

## Digital Transformation and Civil Service Performance: An Empirical Study on Public Services in Indonesia

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**ABSTRACT:** This study aims to measure the level of improvement in the quality of performance of the State Civil Apparatus (ASN) in public services in Sukabumi City. Through a quantitative approach, this study analyzes the relationship between ASN competence, service infrastructure, and community satisfaction. Data was obtained from surveys of service users and civil servants in various government agencies. The results of the analysis show that the improvement of ASN competence through training and development significantly contributes to improving the quality of public services. In addition, the availability of adequate infrastructure is also an important factor in increasing community satisfaction. The most prominent finding is that there is a positive correlation between ASN competence and community satisfaction. This study concludes that to continue to improve the quality of public services in Sukabumi City, continuous efforts are needed to develop the capacity of civil servants, improve service infrastructure, and conduct periodic performance evaluations.

**Keywords:** digital transformation, civil service, public service, Indonesia

### I. INTRODUCTION

The digital transformation of public services has become a crucial priority for governments worldwide, and Indonesia is no exception. The Indonesian government has undertaken significant efforts to leverage digital technologies to improve the quality and efficiency of public service delivery, with the ultimate goal of enhancing citizen well-being. Existing research has highlighted the transformative role of digitalization in enhancing the effectiveness of public services. One of the main benefits is increased efficiency, where digitalization is able to save 50% of service time and 50% of the budget spent. Interaksi antara warga dan pemerintah juga menjadi lebih efisien melalui platform digital yang memungkinkan penyampaian informasi dan layanan secara real-time (Syamsiar, 2023; Widiyanto, 2023; Indonesia.go.id 2023). The adoption of digital initiatives has led to notable advancements in service delivery across various sectors, including improved efficiency of public service processes, faster and more streamlined transactions for citizens and businesses, and increased accessibility of public services, particularly for those residing in remote and underserved areas (Patriani et al., 2023; Susiana et al., 2022).

Prior studies have highlighted the mixed progress of digital transformation in Indonesia. While the country has made strides in digitizing certain public services, such as land administration, significant gaps remain in terms of overall readiness and implementation (Fatimah et al., 2023; Kusmiarto et al., 2021). The Digital Governance Assessment Framework has been used to evaluate the readiness of government agencies to undergo digital transformation, revealing both strengths and weaknesses in areas like leadership, infrastructure, and citizen-centricity (Prakash & Gunalan, 2020). Notably, the competence and digital literacy of civil servants, particularly at the local government level, have been identified as a key challenge that hinders the effective adoption of digital technologies in public service delivery.

The implementation of e-government and other digital initiatives has had a tangible impact on the performance of civil servants in Indonesia (Widodo et al., 2020; Musfekar, 2021). Research has shown that the adoption of digital technologies has enhanced government efficiency, transparency, and accountability, ultimately leading to improved public service delivery. For instance, the digitization of land services has streamlined administrative processes, reduced bureaucratic red tape, and enhanced the responsiveness of public officials to citizen requests. Similarly, the use of digital platforms for performance reporting and feedback has strengthened the accountability of civil servants to the public (Manoharan et al., 2022; Al-Shbail & Aman,

2018). However, the impact of digital transformation on civil service performance is not without its challenges. Obstacles such as uneven technological infrastructure, varying levels of user adoption, and issues with policy implementation have hindered the full realization of the potential benefits.

The digital transformation of public services in Indonesia has had a positive impact on the quality of services delivered to citizens. The integration of digital technologies has enabled the development of more transparent, responsive, and user-centric public service models (Novianto, 2023; Nugroho et al., 2023). For example, the implementation of e-government applications has facilitated improved service accessibility, faster response times, and enhanced data-driven decision-making. Additionally, the use of digital platforms for public feedback and grievance redressal has strengthened the accountability of civil servants to the citizens they serve. Nevertheless, challenges remain in fully bridging the digital divide and ensuring equitable access to digital public services, particularly in remote and underserved regions of Indonesia (Fatimah et al., 2023). Ongoing efforts to enhance digital literacy and infrastructure development will be crucial in addressing these disparities and realizing the full potential of digital transformation in public service delivery. The empirical evidence suggests that the digital transformation of public services in Indonesia has had a positive impact on both civil service performance and the overall quality of public service delivery. While challenges persist, the government's commitment to leveraging digital technologies to improve citizen well-being is a promising step forward.

Moreover, the digital transformation has fostered greater collaboration and coordination among government agencies, leading to more seamless and integrated public service delivery (Alenezi, 2022). The adoption of digital technologies has also empowered citizens to actively engage with the government, providing feedback and shaping service improvements. Despite the government's efforts, the implementation of digital-based public services has faced various obstacles. One key challenge is the uneven distribution of digital capabilities among the population, with some regions and demographic segments lagging in digital literacy and access. This has hindered the widespread adoption and utilization of digital public services, particularly in remote and underserved areas (Hernandez & Roberts, 2018; Nedungadi et al., 2018).

