 0.05 level.

Reliability Testing

Reliability testing is carried out to measure how accurate the data collection methods and techniques are. In a conventional background, one of the reliabilities is the "researcher's instrument" (Samatan, 2018). A questionnaire is considered reliable if the respondent's acquisition of the statement of each variable is stable or stable over time. Reliability testing in this research applies SPSS version 29. Researchers conducted a reliability test on 30 respondents with a significance level of 5%. In this reliability test, the author uses the basis for decision making by observing the acquisition of Cronbach's Alpha. Decision making with Cronbach Alpha is as follows:

1. If the result of Cronbach's Alpha <0.6, the instrument can be stated as unreliable.
2. If the result of Cronbach's Alpha> 0.6, the instrument can be stated as reliable.

Table 5. Reliability Test Results

Reliability Statistics		
Variable	**Cronbach's Alpha**	**N of Items**
X1	.919	12
X2	.955	12
Y	.953	15

Source: Research data processing results through SPSS 2024

The reliability test results in Table 5 show that the Cronbach's Alpha result for X1 is 0.919 > 0.6. For X2 worth 0.955> 0.6, and for Y worth 0.953> 0.5. Therefore, it is concluded that the research instrument items that assess variables X1, X2, and Y are reliable and can be applied to hypothesis testing.

Normality Test

The normality test intends to check whether the independent variables and dependent variables follow a normal distribution (Sahir, 2022: 69). An effective regression model should involve statistical testing as well as graphical analysis. In this research, normality test is carried out using Kolmogorov-Smirnov method with the following conditions:

1. If the result of Sig or the probability > 0.05, the hypothesis is accepted because the data is normally distributed.

2. If the result of Sig or the probability <0.05, the hypothesis is rejected because the data is not normally distributed.

In this research, normality testing was carried out on 400 respondents. The results of the normality test data processing using SPSS version 29 are as follows:

Table 6. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			400
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		3.80144139
Most Extreme Differences	Absolute		.140
	Positive		.092
	Negative		-.140
Test Statistic			.140
Asymp. Sig. (2-tailed)[c]			.247[c]
Monte Carlo Sig. (2-tailed)[d]	Sig.		.584[d]
	99% Confidence Interval	Lower Bound	.471
		Upper Bound	.592

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed2000000.
Source: Research data processing results through SPSS 2024

From the data in Table 6, it is known that the resulting significance value is 0.584. So it can be concluded that the data with 400 respondents is normally distributed, this is because 0.584> 0.05.

Multicollinearity Test

The Multicollinearity test is used to evaluate whether there is a correlation between the independent variables in the regression model. A good regression model should not show any correlation between the independent variables. To detect the presence of Multicollinearity in regression, it can be seen from the Variance Inflation Factor (VIF) value and tolerance value. If VIF < 10 and tolerance > 0.1, then there is no multicollinearity. Meanwhile, if VIF> 10 and Tolerance < 0.1, then Multicollinearity occurs.

Table 7. Multicollinearity Test Results
Coefficientsa[a]

Model		Collinierity Statistics Tolerance	VIF
1	(Constant)		
	Penggunaan Teknologi AI	.318	3.141
	Desain Visual	.318	3.141

a. Dependent Variable: Keputusan Memilih
Source: Research data processing results through SPSS 2024

From the data in Table 7, it can be seen that the data processing results do not show the occurrence of Multicollinearity. Because the regression results in this research show a Tolerance value of 0.318> 0.10 and a VIF value of 3.141 < 10.00. it can be concluded that the data does not occur Multicollinearity.

Heteroscedasticity Test

Table 8. Heteroscedasticity Test Results

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	9.328	1.810		-.181	.856
	Penggunaan Teknologi AI	.525	.077	.354	6.850	.584
	Desain Visual	.723	.075	.496	9.587	.247

a. Dependent Variable: Voting Decision

Source: Research data processing results through SPSS 2024

Table 8 shows the calculation results that the variable Use of AI Technology has a sig value of 0.584> 0.05 and Visual Design has a sig value of 0.247> 0.05. Thus, it can be concluded that the regression model fulfills the heteroscedasticity test or in other words, there is no heteroscedasticity.

Multiple Linear Regression Test

Multiple linear regression is a model that explains the relationship between one dependent variable (Y) and two or more independent variables (X1, X2, ..., Xn). This test aims to predict the value of variable Y based on the values of variable X and determine the direction of the relationship between variables Y and X.

