The Journal of Society and Media, October 2025, Vol. 9(2) 479-503

https://journal.unesa.ac.id/index.php/jsm/index E-ISSN 2580-1341 and P-ISSN 2721-0383

Accredited KEMENRISTEK/ BRIN No.148/M/KPT/2020

DOI: 10.26740/jsm.v9n2.p479-503



Gen Z's Perception of the Application of the Presidential Election Result Recapitulation Information System in Surabaya

Erika Zahra Fitriananta¹, Moch Iqbal Nasrulloh Al Amin¹, Benedikta Ngamul¹, Putri Nadiatus Shofiyah², Artanti Indrasetianingsih^{1*}

1,2,3,4,5 Universitas PGRI Adi Buana Surabaya, Surabaya, Indonesia

Abstract

Democracy is a system of government that emphasises the principles of justice and equality for all citizens. One form of democratic activity is general elections. General elections are a democratic process in which citizens elect representatives or government officials through their voting rights, one of which is to elect representatives of the president and vice president. In the 2024 General Election, Gen Z voters played a significant role. The vote count utilised the Recapitulation Information System, an IT-based application for publishing and recapitulating election results. This research is based on primary data from questionnaires distributed to Gen Z participants in Surabaya City. The variables used in this research consist of 1 dependent variable, the level of trust in SIREKAP, and nine independent variables, including gender, age, education, occupation, use of the Sirekap application, information transparency, political involvement, digital literacy level of the KPU application, and political insight. Based on the results of data analysis using binary logistic regression, it is concluded that simultaneously and partially only the variables of gender, use of the Sirekap application, information transparency, political involvement, and literacy level significantly affect the level of trust in the Sirekap application, with a classification accuracy of 82.9%.

Keywords: Gen Z, Perception, SIREKAP, Binary Logistic Regression

Paper type: Research Paper

Corresponding author: artanti.indra@unipasby.ac.id

Received: 10-03-2025; Received in Revised From 21-03-2025; Accepted: 05-10-2025; Available

Online: 07-10-2025

Cite this document as: Fitriananta, Erika Zahra, Moch Iqbal Nasrulloh Al Amin, Benedikta Ngamul, Putri Nadiatus Shofiyah, and Artanti Indrasetianingsih. (2025). *Gen Z's Perception of the Application of the Presidential Election Result Recapitulation Information System in Surabaya. The Journal of Society and Media, 9(2), 479–503. DOI: 10.26740/jsm.v9n2.p479-503.*

Licensed under Creative Commons attribution-noncommercial 4.0 international



INTRODUCTION

Generation Z has unique characteristics shaped by shared experiences and environmental influences. According to Kupperschmidt, generational classification is based on birth years, age, location, and significant events that impact their development (Putra 2016). Supporting this, data from the Central Bureau of Statistics (BPS) in 2020 recorded that Generation Z is the largest generational group in Indonesia, accounting for 27.94 per cent of the total population (Evita et al. 2023). This indicates that Generation Z is crucial in shaping Indonesia's future, especially in political engagement. Generation Z refers to individuals born between 1997 and 2012 (Dimock 2019). The 2024 election provides this generation with an opportunity to showcase its growing influence, foster political enthusiasm, and draw attention to key issues. Their participation is expected to impact the outcome of this democratic event, which is set to take place in February.

The General Elections Commission (KPU) established the Final Voter List (DPT) for the 2024 election, with 204,807,222 registered voters. Among them, 33.60 per cent or 66,822,389 voters belong to the millennial generation. Meanwhile, Generation Z voters comprise 46,800,161 individuals, representing 22.85 per cent of the electorate. Together, these two generations form 56.45 per cent of the total voting population. The increasing number of young voters highlights the need for political education and awareness programs. Many Generation Z individuals rely on social media for political information, exposing them to credible and misleading sources. This makes it essential to provide accurate and accessible information about the election process, candidates, and policies. Strengthening political literacy among young voters can help them make informed decisions and actively participate in the democratic process (Febriani et al. 2022).

As digital natives, Generation Z can shape political discourse through online platforms. They engage in discussions, share opinions, and mobilise support for causes they believe in. This digital activism influences public opinion and encourages more young people to be politically aware. Political parties and candidates recognise this trend and increasingly use social media to connect with young voters (Sampe 2021). Despite their potential, many young voters face challenges in political participation. Some individuals feel disengaged due to a lack

of trust in political institutions, while others struggle to find reliable sources of information. Political apathy among youth is a concern that needs to be addressed through educational initiatives, open discussions, and greater transparency in governance. Encouraging youth participation in politics can lead to positive changes in leadership and policies. The role of Generation Z in Indonesia's political future cannot be underestimated. Their perspectives, values, and engagement will shape the country's democratic landscape. By promoting political awareness and encouraging active participation, Indonesia can harness the power of its young population to build a more inclusive and progressive society (Wahyuni S 2019).