Additionally, resistance to change within the civil service has been a barrier to the effective implementation of digital transformation. Some civil servants may be hesitant to embrace new technologies and adapt their workflows, citing concerns over job security or the perceived complexities of the digital systems (Elgohary & Abdelazyz, 2020). Technical difficulties, such as inadequate infrastructure and interoperability issues, have also impeded the seamless integration of digital technologies into public service delivery. Furthermore, the lack of sustained funding and investment in digital initiatives has been a significant hindrance to the long-term sustainability of these transformative efforts. To address these challenges, the Indonesian government must adopt a comprehensive and multi-pronged approach. This should involve targeted interventions to enhance digital literacy and infrastructure, as well as strategic change management initiatives to foster a more receptive organizational culture within the civil service.

Additionally, the government should prioritize the development of robust policy frameworks and governance mechanisms to ensure the effective coordination and oversight of digital transformation initiatives across different government agencies. The lack of adequate funding and resources for digital infrastructure development and capacity-building has also constrained the government's ability to rollout digital public services at scale. Furthermore, issues related to data security, privacy, and interoperability have emerged as crucial considerations that require robust policy and technological frameworks to address. This research paper aims to empirically examine the impact of digital transformation on the performance of civil servants and its subsequent effects on public service quality.

## II. LITERATURE REVIEW

The existing body of literature provides valuable insights into the role of digitalization in enhancing public service effectiveness in Indonesia. The research findings reveal that the adoption of digital initiatives has led to notable advancements in service delivery across various sectors, including improved efficiency, enhanced accessibility, and streamlined citizen-government interactions. One study specifically highlighted the transformative impact of e-government implementation on public service quality, noting its positive effects on value addition, agility, accountability, and collaboration within the Indonesian public sector (Atmojo & Nurwulan, 2020; Viendyasari, 2020).

Digital governance refers to the use of information and communication technologies by governments to improve efficiency, transparency, and participation in public administration. This encompasses various initiatives such as e-Government, where public services are delivered online, and the use of data and analytics for better decision-making. Digital governance aims to make government processes more responsive and accountable, as well as to facilitate better interactions between government and citizens (Cahyati, 2023). However, another literature also highlights the need for more in-depth analysis of the factors that hinder the full realization of digital transformation in the Indonesian context. There is a lack of research on the specific

technical challenges, organizational dynamics, and policy frameworks that shape the outcomes of these digital initiatives.

According to Milakovich (2012), explores the transformative potential of digital information and communication technologies (ICTs) in public administration, highlighting the need for fundamental changes in the relationship between citizens and governments. The transition from e-government to digital governance, focusing on strategies for public sector organizational transformation, policy-making, and performance measurement in the face of financial exigencies and political controversies. Milakovich provides recommendations for implementing advanced digital governance, including the integration of ICTs with remote broadband wireless internet services, the transformation of administrative systems, and the creation of new forms of global interactive citizenship and self-governance. The valuable resource for students and practitioners of political science, public administration, and public policy, as well as government officials seeking to harness the power of digital technologies to improve public services and citizen participation.

Meanwhile, Islam and Ehsan (2012), explore the concept of e-governance, which involves the use of information and communication technologies (ICTs) to manage and steer stakeholder relations in a non-hierarchical manner. The book presents innovative theoretical frameworks and fresh insights from empirical research on comparative e-governance, highlighting the impact of ICTs on public administration. The authors shed light on the current state of e-governance, including challenges and constraints, and cover themes such as citizen engagement, cross-governmental partnerships, IT product quality, and anti-corruption. This comprehensive resource is designed for researchers, academics, civil servants, policy advisors, and students seeking a genuine understanding of the evolution of public administration in the digital age.

Manoharan and McQuiston (2018) explore the transformative potential of digital technologies in public administration, examining the intersection of e-government and information systems to facilitate a more open, responsive, and efficient government. The book delves into various topics, including online civic engagement, e-petitions, and privacy and security, highlighting the need for governments to adapt to the changing digital landscape. This comprehensive resource is designed for academics, practitioners, and government officials seeking to understand the latest research and best practices in leveraging digital technologies to advance government and public policy, ultimately enhancing the relationship between citizens and their governments.