The following are the results of multiple linear regression test data processing in the following table:

Table 9. Results of Multiple Linear Regression Tests

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	9.328	1.810		-.181	.856
	Penggunaan Teknologi AI	.525	.077	.354	6.850	.584
	Desain Visual	.723	.075	.496	9.587	.247

a. Dependent Variable: Voting Decision

Source: Research data processing results through SPSS 2024

Based on the equation in Table 9, it can be described as follows:

1. The constant value (a) of 9.328 means that the coefficient value of the voting decision variable (Y) is 9.328.
2. The variable regression coefficient (β1) Use of AI Technology (X1) on Voting Decision (Y) is 0.525 with a positive coefficient sign. This shows that the greater the influence of the Use of AI Technology (X1), the more the level of voting decisions will increase.
3. The variable regression coefficient (β2) Visual Design (X2) on the Decision to Choose (Y) is 0.723 with a positive coefficient sign. This shows that the greater the influence of Visual Design, the more the level of Choosing Decision will increase.

Test of the Coefficient of Determination (R^2)

The coefficient of determination is to assess the suitability or accuracy between the predicted value of the regression line and the sample data. To determine the coefficient of determination, the correlation coefficient value is required (R^2).

Table 10. Test Results of the Coefficient of Determination X1 to Y

Model Summary[b]

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.813[a]	.662	.660	3.81100

a. Predictors: (Constant), Visual Design, The use of AI Technology
b. Dependent Variable: Voting Decision

Source: Research data processing results through SPSS 2024

Based on Table 10 above to see the magnitude of X1 (Use of AI Technology) on the Decision to Choose (Y), it can be found that:

1. R value = 0.813. This means that the relationship between the use of AI technology and voting decisions is 0.813 (81.3%). Then it can be stated that the relationship is very strong, because based on Table 10 it is in the range of 0.80 - 1.000.
2. R Square value = 0.662. That is, this value indicates that the use of AI technology has an impact of 66.2% on voting decisions, while the remaining 33.8% (100% - 66.2%) is influenced by other factors outside this research. Then it can be stated that the level of relationship is Strong, because based on Table 10 it is in the range of 0.60 - 0.799.
3. Adjusted R Square = 0.660 (66%) the voting decision factor is influenced by the use of AI technology in making campaign billboards, while the rest can be influenced by other factors outside this research.
4. Standard Error Estimated means measuring the variation in predicted values or can also be referred to as Standard Deviation. The Standard Error Estimated value is 3.811. The smaller the Standard Deviation value means the better the model.

Table 11. X2 Determination Coefficient Test Results Against Y

Model Summary[b]

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.651[a]	.424	.423	4.091

a. Predictors: (Constant), Visual Design, The use of AI Technology
b. Dependent Variable: Voting Decision

Source: Research data processing results through SPSS 2024

5. R value = 0.651. This means that the relationship between the visual design of campaign billboards and voting decisions is 0.651 (65.1%). Then it can be stated that the relationship is Strong, because based on Table 11 it is in the range of 0.60 - 0.799.
6. R Square value = 0.424. That is, this value shows that the visual design of campaign billboards has an impact of 42.4% on voting decisions, while the remaining 57.6% (100% - 42.4%) is influenced by other factors outside this research. Then it can be stated that the level of relationship is moderate, because based on Table 11 it is in the range of 0.40 - 0.599.
7. Adjusted R Square = 0.423. If it is represented by 42.3%, the voting decision factor is influenced by the visual design of the campaign billboards, while the rest can be influenced by other factors outside this research.
8. Standard Error Estimated means measuring the variation in predicted values or can also be referred to as Standard Deviation. The Standard Error Estimated value is 4.091. The smaller the Standard Deviation value, the better the model.

Table 12. Test Results of the Coefficient of Determination X1 and X2 Against Y

Model Summary[b]

Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.651[a]	.424	.423	4.091

a. Predictors: (Constant), Visual Design, The use of AI Technology
b. Dependent Variable: Voting Decision
Source: Research data processing results through SPSS 2024

Based on Table 12 above to see the magnitude of the use of AI technology (X1) and the visual design of campaign billboards (X2) on voting decisions (Y), it can be seen that the R Square value is 0.528 or if it is represented by 52.8%. These results are in the range of 0.40 - 0.599 which means Moderate. This value shows that the influence of the use of AI technology and the visual design of campaign billboards has an impact of 52.8% on voting decisions, while the remaining 47.2% (100% - 52.8%) is influenced by other factors outside this research.