Proporsi Jumlah Penduduk Indonesia Berdasarkan Generasi Pre-Boomer (>74 tahun) Post Gen Z (<8 tahun) 1,87% **Baby Boomer** (56-74 tahun) Gen Z 11,56% (8-23 tahun) 27,94% Gen X (40-55 tahun) 21.88% Milenial (24-39 tahun) 25.87% Sumber: Badan Pusat Statistik (Hasil Sensus Penduduk 2020); Diolah Litbang *Kompas/*DDY KINFOGRAFIK: NINGSIAWATI

Figure 1.
Percentage of Generation Indonesia

Source: Central Bureau of Statistics, 2020

According to Decision No. 66 of 2024 by the General Election Commission, the vote count in the 2024 General Election utilises the Recapitulation Information System application. The Recapitulation Information System is an information technology-based application used as a medium to publish vote count results and facilitate the process of recapitulating vote count results in elections. The Recapitulation Information System also acts as a tool for counting votes in general elections. According to the General Election Commission, applying information technology in the recapitulation provides several benefits. First, it allows the public

and election organisers to obtain information on vote-counting results and recapitulation quickly. Second, the Recapitulation Information System increases the effectiveness and efficiency of implementing regional elections at the recapitulation stage (Utama 2020).

Previous research entitled Implementation of the Recapitulation Information System Application in the 2020 Manado City Pilkada (Chaverlin et al. 2022). In addition, research related to the Recapitulation Information System application, also known as the Recapitulation Information System, is presented in the title "Urgency of E-Voting Systems and Recapitulation Information Systems in Organising the 2024 Election" (Hardiyanti 2022). In the 2024 General Election, the General Election Commission conducted a vote count using the Recapitulation Information System (SIREKAP) application, one of which was in calculating the president and vice president. After the implementation of the General Election, there was public doubt regarding the transparency of the KPU. Kawal Pemilu explains the discrepancy in data on the 2024 Election vote count results between the KPU's official website and the KPU Recapitulation Information System. Elina Ciptadi, Co-Founder of Kawal Pemilu, stated that the difference between the presidential election vote count data presented by Kawal Pemilu and the version published by the KPU is considered valid. Elina's explanation indicates that Kawal Pemilu uses data from uploaded photos of citizens they approve and photos taken from Sirekap KPU. Therefore, to find out how the level of public trust in the results of the calculation of the General Election Commission Recapitulation Information System application, it is necessary to conduct research to become a reference in the accuracy of the data in the General Election Commission Recapitulation Information System application. One of the analysis methods that can be used is binary logistic regression analysis. When viewed from the problems described above, the authors propose the title "Gen Z Perceptions of the Level of Trust in the Recapitulation Information System (SIREKAP) for the Presidential Election Results in Surabaya".

METHODS

On February 14 2024, a nationwide general election was held in Indonesia, including the presidential election. After the election, the vote counting process was conducted using the SIREKAP application. SIREKAP is an information technology-based application used by the General Election Commission (KPU) to publish vote count results and facilitate the recapitulation process in elections. However, there have been reports of alleged fraud in the vote-counting process using SIREKAP. These allegations have drawn attention as they impact the integrity and public trust in the election results. Therefore, a clear understanding and transparent clarification of the SIREKAP vote counting process is necessary to ensure the legitimacy and fairness of the election. As a result, research on Generation Z's perception is essential to determine the level of trust in the KPU's SIREKAP application regarding the presidential election results.

The research will be conducted on Generation Z voters who have participated in the general election in Surabaya. The research design follows a quantitative approach by testing hypotheses on the influence of independent variables. The stages of this research are as follows:

- 1. Conducting a literature review
- 2. Determining the research location and design
- 3. Developing and creating a questionnaire
- 4. Conducting a survey
- 5. Collecting and analyzing data
- 6. Drawing conclusions
- 7. Creating content and reporting findings

This study uses primary data from a questionnaire survey distributed to Gen Z in Surabaya City who have participated in the general election. Samples were taken using the Probability Sampling method with Simple Random Sampling technique, where samples were randomly selected without considering strata in the population. Data was collected directly from respondents through questionnaires for further analysis. The variables used in this research consist of dependent

variables and 9 independent variables. The variables used will be explained in the table below.

Table 1.

Table 1.						
Symbol	Variables	Categori	Measurement Scale			
Y	Level Trust of SIREKAP	0 = Not Trust	Ordinal			
		1 = Trust	_ 0 1 0 1 0 1 0 1			
<i>X</i> ₁	Gender	0 = Male	Nominal			
		1 = Female	_			
<i>X</i> ₂	Age	-	Ratio			
	Last Education	0 = Junior High School	Ordinal			
X 3		1 = High School				
<i>X</i> ₄	Jobs	0 = Student	Nominal			
		1 = College Student	_			
	The Use SIREKAP Application	0 = Less Understanding				
<i>X</i> ₅		SIREKAP	Ordinal			
		1 = Understand SIREKAP				
X_6	Information Transparency	0 = Not transparency	_ Ordinal			
		1 = Transparency				
	Political Involvement	0 = Not involved				
X 7		1 = Rarely involved	Ordinal			
		2 = Involved	-			
	Digital Literacy Level of KPU	0 = Low	Ordinal			
<i>X</i> 8	Application	1 = Medium	•			

	2 = High	
Political Insight	0 = Low	
X_9	1= Medium	Ordinal
	2 = High	

Research Variables

The data source used in this research is primary data. The primary data collected in this study come from survey results through questionnaire distribution. The population of this research consists of all Generation Z voters in Surabaya who have participated in the general election. The sampling method follows a cluster sampling technique, followed by a non-probability sampling approach. Data collection in this research is conducted through direct questionnaire distribution. The data analysis steps using binary logistic regression are as follows.