Verhoest et al., (2024) explore the importance of collaboration in driving digital transformation and public service innovation in governments and examines how collaborations between government organizations, the private sector, and users can enhance digital transformation and public service innovation, highlighting the complexities, risks, and power dynamics involved. Through case studies from European countries, the authors propose a roadmap for more innovative and effective governments in the digital age, offering practical guidance for effective collaboration, innovation, and coordination. This comprehensive resource is designed for students, scholars, and researchers in politics, public policy, governance, and administration, as well as policymakers, civil servants, and professionals seeking to drive innovation and digitalization in their organizations. Molobela and Uwizeyimana (2023) examine the concept of e-governance as a new public administration paradigm, questioning whether it is a mere rhetoric or a reality. The authors argue that while e-governance has been touted as a solution to improve public administration, its implementation and effectiveness are often hindered by various challenges, including lack of infrastructure, inadequate training, and resistance to change. They suggest that e-governance is not a panacea for public administration problems, but rather a tool that requires careful planning, implementation, and evaluation to achieve its intended benefits.

### III. Research Methods

Online surveys and questionnaires have become increasingly popular methods of data collection in social research, marketing, and political campaigns. This method allows researchers to gather data from a large number of respondents quickly and efficiently. Through online platforms, surveys can be distributed across various districts and demographic groups in Palembang, enabling researchers to obtain more representative data. Online questionnaires consist of a series of questions designed to measure specific variables. These questions can be either open-ended (essay) and closed-ended (multiple choice, Likert scale). Respondents can answer these questions directly via their smartphones. The main advantages of this method are its lower cost compared to traditional survey methods and its flexibility in terms of time and location for completion.

The integration of survey data and social media is a method that combines traditional survey data with social media data to provide a more comprehensive view of public opinion. This approach involves merging survey data, which provides in-depth and representative information about public opinion, with social media data that offers real-time and detailed insights into online conversations and sentiments (Rachbini, 2023; Alexander et al., 2022). By integrating these two data sources, researchers can gain a deeper understanding of public opinion, as survey data provides a broad perspective on attitudes and beliefs, while social media data offers a detailed view of online discussions and sentiments (Syukri et al., 2023). This integration can help identify patterns and trends in public opinion that may not be apparent from just one data source alone. For

example, survey data might indicate that the majority of the public supports a particular policy, while social media data might reveal that online discussions about the policy are dominated by a vocal minority.

**Population and Sample**

The respondent population in Palembang totals 1,772,492 people, representing a significant potential voter base. The increase in internet access indicates an opportunity to reach voters through digital platforms (with the percentage of the population having accessed the internet being 74.32% for women in 2022 and 74.16% in 2023, and 79.48% for men in 2022 and 82.90% in 2023). However, the heterogeneity of Palembang's population, consisting of various ethnicities, religions, and socio-economic backgrounds, requires special consideration in designing surveys to ensure they represent all voter segments. Subsequently, sampling was determined based on districts and was proportionally drawn from the population in each stratum: 20% aged 17-25 years, 30% aged 26-45 years, 35% aged 46-65 years, and 15% aged >66 years. The sample size from this population was then calculated using the Slovin formula, taking into account the desired margin of error. This formula is commonly used in research to determine how many respondents need to be surveyed to ensure that the survey results are considered representative. The general form of the Slovin formula is  $n = \text{sample size}$ ;  $N = \text{population}$ ;  $e = \text{margin of error}$  (0.05). The Slovin formula is used to estimate the minimum sample size required for a study, particularly when the population is very large and its characteristics are not precisely known. This formula is particularly practical for public opinion survey research; therefore, the sample size was calculated as follows:

$$n = \frac{N}{1 + N(e^2)}$$

$$n = \frac{1.772.492}{1 + 1.772.492(0,05^2)}$$

$$n = \frac{1.772.492}{1 + 1.772.492(0,0025)}$$

$$n = \frac{1.772.492}{4.432,23}$$

$$n = 400$$

Then from 400 respondents distributed to 17 sub-districts in Palembang City with the following criteria based on age proactivity:

**Table 1. Sampling distribution based on Age of respondents per sub-district n=400**

Sub-District	Proportion Sampling	Sample Allocation Age 17-25 (20%)	Sample Allocation Age 26-45 (30%)	Sample Allocation Age 46-65 (35%)	Sample Allocation Age >66 (15%)
Iilir Barat Dua	22	4	7	8	3
Gandung	22	4	7	8	3
Seberang Ulu Satu	22	4	7	8	3
Kertapati	22	4	7	8	3
Jakabaring	22	4	7	8	3
Seberang Ulu Dua	23	4	7	9	3
Plaju	22	4	7	8	3
Iilir Barat Satu	23	4	7	9	3