Partial Hypothesis Test (T)

The T Test is needed to determine the impact of the variable use of AI technology (X1) and visual design (X2) has a partial influence on the voting decision variable (Y). T test is carried out by comparing t count with t table, the basis for decision making in the T test is:

1. If the sig <0.05 or t count> t table, Ho is rejected and Ha is accepted.
2. If sig > 0.05 or t count < t table, Ho is accepted and Ha is rejected.

The following are the results of hypothesis testing (Partial T Test) using SPSS version 29 as follows:

Table 13. Partial Hypothesis Test Results (T)

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	8.522	2.001		4.259	.000
	Penggunaan Teknologi AI	.563	.060	.391	9.340	.000
	Desain Visual	.533	.052	.430	10.278	.000

a. Dependent Variable: Voting Decision
Source: Research data processing results through SPSS 2024

After getting the results through SPSS version 29 Based on Table 13, the t test results can be stated that:

1. The variable Use of AI Technology (X1) on the Voting Decision variable (Y) has a t value of 9.340 with a significance value of 0.000. The use of AI Technology (X1) has a t value of 9,340> 1.966 t table, and a significance value of 0.000 <0.05. So, it can be stated that the independent variable, namely the Use of AI Technology (X1) partially affects the dependent variable or the Decision to Choose (Y). From this statement it is known that Ho is rejected and Ha is accepted. So, it can be concluded that the variable Use of AI Technology (X1) has a positive and significant effect on the Decision to Vote (Y) for presidential candidates in Generation Z.
2. The Visual Design variable (X2) on the voting decision variable (Y) shows the results of the t value of 10.278 with a significance value of 0.000. The Visual Design variable (X2) has a calculated t value of 10.278> 1.966 t table, and a significance value of 0.000 <0.05. This result is that the independent variable partially affects the dependent variable. From this statement it is said that Ho is rejected and Ha is accepted. So it can be concluded that

the Visual Design variable (X2) of campaign billboards has a positive and significant effect on the decision to vote (Y) for presidential candidates in Generation Z.

Simultaneous Hypothesis Test (F)

The F test in this research uses the ANOVA test. This test can be done to determine the joint (simultaneous) effect of independent variables (Use of AI Technology and Visual Design) on the dependent variable (Decision to choose). The basic decision making is as follows:

1. If the sig value <0.05, or f count> f table, then there is a simultaneous influence of variable X on variable Y.
2. If the sig value> 0.05, or f count < f table then there is no simultaneous influence of variable X on variable Y.

Table 14. Simultaneous Hypothesis Test Results (F)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11280.068	2	5640.034	388.332	<.001[b]
	Residual	5765.932	397	14.524		
	Total	17046.000	399			

a. Dependent Variable: Voting Decision

b. Predictors: (Constant), The use of AI Technology, Visual Design

Source: Research data processing results through SPSS 2024

After getting the results through SPSS version 29 Based on Table 14, the results of the f test can be stated that the calculated f value is 388.332 with a significance value of 0.001. The f table value is 3.018. Which means that the calculated F value is 388.332> 3.018 and the resulting significance value is 0.001 <0.05. So, it can be stated that Ho is rejected and Ha is accepted. The accepted hypothesis is that the variable Use of AI Technology (X1) and Visual Design (X2) of campaign billboards has a positive and simultaneous effect on the Decision to Vote (Y) for presidential candidates in Generation Z.

Discussion Analysis Of Sor Theory (Stimulus – Organism - Response)

This research uses the Stimulus Organism Response (SOR) Theory. SOR theory, which stands for Stimulus, Organism, and Response, emphasizes three key elements in the communication process. Stimulus refers to the message conveyed, Organism represents the communicant or audience receiving the message, and Response is the effect or reaction expected from the audience. According to this theory, the message conveyed by the communicator is designed to influence and change the attitude or behavior of the audience so that the audience acts in accordance with the wishes of the communicator. In other words, SOR Theory explains the process of messages that can evoke certain reactions in the target audience, so that communication objectives are achieved as desired (Efendy, 2003). This theory becomes very relevant in understanding how communication messages, especially in the context of a campaign, can effectively influence the behavior of the target audience.

The results show that agencies or political parties effectively utilize Artificial Intelligence technology and campaign billboards as a means of communication with their audiences. Through the campaign billboard platform, agencies or political parties consistently share informative and inspiring content, aiming to raise public awareness about various social issues in Indonesia. In addition, these political parties also use campaign billboards to invite the public to actively participate in voting in the 2024 elections. The campaign billboards were designed to be visually appealing and convey accurate and reliable information, so as to build trust and encourage concrete actions from the viewing

public. With this approach, political parties not only raise awareness, but also mobilize their audiences to contribute to the 2024 General Election.