- 1. Create and distribute research questionnaires.
- 2. Conduct validity and reliability tests on the Surabaya Community's perceptions data.
- 3. Perform descriptive statistics to determine the characteristics of the data.
- 4. Conduct an independence test to determine the relationship between the dependent variable and the independent variable.
- 5. Perform binary logistic regression analysis.
- 6. Performing simultaneous parameter significance test.
- 7. Conducting partial parameter significance test.
- 8. Interpreting the binary logistic regression model and the odds ratio value obtained.
- 9. Performing model fit test
- 10. Draw conclusions and suggestions.

RESULT AND DISCUSSION

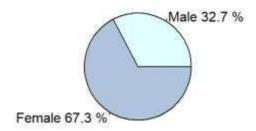
Descriptive Statistics

This study's respondents are individuals from Generation Z who participated in the 2024 general election. They were selected as the target group to understand their perceptions regarding the trustworthiness of SIREKAP, the vote recapitulation application used by the General Election Commission (KPU).

Generation Z, known for its high digital literacy and active engagement in social and political issues, represents a crucial demographic in evaluating the reliability and transparency of election-related technology. Their firsthand experience in the electoral process provides valuable insights into how technological advancements, such as SIREKAP, influence public trust in election results. By focusing on this specific group, the study aims to assess how Generation Z perceives the effectiveness, transparency, and reliability of SIREKAP in ensuring accurate vote counting and fair election outcomes.

Figure 2.

Percentage Gender

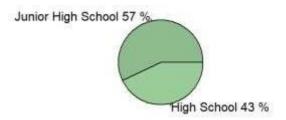


Pie chart of respondent data based on Gender

The pie chart represents the gender distribution in the study. It shows that the majority of respondents are female, making up 67.3% of the total sample, while male respondents account for 32.7%. This indicates a higher participation rate among females in the survey compared to males.

Figure 3.

Percentage Education

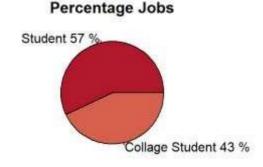


Pie chart of respondent data based on Last Education

The pie chart illustrates the educational background of respondents, categorising them into two groups: those who have completed junior high school and those who have completed high school. The data reveal that 57% of the respondents have a junior high school education, whereas 43% have a high school education.

This distribution suggests that a significant portion of the respondents have not yet advanced to higher education levels, possibly indicating that the survey was conducted among a younger demographic. The predominance of junior high school graduates may also reflect the accessibility or availability of education at different levels within the surveyed population. Understanding this educational composition is essential in interpreting other study aspects, as the respondents' educational background could influence their perspectives, decision-making, and overall responses to the survey questions.

Figure 4.



Pie chart of respondent data based on Job

The pie chart illustrates the distribution of respondents based on their occupation. The data reveals that 57% of the respondents are students, while 43% are college students. This indicates that most respondents are still in secondary education rather than higher education. The higher percentage of students suggests that the study sample consists mainly of individuals who are still in school and have not yet entered college or University. This could have implications for the study, as their perspectives and experiences may differ from those already in higher education. Additionally, the presence of 43% of college students shows a significant proportion of respondents who have moved on to a higher level of education, potentially providing more diverse opinions regarding the study topic.

Contingency Tabel

A contingency table is one of the methods in statistical analysis whose combination of results is presented in cells to form a table. In the contingency table, there is a row i, which shows the X category that explains the independent variable, and the jth column for the Y category that explains the dependent variable, which can be informative for building the probability distribution of Y at each level of X (Agresti, 2019). This contingency table can only show the relationship between two or more variables in a study and cannot answer the cause-and-effect relationship. The complexity of interpreting the contingency table depends on the number of variables; the more variables are tabulated, the more complex the table interpretation is.

Table 2.

		Level Trust of SIREKAP		Count
		Not Trust	Trust	Count
	Male	16	70	86
Gender	Female	73	104	177
	Count	89	174	263

Level Trust of SIREKAP Contingency Table by Gender

The relationship between gender and the Level of trust in SIREKAP reveals that male respondents tend to have a higher level of confidence in the system than females. Among the 263 respondents, 86 are male and 177 are female. Most males,

around 81.40%, express trust in SIREKAP, while only 18.60% do not. In contrast, female respondents display a lower level of trust, with 58.76% expressing confidence in the system and 41.24% remaining skeptical. This difference suggests that gender may influence perceptions of election technology, potentially due to varying levels of exposure to political information, personal experiences, or differing attitudes toward technology and transparency.

Table 3.