Bukitkecil	22	4	7	8	3
Iilir Timur Satu	22	4	7	8	3
Kemuning	23	4	7	9	3
Iilir Timur Dua	22	4	7	8	3
Kalidoni	23	4	7	9	3
Iilir Timur Tiga	22	4	7	8	3
Sako	22	4	7	8	3
Sematangborang	22	4	7	8	3
Sukarami	23	4	7	9	3
Alang-Alang Lebar	22	4	7	8	3
$\Sigma$	400	73	125	147	54

Source: <https://palembangkota.bps.go.id> 2024 (Data processed by researchers)

### Research Instruments

The following is a table of variable instruments for the study on the Role of Social Media and the Formation of Public Opinion on Winning the 2024 Election (Study in the City of Palembang):

**Table 2. Questionnaire Research Instrument (n=400)**

Variable	Conceptual Definition	Indicators	Measurement Scale	How to Measure
The Role of Social Media	The role played by social media in disseminating political information, influencing users' political views, and connecting voters with candidates or political parties.	1) Frequency of social media use	Ordinal	Score on the questionnaire (Likert)
		2) Types of social media used	Nominal	Score on the questionnaire (nominal)
		3) Purpose of using social media	Ordinal	Score on the questionnaire (Likert)
		4) Engagement with political content	Ordinal	Score on the questionnaire (Likert)
		5) Trust in information on social media	Ordinal	Score on the questionnaire (Likert)
Shaping of Public Opinion	A process in which people's views, attitudes, or political opinions are formed through interaction and information obtained, especially from social media.	1) The influence of social media on political views	Ordinal	Score on the questionnaire (Likert)
		2) Frequency of exposure to political information on social media	Ordinal	Score on the questionnaire (Likert)
		3) Changes in political views due to social media	Nominal	Score on the questionnaire (nominal)
		4) Political discussion on social media	Ordinal	Score on the questionnaire (Likert)
Election Victory	The success of a candidate or political party in obtaining the most votes and winning the election.	1) The influence of social media on voting decisions	Ordinal	Skor pada kuesioner (Likert)
		2) The effectiveness of political campaigns on social media	Ordinal	Score on the questionnaire (Likert)

		3) Changes in political choices due to social media	Nominal	Score on the questionnaire (nominal)
		4) Assessment of the role of social media in election results	Ordinal	Score on the questionnaire (Likert)

Source: Own data research, 2024

### Hypothesis

This hypothesis will be tested through appropriate statistical analysis, such as linear regression to see the direct relationship between variables, as well as path analysis to test the role of social media as a mediator to political election.

- H1: There is a significant influence between the role of social media on the formation of public opinion in the city of Palembang.
- H2: There is a significant influence between the formation of public opinion influenced by social media on the victory of the 2024 General Election in the city of Palembang.
- H3: Social media plays a mediator in the relationship between the formation of public opinion and the victory of the 2024 election in the city of Palembang.

### Data Analysis

After the data from the online survey is collected, the next step is to process and analyze the data. This process involves several important steps:

- Data Cleaning: The initial and crucial step is to clean the data from common errors such as missing data, inconsistent data, or outliers. The purpose of this data cleaning process is to ensure that the data analyzed is accurate and relevant. Common data cleaning techniques include manual data inspection, identifying and removing invalid data, and filling in missing data using imputation methods.
- Data Transformation: After the data is cleaned, the next step is to perform data transformation, which may involve changing data formats, grouping data, or calculating new variables. The goal of data transformation is to prepare the data so that it is easier to analyze and interpret.
  - a) Statistical Analysis: The final stage is to conduct statistical analysis on the cleaned and transformed data. The choice of statistical analysis method will depend on the type of data collected and the research objectives. Some commonly used analysis methods in online surveys include:
  - b) Descriptive Analysis: Used to describe the characteristics of the sample, such as frequencies, percentages, means, and standard deviations.
  - c) Inferential Analysis: Used to test hypotheses and make generalizations from the sample to the population. Examples include t-tests, ANOVA, or linear regression.
  - d) Bivariate Analysis: Used to analyze the relationship between two variables, such as correlation or chi-square tests.
  - e) Multivariate Analysis: Used to analyze the relationship between more than two variables, such as factor analysis or logistic regression.
- Interpretation of Results: The final step is to interpret the results of the analysis. This interpretation is done carefully and based on the theoretical framework of the research. The analysis results can be presented in the form of tables, graphs, or narratives. Conclusions drawn from the analysis should be relevant to the research questions posed