The visual elements of campaign billboards used by political parties can be seen as a form of message or stimulus. In this context, the organism refers to the audience and voters from Generation Z who receive and analyze these social campaign messages, through attention, understanding, and finally acceptance of the messages conveyed. This process emphasizes the cause-and-effect relationship between stimulus and response, where any given stimulus tends to trigger a particular response.

In this research, political parties use their platforms to spread social campaign messages through campaign billboards designed using artificial intelligence technology. These messages aim to raise awareness and encourage action from the audiences. The response or effect that results from this stimulus can be a change in attitude or behavior, such as a decision to vote for a presidential candidate or participate in other efforts raised in the campaign. Through this approach, the political party managed to create a tangible impact by mobilizing its audience to be actively involved in the 2024 General Election.

CONCLUSION

Based on the results of the research and discussion previously described regarding the Effect of the Use of Artificial Intelligence Technology and Visual Design of Campaign Billboards on the Decision to Vote for Presidential Candidates in Generation Z, it can be concluded that:

1. On the variable Use of Artificial Intelligence Technology, there is a significant influence on the decision to vote for presidential candidates in Generation Z. This proves that respondents agree that campaign billboards have the ability to convey messages that are considered true or credible.
2. In the Visual Design of Campaign Billboards variable, there is a significant influence on the decision to vote for presidential candidates in Generation Z. This is evidenced in the research results, the majority of respondents recognized that the visual design elements in campaign billboards had an effect on the messages conveyed.
3. There is an equal influence of both independent variables on the dependent variable that can have a positive impact on the sentiment of Generation Z voters and influence their decision to choose a presidential candidate in the 2024 election.

REFERENCES

Aini, D. N. (2023). Visualisasi Teks Ke Gambar Dengan Kekuatan AI Art Generator: Potensi Atau Masalah? *Proceeding, Seminar Nasional Pembelajaran Bahasa dan Sastra (SELASAR)*, 7, pp. 1-12.

Andra, S. (2017). Efektifitas Penggunaan Media Luar Ruang Dalam Mempromosikan Pariwisata Kota Samarinda. *EJournal Ilmu Komunikasi*, *5*(2), 160–171.

Arifin, Anwar. (2011). *Komunikasi Politik: Filsafat, Paradigma, Teori, Tujuan, Strategi dan Komunikasi Politik Indonesia*, Yogyakarta: Graha Ilmu.

Azwar, S. (2007). *Sikap Manusia Teori dan Pengukurannya*. Yogyakarta: Pustaka Belajar.

Baines, P. R., & O'Shaughnessy, N. J. (2014). Political Marketing and Propaganda: Uses, Abuses, Misuses. *Journal of Political Marketing*, Vol. 13, Issues 1–2, pp. 1–18. https://doi.org/10.1080/15377857.2014.866018

Billah, S. A., Wulandari, A. A., & Sapitri, A. N. (2024). Teori Kesan Pertama Terhadap Pesan Visual Poster Kampanye Dalam Keputusan Pemilu 2024. *JDMR: Jurnal Digital Media & Relationship,* 6(1), pp. 38-51.

Budiyono, Slamet; Azhari, Pebri; Pamungkas, Maulana Al Bana. (2024). Problematika Penggunaan AI (Artificial Intellegence) di Bidang Pendidikan, *Al-Dyas: Jurnal Inovasi dan Pengabdian Kepada Masyarakat*, Vol. 3 No. 2, pp. 660-669.

Fauziyyah, S. N., & Rina, N. (2020). Literasi Media Digital: Efektivitas Akun Instagram @infobandungraya Terhadap Pemenuhan Kebutuhan Informasi Followers, *MEDIALOG: Jurnal Ilmu Komunikasi, 3(1),* pp.13-24.

Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25*. Semarang: Badan Penerbit Universitas Diponegoro.

Gross, E. C. (2023). Artificial Intelligence Generated Art Imitation and the Art World: Implications and Further Questions. *Boletin de Arte*, 44, 313–316. https://doi.org/10.24310/ba.44.2023.15972

Hernaeny, Ul'fah. (2021). Populasi dan Sampel. *Pengantar Statistika* Vol. 1, Issue 33, pp. 342-351.