		Level Trust of SIREKAP		Count
		Not Trust	Trust	_ Count
Last	Junior High School	41	109	150
Education	High School	48	65	113
Education	Count	89	174	263

Level Trust of SIREKAP Contingency Table by Last Education

Last education also appears to impact level trust of SIREKAP. Respondents with a junior high school education show a higher level of trust (72.67%) compared to those who have completed senior high school (57.52%). Meanwhile, scepticism is more common among individuals with higher education levels, as 42.48% of those with a senior high school background do not trust the system, compared to 27.33% of those with only a junior high school education. These findings suggest that individuals with more education may develop greater critical thinking skills, leading them to question the reliability or fairness of election-related technology. Access to more detailed information and exposure to discussions about election integrity may also contribute to this scepticism.

Table 4.

		Level Trust of SIREKAP		Count
		Not Trust	Trust	Count
	Student	42	109	151
Jobs	College Student	47	65	112
	Count	89	174	263

Level Trust of SIREKAP Contingency Table by Jobs

Jobs further influence trust levels in SIREKAP, with students showing greater confidence in the system compared to college students. Among students, 72.19% express trust while 27.81% do not. In contrast, only 58.04% of college students trust SIREKAP, with 41.96% expressing doubt. This difference may be attributed to the level of exposure to discussions about electoral transparency, as college students are more likely to encounter critical analyses of digital election processes. Additionally, the transition from high school to college often involves increased awareness of political and technological issues, which may lead to a more cautious perspective.

Table 5.

		Level Trust of SIREKAP		Count
		Not Trust	Trust	Count
The Use	Less Understanding SIREKAP	39	36	75
SIREKAP	Understand SIREKAP	50	138	188
Application	Count	89	174	263

Level Trust of SIREKAP Contingency Table by Using the Use SIREKAP

Application

The level of understanding of SIREKAP plays a significant role in determining trust. Among the 75 respondents who reported having less understanding of the application, 39 individuals (52%) expressed distrust, while 36 individuals (48%) trusted the system. In contrast, among the 188 respondents who understood SIREKAP, a majority of 138 individuals (73.4%) trusted it, whereas 50 individuals (26.6%) did not. This trend indicates a strong correlation between

knowledge of the system and trust, where individuals with a higher level of understanding are more likely to perceive SIREKAP as a reliable and trustworthy platform.

Table 6.

		Level Trust of SIREKAP		Count
		Not Trust	Trust	_ Count
Information	Not transparency	26	94	120
	Transparency	63	80	143
Transparency	Count	89	174	263

Level Trust of SIREKAP Contingency Table by Information Transparency

The perception of transparency in SIREKAP also significantly affects trust levels. Among the 120 respondents who perceived a lack of transparency in the system, only 26 individuals (34.3%) trusted it, while a majority of 94 individuals (65.7%) expressed distrust. On the other hand, among the 143 respondents who believed the system was transparent, 80 individuals (55.9%) trusted SIREKAP, whereas 63 individuals (44.1%) did not. This data suggests that when respondents perceive the system as transparent, their level of trust increases. Conversely, a lack of perceived transparency leads to scepticism and reduced confidence in SIREKAP.

Table 7.

		Level Trust of SIREKAP		Count	
		Not Trust Trust		Count	
	Not Involved	27	14	41	
Political	Rarely Involved	33	66	99	
Involvement	Involved	29	94	123	
	Count	89	174	263	

Level Trust of SIREKAP Contingency Table by Political Involvement

Political involvement also plays a crucial role in shaping trust in SIREKAP. Among the 41 respondents who reported having no political involvement, only 14 individuals (34.1%) trusted the system, while the remaining 27 individuals (65.9%)

did not. Among the 99 respondents who were rarely involved in politics, 66 individuals (66.7%) trusted SIREKAP, while 33 individuals (33.3%) distrusted it. Finally, among the 123 respondents who actively participated in political activities, a significant 94 individuals (76.4%) trusted SIREKAP, while only 29 individuals (23.6%) did not. This pattern indicates that individuals with higher political engagement tend to have greater trust in SIREKAP, likely due to their exposure to political processes and electoral technologies

Table 8.

		Level Trust of SIREKAP		Count
		Not Trust	Trust	Count
Digital	Low	47	20	67
Literacy	Medium	28	73	103
Level of KPU	High	14	81	95
Application	Count	89	174	263

Level Trust of SIREKAP Contingency Table by Digital Literacy Level of KPU

Application

The table illustrates the relationship between digital literacy levels and trust in SIREKAP. Respondents with low digital literacy show higher distrust in SIREKAP with 47 individuals expressing doubt compared to only 20 who trust it. In contrast those with medium digital literacy exhibit greater trust with 73 individuals showing confidence in SIREKAP and only 28 expressing distrust. The highest level of trust is observed among respondents with high digital literacy, where 81 individuals trust the system, while only 14 do not. These findings suggest a positive correlation between digital literacy and trust in SIREKAP, indicating that as digital literacy increases, trust in the system also improves. Those with higher digital literacy are more likely to understand how SIREKAP functions leading to greater confidence in its reliability and transparency. Conversely, individuals with low digital literacy may struggle to comprehend the system, resulting in scepticism and distrust. Overall, the data highlights the crucial role of digital literacy in shaping public confidence in electoral technology, emphasising the need for initiatives that enhance digital education to increase trust in SIREKAP.