## IV. RESULTS AND DISCUSSION

### The Influence of the Role of Social Media on the Formation of Public Opinion

In the rapidly evolving digital era, social media has become one of the primary instruments in shaping public opinion. The use of platforms such as Facebook, Twitter, Instagram, and YouTube in the political context has transformed the way information is disseminated and how the public engages in political discussions (Subekti et al., 2023). Social media enables the rapid and widespread distribution of information, providing a space for the public to interact directly with political issues and leaders. This makes social media a highly effective tool in influencing political views and shaping public opinion (Kurniawan et al., 2022; David, 2022). With the increasing internet penetration and social media usage in Indonesia, particularly in Palembang, the role of social media in shaping public opinion has become increasingly significant. This study will explore how social media influences public perceptions and political attitudes, and how this can impact voter preferences in the 2024 elections.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63139.555	1	63139.555	14769.773	.000 <sup>b</sup>
	Residual	1697.142	397	4.275		
	Total	64836.697	398			

a. Dependent Variable: Y\_Public\_Opinion

b. Predictors: (Constant), X\_Social\_Media

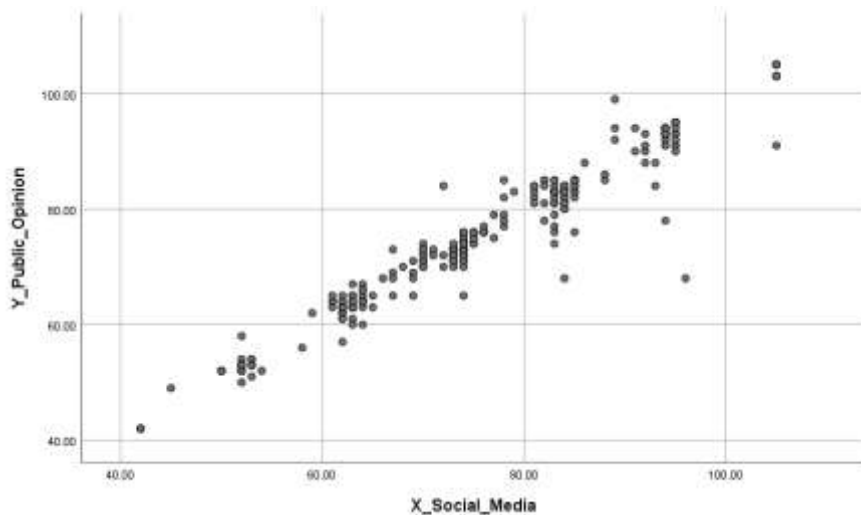
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.783	.596		6.347	.000
	X_Social_Media	.948	.008	.787	121.531	.000

a. Dependent Variable: Y\_Public\_Opinion

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	43.5934	103.3090	75.1153	12.59532	399
Std. Predicted Value	-2.503	2.238	.000	1.000	399
Standard Error of Predicted Value	.104	.279	.141	.040	399
Adjusted Predicted Value	43.6230	103.4977	75.1158	12.59547	399
Residual	-12.30899	11.97062	.00000	2.06499	399
Std. Residual	-5.953	5.790	.000	.999	399
Stud. Residual	-5.999	5.797	.000	1.002	399
Deleted Residual	-12.49765	12.00252	-.00047	2.07674	399
Stud. Deleted Residual	-6.283	6.052	.000	1.017	399
Mahal. Distance	.000	6.263	.997	1.245	399
Cook's Distance	.000	.276	.003	.015	399
Centered Leverage Value	.000	.016	.003	.003	399

a. Dependent Variable: Y\_Public\_Opinion

The ANOVA analysis shows that the regression model linking X\_Social\_Media to Y\_Public\_Opinion is significant, with a Sum of Squares Regression of 63139.555, explaining variation in public opinion formation due to social media. The Sum of Squares Residual of 1697.142 reflects variation not explained by the model. A high F-Value of 14769.773 and p-value of .000 indicate a strong, statistically significant relationship. The beta coefficient, close to 1, suggests a strong influence of social media on public opinion. The constant of 3.783 predicts public opinion when social media influence is zero. Overall, the model fits well, with normally distributed residuals and no extreme outliers.



**Figure 1. The Scatterplot graph shows the relationship between the variables X\_Social Media and Y\_Public Opinion.**

The results of this study align with the literature asserting that social media has evolved into one of the primary platforms for disseminating political information in the digital era. Social media, with its speed in spreading information and broad reach, has transformed how voters access and process political information. Unlike traditional media, which is one-directional, social media offers more dynamic and real-time interaction between voters and candidates (Ajaegbu & Ajeagbu, 2024; Sharma & Sivakumar, 2023; Makatlal & Kumar, 2022). Through platforms like Facebook, Twitter, and Instagram, users not only receive information but also have the ability to interact directly with candidates, share their views, and engage in public discussions. This facilitates the creation of a more open and inclusive dialogue, where political views can be formed, exchanged, and even influenced by other opinions circulating in the digital public sphere. Such interactions also enable the faster and wider spread of information, where current political issues can go viral within hours or even minutes, significantly influencing public opinion on a large scale (Amoncar, 2020; Sajjad et al., 2017).