Hertanto, E. (2017). Perbedaan Skala Likert Lima Skala Dengan Modifikasi Skala Likert Empat Skala. *Academia Edu*, diakses pada 18 Agustus 2024, melalui: (DOC) PERBEDAAN SKALA LIKERT LIMA SKALA DENGAN MODIFIKASI SKALA LIKERT EMPAT SKALA | Eko Hertanto - Academia.edu

Hisan, K., & Azhar, A. A. (2020). Trend Iklan Politik Luar Ruang Dalam Ruang Media Massa. *Al-Hikmah Media Dakwah, Komunikasi, Sosial Dan Kebudayaan*, *11*(2), 80–84. https://doi.org/10.32505/hikmah.v11i2.2543

Janie, D. N. A. (2012). *Statistik Deskriptif & Regresi Linier Berganda Dengan SPSS*. Semarang: Semarang Universituy Press.

Kaid, L. L. (2004). *Handbook of Political Communication Research*, New York: Routledge.

Kasiram. (2008). *Metodologi Penelitian Kualitatif dan Kuantitatif*. Malang, UIN - Maliki Press Malang.

KBBI_Online. 2024. *Baliho*, diakses pada: 14 Desember 2024, melalui: Arti kata baliho - Kamus Besar Bahasa Indonesia (KBBI) Online.

Kristyowati, Y. (2021). Generasi "Z" Dan Strategi Melayaninya, *Ambassadors: Jurnal Theologi dan Pendidikan Kristiani*, *02*(1), 23–34. https://doi.org/10.31219/osf.io/w3d7.

Kriyantono, R. (2014). *Teknik Praktis Riset Komunikasi*. Jakarta: Prenada Kencana Media Group.

Kurdaningsih, D. M., & Mulyadi, U. (2020). Iklan Politik Di Media Online Dan Peer Group Terhadap Keputusan Memilih Para Pemilih Muda Pada Pemilihan Presiden 2019, *Media Kita*, 3(2), pp. 107-119.

Kurniawan, Agung Widhi & Puspitaningtyas, Zarah. (2016). *Metode Penelitian Kuantitatif*. Yogyakarta: Pandiva Buki.

Kusrianto, A. (2007). *Pengantar Desain Komunikasi Visual*. Depok: Andi Offset.

Littlejohn, Stephen W. & Foss, Karen A. (2011). *Theories Of Human Communication*, Illionis: Long Grove

Manullang, Osin Jentia Rosni & Simanjuntak, Mariana (2024). Pengaruh Pemasaran Media Sosial Dan Persepsi Calon Mahasiswa Terhadap Keputusan Pemilihan Perguruan Tinggi. *Jurnal Manajemen Kreatif dan Inovasi*, *2*(3), 168–179. https://doi.org/10.59581/jmki-widyakarya.v2i3.3820

Martono, S., & Al Fadzilah, A. (2016). Pengaruh Ketidakamanan Kerja, Komitmen Organisasional Dan Kepercayaan Organisasional Pada Keinginan Berpindah. *Management Analysis Journal*, *5*(1), pp. 44-54. http://maj.unnes.ac.id

Maulana, Alvin; & Kristiana, Nova. (2020). Perancangan Desain Baliho Kampanye Pasangan Eri – Armuji Pada Pilkada Surabaya 2020, *Jurnal Barik*, Vol. 1 No. 3, pp.114-126.

McQuail, D. (2005). *McQuail's Mass Communication Theories (6th Edition)*, London: Sage Publications LTD.