Table 9.

		Level Trust of SIREKAP		Carret	
		Not Trust Trust		Count	
	Low	28	18	46	
Political	Medium	30	83	113	
Insight	High	31	73	104	
	Count	89	174	263	

Level Trust of SIREKAP Contingency Table by Political Insight

The data illustrates the relationship between respondents' level of political insight and their trust in SIREKAP. Political insight is crucial in shaping individuals' perceptions of the system. Among respondents with low political insight, 28 individuals (60.9%) did not trust SIREKAP, while only 18 (39.1%) expressed trust. This suggests that those with limited knowledge or awareness of political processes tend to be more skeptical about the system. For respondents with a medium level of political insight, 83 individuals (73.5%) trusted SIREKAP, while 30 individuals (26.5%) did not. This indicates a significant increase in trust compared to those with low political insight, implying that a better understanding of politics and electoral processes positively correlates with trust in the system. Among respondents with high political insight, 73 (70.2%) trusted SIREKAP, while 31 (29.8%) did not. Although the trust level is slightly lower than that of respondents with low political insight.

Various demographic and cognitive factors, including gender, education level, occupation, political involvement, and digital literacy, influence trust in SIREKAP. Male respondents, individuals with lower education levels, and students tend to exhibit higher trust in the system, while females, those with higher education and college students, are more critical. These differences suggest that exposure to information, personal experiences, and critical thinking abilities shape public confidence in electoral technology. A strong correlation exists between understanding SIREKAP and trust, with those more knowledgeable about the

system being more likely to trust it. Perceived transparency also plays a crucial role, as skepticism increases when transparency is questioned.

Additionally, politically active individuals with higher political insight tend to demonstrate greater trust, likely due to their familiarity with electoral processes and confidence in the system's functioning. The findings highlight the need to improve public awareness, increase transparency, and foster political engagement to strengthen trust in SIREKAP. Enhancing civic education and providing clearer information about the system could help address scepticism and build public confidence in electoral technology.

Validity and Reliability Test

The validity and reliability tests are essential in ensuring that the measurement instruments used in research produce consistent and accurate results. Validity refers to the extent to which an instrument measures what it is intended to measure, while reliability assesses the consistency and stability of the measurement over repeated applications.

Based on the results of the validity and reliability tests conducted in this study, it can be concluded that all components forming each variable meet the necessary statistical criteria. The obtained value of 0.1654 or the significance value of <0.05 (at a significance level of 5%) indicates that the measured indicators are statistically significant. This means the research instrument has successfully passed the validity test, confirming that the questionnaire items effectively represent the intended constructs.

Furthermore, the reliability test ensures the measurement scale is stable and yields consistent results. A significance level below 0.05 suggests that the instrument is reliable and can be used confidently for further analysis. This finding strengthens the credibility of the research and ensures that the data collected accurately reflects the opinions and perceptions of the respondents.

Independence Test

The independence test is a statistical method used to determine whether there is a significant relationship between two categorical variables. In the context of data analysis, this test helps assess whether an independent variable, particularly one measured on a categorical scale, is associated with a dependent variable. It is

commonly applied in research to examine the independence or correlation between different factors that may influence a specific outcome. One of the most widely used independence tests is the Chi-Square Test of Independence, which compares the observed frequencies in a contingency table with the expected frequencies under the assumption that the variables are independent. If the test result yields a p-value lower than the predetermined significance level, it indicates a statistically significant relationship between the variables, meaning they are not independent of each other.

In the context of this study, the independence test is crucial for determining whether the independent variables such as demographic factors, education level, or occupation have a meaningful association with the dependent variable, such as the level of trust in the SIREKAP application. Understanding these relationships helps in building a more accurate and reliable model for further statistical analysis. The independence test is used to see whether the independent variables, especially those with categorical data scales, have a relationship with the dependent variable.

Table 10.

	Variabel	hi-square	df	P-	Decision
				Value	
$\overline{X_1}$	Gender	12.257	1	0.0004	There is a
					Relationship
<i>X</i> ₃	Last Education	5.943	1	0.0147	There is a
					Relationship
$\overline{X_4}$	Jobs	5.135	1	0.0234	There is a
					Relationship
$\overline{X_5}$	The Use SIREKAP	14.340	1	0.0001	There is a
	Application				Relationship
$\overline{X_6}$	Information	13.626	1	0.0002	There is a
	Transparency				Relationship
<i>X</i> ₇	Political Involvement	24.566	2	0.0000	There is a
					Relationship

<i>X</i> ₈	Digital Literacy Level of	56.626	2	0.000	There is a
	KPU Application				Relationship
<i>X</i> ₉	Political Insight	18.450	2	0.026	There is a
					Relationship

Independence Test

From the following results, it is found that there are a relationship between the Trust Level of SIREKAP(Y), Gender(X_1), Last Education (X_3), Jobs (X_4), The Use of the SIREKAP Application (X_5), Information Transparency(X_6), Political Involvement(X_7), Digital Literacy Level of KPU Application (X_8), and Political Insight (X_9). This is due to the p-value of all these variables < 0,05

The Signifikance Test of Parameter Estimasion

To determine whether the model has an effect on the relationship between the independent and dependent variables, parameter significance testing is carried out. This test aims to identify variables that are assumed to affect the Level of Trust of SIREKAP both simultaneously and individually. In addition, this test also aims to ensure the suitability of the resulting model equation. The following are the results of the parameter significance test of the binary logistic regression model.

