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Public Trust Recovery: the Role of Digital Government Public Relations and AI-Assisted Crisis Communication

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Abstract
The recent sting operation involving the Governor of Riau has triggered a significant public trust crisis toward the local government. This situation underscored the urgent need for a more adaptive, transparent, and technology-driven governance system. This study aimed to examine the influence of Digital Government Public Relations and AI-Assisted Crisis Communication on Public Trust Recovery in Riau Province. A quantitative study design was employed, utilizing an online survey distributed via Google Forms to 150 residents of Pekanbaru. The collected data were analyzed by using multiple linear regression. The findings indicated that Digital Government Public Relations exerted a positive and significant effect on public trust recovery by enhancing the transparency and accessibility of government information. Furthermore, AI-Assisted Crisis Communication also demonstrated a significant impact through faster crisis response, message consistency, and analytics-based detection of misinformation. Collectively, both variables contributed to rebuilding public trust in the aftermath of political crises. The study highlighted the importance of digital communication governance and the integration of artificial intelligence in modern governmental communication strategies to strengthen legitimacy, credibility, and public confidence.

Keywords: *Artificial Intelligence, Crisis Communication, Digital Government PR, Public Trust, Riau Sting Operation*

1. Introduction

In the digital era, public trust recovery can no longer rely solely on conventional communication mechanisms. Social media and online platforms have become primary channels for crisis communication because they enable direct interaction between governments and citizens (Asfia & Sari, 2024). Within this framework, Digital Government PR plays a crucial role in delivering transparent, data-driven, and dialogic communication (Zein & Utomo, 2025). Communication, particularly in public governance, serves as an essential component of the governmental machinery (Ramadhan et al., 2023). The stronger a government's public relations strategy, the higher the perceived quality of its public engagement and responsiveness (Harianja & Kurniawati, 2020), especially in addressing crises of corruption, gratification, and trust, as exemplified by the 2025 arrest of the Riau Governor by Indonesia's Corruption Eradication Commission (*Komisi Pemberantasan Korupsi: KPK*).

In practice, digital government public relations functions as a strategic medium for disseminating clarifications, policy information, and internal crisis management measures. Alongside this evolution, artificial intelligence (AI) has introduced a new paradigm in crisis communication through *AI-Assisted Crisis Communication*. AI enables government communication units to monitor public opinion in real time, analyze citizen sentiment, and deliver faster, more consistent, and data-informed responses. Technologies such as big data analytics, chatbots, and social media listening tools enhance the quality of decision-making in communication management, while still serving as supportive tools that complement the strategic role of human public relations professionals governmen (Glikson & Woolley, 2020; Verhoeven et al., 2018; Wirtz et al., 2019)

Public trust recovery wer comprehended as a strategic and continuous process conducted by public institutions to repair citizens' perceptions of the government's integrity, competence, and benevolence following a crisis (Van Der Meer & Jin, 2020). Rebuilding public trust was essential for restoring effective communication and encouraging participation between local governments and their constituents (Atnan & Abrar, 2023).

Concurrently, recent studies on AI-Assisted Crisis Communication demonstrated that the application of AI in public communication can enhance response speed, data accuracy, and the government's interactive engagement with citizens, thereby supporting public trust restoration after crises (Liu & Duarte, 2025; Zhang & Nie, 2025). Based on these converging findings, this study holds strong theoretical and practical relevance by integrating Digital Government PR, AI-Assisted Crisis

Communication, and Public Trust Recovery into a single analytical framework, particularly in the context of local political crises. Specifically, in Riau Province, a study examining these two variables simultaneously in rebuilding public trust following the 2025 corruption sting operation involving the regional governor remains scarce.

The study gap addressed in this study arises from the political crisis triggered by the 2025 gratification case involving the Governor of Riau, which led to a decline in public trust in the Riau Provincial Government. In this context, the role of government public relations becomes crucial as the main actor in maintaining communication stability, managing public opinion, and ensuring the delivery of accurate and transparent information to the public. Digital Government Public Relations (DGPR) represents the development of government public relations practices in response to digital transformation, in which communication is no longer conducted in a one-way manner but is instead interactive, real-time, and supported by digital technology (Belim, 2020)

Conceptually, DGPR is rooted in the theory of two-way symmetrical communication proposed by Grunig and Hunt, which conceptualizes communication as a dialogic process between organizations and their publics. In the governmental context, this approach encourages public relations not only to disseminate policy information but also to accommodate public aspirations, respond to criticism, and involve citizens in the communication process (De Marco, 2021). However, from an empirical perspective, a further gap remains in the limited integration between Digital Government Public Relations and AI-assisted crisis communication in explaining the process of restoring public trust during local political crises.

Previous studies have primarily focused on the function of digital government public relations in managing information and maintaining government–citizen relations in digital spaces, without directly linking these practices to mechanisms of public trust recovery in times of crisis (Adenmosun et al., 2025; Derivanti, 2022; Igben & Dorka, 2024; Jajuli et al., 2024). On the other hand, emerging discussions on the transition toward AI-based e-government remain largely confined to the aspects of digital governance, with limited exploration of how digital government public relations and AI technologies can collaborate to strengthen governmental communication strategies(Savveli et al., 2025; Vrabie, 2023). This study seeks to fill that void by empirically examining how Digital Government Public Relations and AI-Assisted Crisis Communication contribute to the recovery of public trust amid local political crises.