McQuail, D. (2011). *Teori Komunikasi Massa*. Jakarta: Salemba Humanika.
Mulyana, D. (2008). *Ilmu Komunikasi: Suatu Pengantar*. Bandung: Remaja Rosdakarya.
Nabilah, S. (2023). Pengaruh Penggunaan Teknologi Big Data dalam Bisnis Retail Terhadap Keputusan Konsumen, diakses pada 30 Agustus 2024, melalui: Pengaruh+Penggunaan+Teknologi+Big+Data+dalam+Bisnis+Retail+Terhadap+Keputusan+Konsumen.pdf - Pengaruh Penggunaan Teknologi Big Data dalam Bisnis Retail Terhadap Keputusan Konsumen Sarah - College Sidekick
Nugroho, B. P., & Samatan, N. (2021). Strategi Komunikasi Pemasaran Toko @Xstyle.id pada Masa Pandemi Covid-19. *Jurnal PIKMA: Publikasi Media Dan Cinema*, *4*(1), pp. 40–48.
Nuraeni, Yeni; Basuki, Heru; Samatan, Nuriyati. (2020). Perspektif Psikologi Komunikasi Dan Ranah Afektif Dalam Pelestarian Nilai Budaya Pada Pendengar Radio, *International Journal of Communication, Social and Humanities (IJCOMAH),* Vol. 1 Issue 2, pp. 164-172.
Petty, R. E., & Cacioppo, J. T. (1986). *The Elaboration Likelihood Model of Persuasion*. Springer New York.
Ragot, M., Martin, N., & Cojean, S. (2020). AI-Generated VS. Human Artworks. A Perception Bias Towards Artificial Intelligence? *Conference on Human Factors in Computing Systems - Proceedings*. https://doi.org/10.1145/3334480.3382892
Rakhmansyah, A. (2014). Pengaruh Penggunaan Teknologi Informasi Terhadap Kinerja (Studi Pada Karyawan Pt. Pln Area Madiun). *Jurnal Administrasi Bisnis (JAB), 14(1),* pp. 34-44.
Rifky, S. (2024). Dampak Penggunaan Artificial Intelligence Bagi Pendidikan Tinggi. *Indonesian Journal of Multidisciplinary on Social and Technology*, *2*(1), 37–42. https://doi.org/10.31004/ijmst.v2i1.287
Sahnir, N., & Yatim, H. (2023). Pengenalan Teknologi Artificial Intelligence (AI) Dalam Meningkatkan Pengalaman Belajar Seni Di Era Digitalisasi Pendidikan. *Prosiding Seminar Nasional*. https://journal.unm.ac.id/index.php/Semnasdies62/index
Samatan, N. (2017). *Riset Komunikasi I*. Jakarta: Penerbit Gunadarma.
Samatan, N. (2018). *Riset Komunikasi II*. Jakarta: Penerbit Gunadarma.
Sarwono, J. (2012). *Metode Riset Skripsi Pendekatan Kuantitatif (Menggunakan Prosedur SPSS): Tuntunan Praktis dalam Menyusun Skripsi*. Jakarta: Elex Media Komputindo.
Save, M. Dagun. (2006). *Kamus Besar Ilmu Pengetahuan*. Jakarta: HIPN.
Setiawan, B. (2015). *Teknik Hitung Manual Analisis Regresi Linier Berganda Dua Variabel Bebas*. *E-Book,* Accessed December 20th 2024, by: EconPapers: Teknik Hitung Manual Analisis Regresi Linear Berganda Dua Variabel Bebas
Sihabudin, M. Maulana Rizik; Laila, Helwa Nur Alfa; Kharis, Kharisma; Rismayanti; Fatimah, Riska Siti. (2023). Strategi Positioning "Gemoy" Prabowo Subianto melalui Media Digital. *Jurnal Sosiohumaniora Nusantara (Humanus), 1(1),* pp. 146–154.
Siregar, S. (2013). *Metode Penelitian Kuantitatif: Dilengkapi Dengan Perhitungan Manual & SPSS*. Jakarta: Prenadamedia Group.
Sugiyono. (2010). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif dan R & D*. Bandung: Alfabeta.
Sugiyono. (2013). *Metode Penelitian Bisnis*. Bandung: Alfabeta.
Suharnan. (2005). *Psikologi Kognitif*. Bandung: Srikandi.
Suryono, J., Astuti, P. I., Rahayu, N. T., Hariyanto, H., & Widayati, M. (2019). Karikatur Iklan Politik Media Luar Ruang Jangan Membeli Kucing Dalam Karung. *Profetik: Jurnal Komunikasi*, *12*(1), pp. 46-60. https://doi.org/10.14421/pjk.v12i1.1539
Tinarbuko, S. (2009). Menakar Iklan Politik Pemilu 2009. *Jurnal Desain Komunikasi Visual Nirmana,* Vol.11, No. 2, pp.114-124.

Umar, H. (2005). *Metode Penelitian Untuk Skripsi dan Tesis Bisnis*. Depok: PT. RajaGrafindo Persada.

Venus, A. (2004). *Manajemen Kampanye Panduan Teoretis dan Praktis dalam Mengefektifkan Kampanye Komunikasi*. Bandung: Simbiosa Rekatama Media.

Wijayanti, A. (2016). Teknik Dasar Pengolahan Data Kuantitatif. *Modul,* Akademi Pariwisata BSI.

Wu, Y., Mou, Y., Li, Z., & Xu, K. (2020). Investigating American and Chinese Subjects' Explicit and Implicit Perceptions of AI-Generated Artistic Work. *Computers in Human Behavior*, *104*. https://doi.org/10.1016/j.chb.2019.106186