The first simultaneous parameter testing aims to determine whether the independent variables have a simultaneous effect on the dependent variable. This simultaneous test is carried out using the omibust test value.

Table 11.

	G_{hitung}	X_{tabel}^2	df	p-value
Omnibus Test	103.99	16.919	12	<2.2e-16

Simultaneous Test

Based on the results above, the value is obtained G_{hitung} (103.99) > X^2_{tabel} (16.919) and the significance value <2.2e-16 < \propto (0.05) then reject H_0 which means there is at least one regression parameter that is not equal to zero. Furthermore, finding a partial test is used to see the effect of each independent variable on the SIREKAP Application Trust Level (Y).

After conducting simultaneous parameter testing, the next step is to perform

partial parameter testing. This test aims to determine whether each independent variable individually influences the dependent variable. By analyzing the partial effect, researchers can identify which specific independent variables contribute significantly to changes in the dependent variable. The Wald test is used as the primary method for assessing these partial parameters. This test evaluates the significance of each independent variable by comparing the estimated coefficient to its standard error. If the Wald test results show a significant value (p < 0.05) it indicates that the independent variable has a meaningful impact on the dependent variable. Conversely, if the p-value is greater than the significance threshold, the variable is considered to have no significant individual effect.

The results of the Wald test help in refining the model by identifying the most influential predictors and eliminating those that do not contribute significantly. This ensures that the final model only includes relevant variables, making it more accurate and effective in explaining the relationship between the independent and dependent variables.

Table 12. Partial Test

Variables	β	SE	Wald	P- Valu Decision
Intersep				
$X_{1(1)}$	-2.3699	0.6983	-3.394	0.0006 Reject
				H_0
<i>X</i> ₂	0.2180	0.1278	1.7064	0.0880 Failure
				reject
				H_0
X ₃₍₁₎	-	882.7435	-0.017	0.9865 Failure
	14.9021			reject
				H_0
$X_{4(1)}$	15.3005	882.7435	0.017	0.9861 Failure
				reject
				H_0

$X_{5(1)}$	2.0197	0.6307	3.202	0.0013 Reject
				H_0
X ₆₍₁₎	-2.2995	0.7176	-3.204	0.0013 Reject
				H_0
$X_{7(1)}$	0.8095	0.8606	0.941	0.3468 Failure
				reject
				H_0
$X_{7(2)}$	1.5552	0.7830	1.986	0.0470 Reject
				H_0
$X_{8(1)}$	1.8610	0.5032	3.698	0.0002 Reject
				H_0
X ₈₍₂₎	2.2840	0.5115	4.465	8e-06 Reject
				H_0
$X_{9(1)}$	0.9057	0.8285	1.147	0.2512 Failure
				reject
				H_0
$X_{9(2)}$	0.1514	0.7668	0.201	0.8406 Failure
				reject
				H_0

Partial Test

Based on the results of the analysis, several factors significantly influence the level of trust in SIREKAP. First, the gender variable $X_{1(1)}$ has a significant influence (0.0006) with a coefficient β = -2,3699 indicating that female respondents tend to have a lower level of trust than male respondents. Second, the use of the SIREKAP application is also significant $X_{5(1)}$ (0,0013) dengan koefisien (β = 2,0197) where respondents who understand how to use the application tend to trust SIREKAP more. Third, information transparency shows a significant influence (0.0013) with a coefficient (β =-2,2995), which means that respondents who consider information to be non-transparent tend to be less trusting.

In addition, the political involvement category involved $X_{7(2)}$ has a significant influence (0.0470) with a coefficient ($\beta = 1.5552$), which indicates that

respondents who are involved in political activities tend to trust SIREKAP more than those who are not involved. Furthermore, the Digital Literacy Level of KPU Application also has a significant impact on both the medium $X_{8(1)}$ (0,0002) and high $X_{8(2)}$ (8e-06) categories where respondents with a higher digital literacy level of KPU Application are more likely to trust SIREKAP compared to those with a low Digital Literacy Level of KPU Application. Overall, these factors indicate that policies to increase trust in SIREKAP can be focused on improving the Digital Literacy Level of the KPU Application, the Use of the SIREKAP Application, and Information Transparency.