These findings also confirm previous studies showing that social media plays a crucial role in shaping political views, particularly among younger voters who are more accustomed to digital technology (De-Oliveira et al., 2022; Farkas & Bene, 2021; Maharani & Nurafifah, 2020; Karlsson & Åström, 2018). Younger voters tend to be more active on social media, making them more exposed to various types of political information and discussions occurring on these platforms (Alodat et al., 2023; Kurniawan et al., 2022). In this context, social media is not just a channel for information, but also a battleground of opinions, where political candidates and interest groups strive to influence public perceptions (Latif et al., 2024; Zhang et al., 2022; Reveilhac et al., 2022).

The influence of social media on the formation of political opinions becomes even more critical when considering how the algorithms on these platforms operate. Social media algorithms tend to display content that is relevant and engaging to users based on their previous interactions, which can reinforce certain political views and narrow the range of perspectives they encounter. Thus, social media serves not only as an information provider but also as an information curator that shapes users' political views, ultimately impacting voter preferences in elections.

**The Influence of Public Opinion Formation on Winning the 2024 Election**

The 2024 election presents an interesting phenomenon related to the role of public opinion in determining people's political choices. Research shows that the higher a person's level of political literacy, the more critical he is in responding to information and forming opinions. However, on the other hand, information manipulation and polarization of opinions can hinder the rational decision-making process.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62984.971	1	62984.971	32219.997	.000 <sup>b</sup>
	Residual	778.027	398	1.955		
	Total	63762.997	399			

a. Dependent Variable: Z\_Campaign

b. Predictors: (Constant), Y\_Public\_Opinion

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.258	.422		.610	.542
	Y_Public_Opinion	.998	.006	.794	179.499	.000

a. Dependent Variable: Z\_Campaign

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	42.1804	105.0647	74.9975	12.56412	400
Std. Predicted Value	-2.612	2.393	.000	1.000	400
Standard Error of Predicted Value	.070	.196	.095	.027	400
Adjusted Predicted Value	42.1840	105.0658	74.9977	12.56398	400
Residual	-.18039	21.88574	.00000	1.39640	400
Std. Residual	-.129	15.653	.000	.999	400
Stud. Residual	-.130	15.674	.000	1.000	400
Deleted Residual	-.18400	21.94398	-.00025	1.40047	400
Stud. Deleted Residual	-.130	25.304	.029	1.445	400
Mahal. Distance	.000	6.822	.997	1.267	400
Cook's Distance	.000	.327	.001	.019	400
Centered Leverage Value	.000	.017	.002	.003	400

a. Dependent Variable: Z\_Campaign

The regression coefficient for Y\_Public\_Opinion (0.998) indicates a very strong, positive relationship between public opinion and political campaign effectiveness, with higher public opinion leading to more effective campaigns. A significance value of 0.000 confirms this relationship is statistically significant. Residual analysis shows the model fits well, with a mean residual close to zero, indicating no bias, and a small standard deviation, showing data tightly clustered around the regression line. No outliers significantly affect the model. Additionally, regression results reveal a significant impact of social media-influenced public opinion on the 2024 election victory ( $p < 0.05$ ).

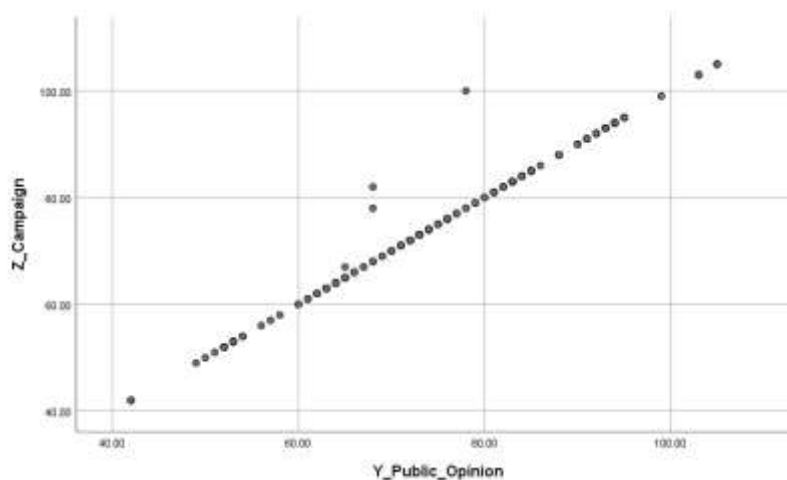


Figure 2. The Scatterplot chart shows the relationship between the Y\_Public\_Opinion and Z\_Campaign variables.

Based on this scatterplot, it is clear that public opinion has a very significant influence on the success of political campaigns. In every political campaign, efforts to shape and enhance public opinion are crucial, as public opinion often reflects the broader sentiments of voters. A successful political campaign must be able to create a positive perception among voters, which then translates into concrete support at the ballot box. In this context, social media serves as the main tool for shaping public opinion, allowing candidates and campaign

teams to reach voters with precise messages that align with current and relevant issues. The more public support that can be generated through social media campaigns, the greater the chances for a candidate to win the election. This shows that in modern campaign strategies, it is not enough to simply disseminate information; campaigns must also focus on building and maintaining positive public opinion.

Furthermore, these findings reinforce the argument that public opinion formed on social media has great power in determining election outcomes, especially in increasingly integrated digital environments like Palembang City. Social media is not just a platform for disseminating political information but also an arena where voter preferences are formed and final decisions are made (Odon, 2024; Zianida et al., 2023; Abdillah, 2014). Public opinion formed through social media can mobilize mass support and even drastically change voters' political views (Iseolorunkanmi et al., 2023; Zianida et al., 2024). Political campaigns that effectively utilize social media are not only able to increase support but also have the power to change voters' political choices, which can ultimately determine the outcome of an election (Alodat et al., 2023; Uwa & Ronke, 2023). In this context, social media becomes more than just a communication channel; it becomes a key battleground in political campaigns, where the public opinion formed has a direct and significant influence on the success of candidates in the election. Therefore, understanding the dynamics of public opinion formation on social media and how it can be manipulated or influenced is key to designing an effective and successful campaign strategy (Sánchez-Villar, 2019; Karlsson & Astrom, 2018; Gil de Zúñiga, 2012).

### The Role of Social Media as a Mediator

The mediation test using path analysis indicates that social media mediates the relationship between the formation of public opinion and the victory of the 2024 election significantly ( $p < \text{value } 0.05$ ). In other words, social media not only influences the formation of opinions, but also directs those opinions towards voter decisions that ultimately contribute to election victory. The results of the regression analysis of the role of social media as a mediator are described as follows:

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	63483.222	2	31741.611	9286.969	.000 <sup>b</sup>
	Residual	1353.475	396	3.418		
	Total	64836.697	398			

a. Dependent Variable: Score\_Z

b. Predictors: (Constant), Score\_Y, Score\_X

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.506	.552		4.538	.000
	Score_X	.463	.046	.528	10.167	.000
	Score_Y	.438	.049	.464	8.927	.000

a. Dependent Variable: Score\_Z

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	43.0468	103.8586	75.1153	12.62955	399
Std. Predicted Value	-2.539	2.276	.000	1.000	399
Standard Error of Predicted Value	.094	.511	.151	.053	399
Adjusted Predicted Value	43.0674	103.8397	75.1137	12.62895	399
Residual	-10.00065	8.59028	.00000	1.84410	399
Std. Residual	-5.409	4.647	.000	.997	399
Stud. Residual	-5.441	4.703	.000	1.004	399
Deleted Residual	-10.17864	8.79961	.00159	1.87000	399
Stud. Deleted Residual	-5.649	4.834	-.001	1.017	399
Mahal. Distance	.021	29.451	1.995	2.534	399

Cook's Distance	.000	.381	.005	.026	399
Centered Leverage Value	.000	.074	.005	.006	399

a. Dependent Variable: Score\_Z

Control Variables		Correlations	
Score_Z	Score_X	Score_X	Score_Y
		Correlation	1.000
		Significance (2-tailed)	.000
		df	0
	Score_Y	Correlation	.618
		Significance (2-tailed)	.000
		df	396

Regression analysis reveals a significant relationship between the dependent variable (Score\_Z) and the independent variables (Score\_X and Score\_Y). Positive regression coefficients for both independent variables indicate that increases in Score\_X and Score\_Y lead to increases in Score\_Z. The very small significance values (0.000) confirm this relationship is statistically significant, not due to chance. ANOVA analysis supports this, with a large F-value (9286.969) and a small significance value (0.000), indicating the overall model is highly significant. Thus, changes in Score\_X and Score\_Y significantly influence Score\_Z, showing that social media effectively shapes and directs public opinion in political campaigns.