From simultaneous and partial testing, the model obtained for binary logistic regression is :

$$\hat{\pi}(x) = \frac{\exp(-1.5024 - 1.9308X_{1(1)} + 1.9972X_{5(1)} - 1.3366X_{6(1)} + 1.4935X_{7(1)} + 1.8326X_{7(2)} + 2.0239X_{8(1)} + 2.5373X_{8(2)}}{1 + \exp(-1.5024 - 1.9308X_{1(1)} + 1.9972X_{5(1)} - 1.3366X_{6(1)} + 1.4935X_{7(1)} + 1.8326X_{7(2)} + 2.0239X_{8(1)} + 2.5373X_{8(2)}}$$

The logit model of the above model is

$$g(x) = -1.5024 - 1.9308X_{1(1)} + 1.9972X_{5(1)} - 1.3366X_{6(1)} + 1.4935X_{7(1)} + 1.8326X_{7(2)} + 2.0239X_{8(1)} + 2.5373X_{8(2)}$$

CONCLUSION

The study results show that the variables that significantly affect the level of trust in the SIREKAP application are Gender, The Use of the SIREKAP Application, Information Transparency, Political involvement, and the Digital Literacy Level of the KPU Application. Judging from the odds ratio value, Gen Z women have a 0.1450 times greater chance of trusting than men. In addition, those who understand the use of the SIREKAP application have a 7.3681 times greater chance of believing than those who do not understand. Regarding information transparency, confidence in vote results was higher among those who perceived transparency, with an odds ratio of 0.2627. Political involvement also plays a role, where Gen Z is rarely and frequently involved, and Gen Z is 4.4527 and 6.2727 times more likely to believe, respectively. Finally, the Digital Literacy Level of the KPU Application shows that Gen Z with moderate and high literacy have 7.5676

and 12.6452 times greater odds of believing than those with low literacy. The results also obtained an accuracy value of 83.6%.

Based on the results of this study, election organizers should improve Gen Z's understanding of using the SIREKAP application through training or socialization, strengthen the transparency of the information presented, and encourage more active political involvement among Gen Z to increase their trust in this application.

Funding Acknowledgement

This research was funded by the RSH Student Creativity Program (PKM) and received additional support from PGRI Adi Buana University Surabaya. We would like to thank those who provided funds and resources to make this research possible.

About The Author

Erika Zahra Fitriananta, Moch Iqbal Nasrulloh Al Amin, and Benedikta Ngamul are students in the Statistics Study Program at the Faculty of Science and Technology, Universitas PGRI Adi Buana Surabaya. All three are interested in developing data-based research and utilising statistics in various fields of life. Putri Nadiatus Shofiyah is a student of the Accounting Study Program, Faculty of Economics and Business, Universitas PGRI Adi Buana Surabaya, with a special interest in applied accounting and financial management. Meanwhile, Artanti Indrasetianingsih is a Lecturer at the Statistics Study Program, Faculty of Science and Technology, Universitas PGRI Adi Buana Surabaya, who actively guides students in various research and community service activities in applied statistics.

REFERENCES

Agresti, Alan. 2019. Statistical Methods for the Social Sciences. 5th ed. Pearson.

Ammassari, Silvia, Ferran Martinez i Coma, and David McDonnell. 2025. "Young Voters, Abstainers and Unregistered: Generation Z Turnout in a Compulsory System." *Political Studies*. https://doi.org/10.1177/00323217251314603.

Ariska, Yuli Fitri, and Ade Hapsery. 2022. "Regresi Logistik Biner untuk Memprediksi Faktor yang Mempengaruhi Nilai Akhir Peserta Didik SMK Sepuluh Nopember Sidoarjo dalam Efektivitas Pembelajaran Pasca Pandemi." *Jurnal VARIENCE: Journal of Statistics and Its Application* 4(2):89.

- Asmiyanto, Tony, Desvianita V. Ferezagia, Muhammad H. Inamullah, Zainal Abdurrahman, and Evi Roselina. 2021. "The Effect of Information-Seeking Behavior on Gen-Z Political Preference: Study on 2020 District Heads Election in Depok and South Tangerang." *Library Philosophy and Practice* 2021:1–17.
- Chaverlin, M. et al. 2022. "Implementation of the Recapitulation Information System Application in the 2020 Manado City Pilkada." *Scientific Journal*.
- Deckman, Melissa, and Janna McDonald. 2023. "Uninspired by Old White Guys: The Mobilizing Factor of Younger, More Diverse Candidates for Gen Z Women." *Politics and Gender* 19(1):195–219. https://doi.org/10.1017/S1743923X21000477.
- Evita, N., A. M. Prestianta, and R. A. Asmarantika. 2023. "Patterns of Media and Social Media Use in Generation Z in Indonesia." *Journal of Communication Studies* 7(1):195–214.
- Febriani, Y., A. Rafni, and S. Suryanef. 2022. "Political Socialization of the General Election Commission (KPU) of Solok Regency for Novice Voters in the 2020 Regional Elections." *Aurelia Jurnal Penelitian dan Pengabdian Masyarakat Indonesia* 1(2):239–245. https://doi.org/10.57235/aurelia.v1i2.157.
- Fisher, Patrick. 2020. "Generational Replacement and the Impending Transformation of the American Electorate." *Politics and Policy* 48(1):38–68. https://doi.org/10.1111/polp.12340.
- Ginting, Jhon H. G. 2024. "General Election 2024: Mechanism and Process." *Journal of Law and Politics*.
- Grigoryan, Nelli. 2024. "The Politically Engaged: Gen Z's Use of TikTok and Instagram in the 2020 Presidential Elections." In *Social Media Politics:* Digital Discord in the 2020 Presidential Election. https://doi.org/10.4324/9781003409427-11.
- Hardiyanti, Dwi. 2022. "The Urgency of E-Voting System and Recapitulation Information System in Organizing the 2024 Election." *Journal of Information Technology*.
- Hosmer, David W., and Stanley Lemeshow. 2000. *Applied Logistic Regression*. 2nd ed. New York: Wiley.

- International Foundation for Electoral Systems. 2021. *Technology in Elections: A Comparative Study*.
- Jameson-Charles, M., and H. W. Charles. 2022. "Youth Mobilising Youth to Vote: An Examination of a Youth-Led Voter Education Initiative in Guyana." In *Youth Participation in the Caribbean: Politics and Development*. https://doi.org/10.4324/9781003203889-10.
- Komisi Pemilihan Umum (KPU). Various Years. Reports on Electoral Management and Innovations.
- Li, Chen. 2024. "Changing Generational Tides: The Transformation of Electoral Participation in European Parliament Elections." *West European Politics*. https://doi.org/10.1080/01402382.2024.2382020.
- Maniagasi, Albert, and Nur Aedah. 2023. "Implementasi Kebijakan Penggunaan Sistem Informasi dan Rekapitulasi (Sirekap) pada Pemilihan Kepala Daerah Serentak Tahun 2020 di Provinsi Papua." *Jurnal Kebijakan Publik* 5(3):110–126. https://doi.org/10.31957/jkp.v5i3.2792.
- Muhammad, Iqbal, Dwi Rakhmawati, and Andi Wijaya. 2024. "Analyzing the Sentiment of the 2024 Election Sirekap Application Using Naïve Bayes Algorithm." *Jurnal Media Informatika Budidarma* 8(3):1503. https://doi.org/10.30865/mib.v8i3.7773.
- Nabila, Nurul, P. Prananingtyas, and M. Azhar. 2020. "The Influence of Money Politics in the Election of Legislative Members on the Sustainability of Democracy in Indonesia."
- Novalia, N., R. Emeilia, A. Muntazah, and R. Andhikasari. 2024. "The Image of the General Elections Commission (KPU) in the 2024 Presidential Election." *Golden Ratio of Data in Summary* 4(2):896–902. https://doi.org/10.52970/grdis.v4i2.734.
- Nugroho, Eko W., and R. Hartono. 2020. "Evaluating Electoral Technology: The Case of SIREKAP." *Journal of Indonesian Democracy* 12(1):45–60.
- Perrett, Sophie, and Delia Baldassarri. 2024. "A Generational Shift: How Partisan Alignment and the Rise of Social Issues Have Produced a Generation of Democrats." *Journal of Elections, Public Opinion and Parties*. https://doi.org/10.1080/17457289.2024.2364734.
- Priyanto, A., E. Purnomo, M. Fadhlurrohman, H. Fahamsyah, and E. Khairina. 2021. "The Influence of Social Media (Instagram) of Bantul's General

- Election Commissions on Voters Participation in the 2019 Elections." *Journal of Government and Civil Society* 5(1):79. https://doi.org/10.31000/jgcs.v5i1.2924.
- Robinson, Laura. 2024. "Gen Z's Gendered Divergences in the U.S. 2024 Election: Digital Engagement, Education, and Politics." *First Monday* 29(12). https://doi.org/10.5210/fm.v29i12.13865.
- Samad, Muhammad, S. Setiono, D. Permatasari, K. Pribadi, and P. Persadha. 2024. "Political Communication of the General Election Commission and the Election Supervisory Board in Responding to Allegations of Voter Data Leakage." *International Journal of Advanced Multidisciplinary* 3(2):276–283. https://doi.org/10.38035/ijam.v3i2.621.
- Sampe, Samuel. 2021. "Why Political Parties Don't and Do Matter in Local Government Elections in Indonesia: A Manado Case." *Revista de Sociologia e Política* 29(77). https://doi.org/10.1590/1678-987321297703.
- Saputro, R. H., T. Anggoro, S. Muslim, I. U. Wardani, E. Fatmawati, M. Yusuf, D. Prasetyo, and M. A. Yusuf. 2023. "Gaining Millennial and Generation Z Vote: Social Media Optimization by Islamic Political Parties." *Res Militaris* 13(1):323–336.
- Sugiyono. 2007. Statistics for Research. Bandung: Alfabeta.
- Suyono. 2015. Regression Analysis for Research. Yogyakarta: Deepublish.
- Utama, Farhan. 2020. "The Benefits of Sirekap in the 2020 Simultaneous Regional Elections." *Sindonews.com*.
- Wahyuni, Sri. 2019. "E-Government and Elections: A Case Study of Indonesia." *Asia Pacific Journal of Public Administration* 41(2):113–125.
- Yandra, Andi, A. Faridhi, A. Andrizal, A. Ferizko, and T. Puteri. 2023. "Understanding the Voter Data Information System (Sidalih): The Need for Sustainable Voter Data Accuracy (DPB) Ahead of the 2024 General Election." *KnE Social Sciences*. https://doi.org/10.18502/kss.v8i5.13012.