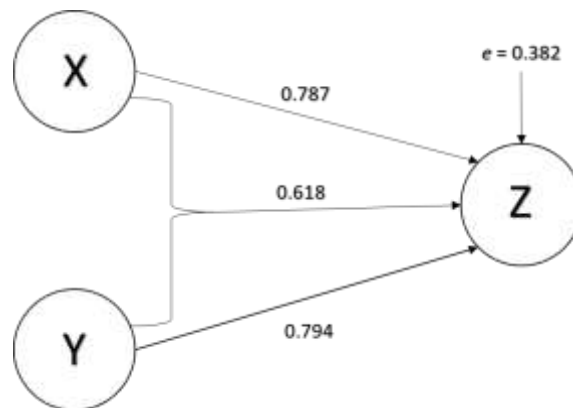


Figure 3. Correlation coefficients of X and Y influence on Z in Linear Regression Models

Based on the given path diagram, the analysis shows that both variable X and variable Y have a significant direct influence on variable Z. Variable X contributes 0.787 to the variation in variable Z, while variable Y provides a slightly larger contribution of 0.794. These figures indicate that both variables are strong predictors and play an important role in determining the value of variable Z. The significance of these contributions suggests that changes in variables X and Y will have a direct and substantial impact on variable Z, reinforcing the argument that these two factors should be the main focus in analyses related to variable Z.

However, although variables X and Y show significant influence, this analysis also reveals that the model used does not fully explain the variation in variable Z. In other words, about 38.2% of the variance in variable Z remains unexplained by this model. This indicates the presence of other factors outside of variables X and Y that also influence variable Z but are not included in this analysis. These factors may include other related variables, such as economic conditions, social factors, or psychological elements not measured in the analyzed model. It is important to consider that the model used only provides a partial view, and this unexplained variation opens opportunities for further exploration.

Furthermore, these findings suggest that, although variables X and Y are strong predictors, this model may need to be refined or expanded by including additional relevant variables to obtain a more complete picture of the factors influencing variable Z. Adding other variables or interactions between variables in the model can help reduce the amount of unexplained variance and improve the predictive capability of the model. Thus, further analysis incorporating other potentially influential elements can provide deeper and more comprehensive insights, and help in understanding the complexity of the relationships between variables X, Y, and Z in a broader context.

## V. FINDING

The findings from this study suggest that digital transformation has had a significant and multifaceted impact on civil service performance and public service delivery in Indonesia. One key outcome is the enhanced efficiency of public service processes, enabling faster and more streamlined transactions for citizens and businesses. Digital platforms and applications have facilitated smoother interactions between service providers and users, reducing bureaucratic hurdles and administrative delays (Alenezi, 2022) (As'ad et al., 2018). Additionally, digitalization has played a transformative role in increasing the accessibility of public services, particularly for individuals residing in remote and underserved areas (Aayale & Seffar, 2021) (Prieto-Egido et al., 2022).

However, the findings also reveal that the full potential of digital transformation has yet to be realized, as several challenges and barriers persist. The implementation of e-government initiatives has also had positive effects on public service quality, contributing to increased value addition, agility, accountability, and collaboration within the Indonesian public sector (Atmojo & Nurwulan, 2020). Nonetheless, the study identifies several factors that hinder the adoption and implementation of online service innovations, including technical difficulties, resistance to change among civil servants, and limited resources.

However, the study also identified several challenges and barriers that have hindered the full realization of digital transformation in the public sector. Technical difficulties, such as outdated infrastructure, data management issues, and interoperability challenges, have emerged as significant impediments (Alenezi, 2022). Additionally, the study found that resistance to change among civil servants, coupled with a lack of digital skills and training, has slowed the adoption of new technologies and service delivery models. Furthermore, limited financial and human resources, as well as policy and governance gaps, have constrained the ability of government agencies to invest in and sustain digital transformation initiatives. Additionally, the research found that resistance to change among civil servants, as well as limited resources and organizational capacity, have also constrained the successful adoption and implementation of digital technologies and innovations (Tangi et al., 2021) (Veenstra et al., 2011). Despite these challenges, the findings suggest that digital transformation has the potential to enhance civil service performance and significantly improve the quality and delivery of public services in Indonesia.

## VI. CONCLUSION

This study successfully demonstrates that social media plays an important role in shaping public opinion, which then has a significant impact on the success of the 2024 elections in Palembang City. Social media is not just a tool for disseminating information but also becomes a primary platform for influencing voters' perceptions and political decisions. In an increasingly digital political environment, the ability to effectively utilize social media becomes a key factor in political campaign strategies. However, the results of the study should be viewed in the context of its limitations, particularly in terms of generalization and potential biases. Nevertheless, these findings make an important contribution to our understanding of the dynamics of political communication in the digital era and offer practical implications for politicians and political parties in designing their future campaign strategies. Thus, this study not only enriches the literature on the role of social media in politics but also provides guidance for political practitioners to better understand and leverage the power of social media in achieving political success. Further research is recommended to explore this relationship in various different social and political contexts, as well as to expand the analysis by including other relevant variables, such as the influence of traditional media and the level of political literacy in society.

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