The novelty of this lies in its integration of digital public relations and AI-assisted crisis communication within a single empirical model of public trust recovery, particularly in the context of the 2025 Riau Governor corruption case. Unlike prior studies that examined these variables separately, this study positions Digital Government public relations and AI-assisted crisis communications as two interrelated independent variables that jointly influence the public trust recovery process during local political crises triggered by corruption scandals.

The urgency of this study lies in the need to understand how public trust can be restored in the context of an apolitical crisis involving local government leadership. In response to this challenge, the study holds both academic and practical importance. Therefore, this study carries both academic and practical significance. Academically, it contributes to the literature by introducing an empirical model that integrates Digital Government PR and AI-Assisted Crisis Communication in the context of political crisis-driven trust recovery. Practically, the findings are expected to provide valuable insights for local governments in designing transparent, responsive, and technology-based communication strategies aimed at restoring public legitimacy and strengthening digital governance practices.

Accordingly, this study aims to examine and analyse the influence of Digital Government Public Relations (X_1) and AI-Assisted Crisis Communication (X_2) on Public Trust Recovery (Y) within the context of the 2025 corruption and gratification case involving the Governor of Riau.

2. Method

This study employed a quantitative explanatory approach to examine the influence of Digital Government Public Relations (X_1) and AI-Assisted Crisis Communication (X_2) on Public Trust Recovery (Y) among the citizens of Riau Province following the *OTT* case involving the Governor. The explanatory quantitative approach was selected to identify causal relationships between variables objectively through statistical analysis (Creswell & Creswell, 2018). Data were collected by using an online questionnaire distributed via Google Forms, utilizing a five-point Likert scale ranging from 1 *(*strongly disagree) to 5 (strongly agree*)* (Koo & Yang, 2025)

The use of online surveys was widely recognized and effective in studies related to **e-**government and digital communication (Newlin & Bhattacherjee, 2024). Quantitative study is a systematic and objective approach that involves the collection and statistical analysis of numerical data to obtain valid and reliable insights regarding a particular social or

behavioral phenomenon (Creswell, 2014). This design enabled the researcher to generalize findings and test theoretical relationships empirically within the framework of modern government communication and public trust dynamics.

The determination of the sample size in this study followed the principles of a quantitative survey study. According to (Creswell, 2014)A quantitative survey study generally requires between 100 and 200 respondents to ensure sufficient statistical reliability and analytical precision. Similarly, (Sekaran & Bougie, 2016) emphasized that a sample size exceeding 100 respondents was typically adequate to represent large populations in social science and management study. Furthermore, (Hair et al., 2019) recommended that the minimum sample size for multivariate analysis should range from five to twenty times the number of indicators used in the study. Based on these methodological and statistical considerations, a total of 150 respondents was deemed appropriate to meet the requirements of reliability and representativeness for this study. The study data were collected through a questionnaire employing a Likert scale and subsequently processed and analyzed by using SPSS version 25. The statistical analysis followed the model testing procedures outlined by (Ghozali, 2018), which included validity testing, reliability testing, classical assumption testing, and multiple regression analysis.

The study population comprised 27,187 residents living in the *Pekanbaru Kota* district. The sample size was determined by using the Slovin formula with a margin of error (e) of approximately 8%, resulting in a total of 150 respondents, which was considered representative of the population in this study (Majdina et al., 2024; Sugiyono, 2017). This study employed a non-probability sampling technique, specifically purposive sampling, to ensure that respondents met the relevant criteria for the study's objectives. As stated by (Priadana & Sunarsi, 2021) Non-probability sampling refers to a sampling method in which participants are selected based on the researcher's judgment or expert consideration, ensuring that the chosen respondents are most capable of providing relevant and informed perspectives on the study. The Following is Figure 1 of the study flowchart

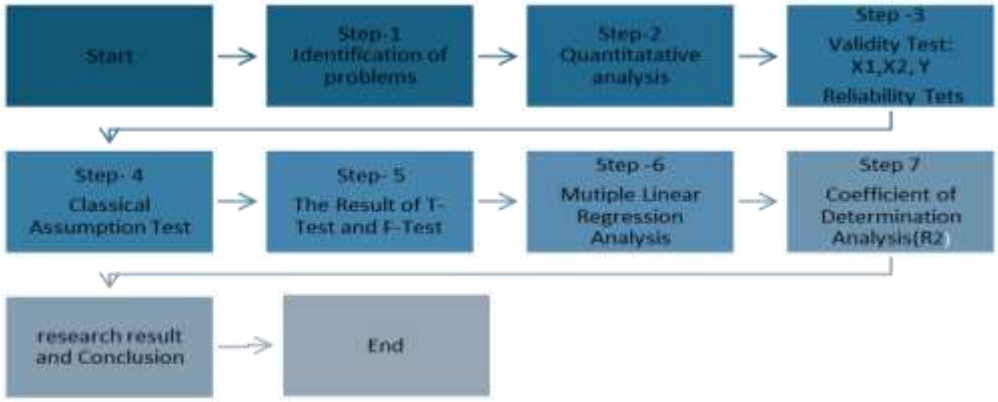

Figure 1. Study Flowchart

This study was conducted in a systematic and sequential manner following a structured flowchart. In brief, the process began with problem identification, followed by data processing and quantitative analysis. The study instrument was first tested for validity and reliability, after which the data underwent classical assumption testing to ensure that all statistical requirements were met. These stages culminated in the presentation of findings and formulation of conclusions, marking the final step of the study process.

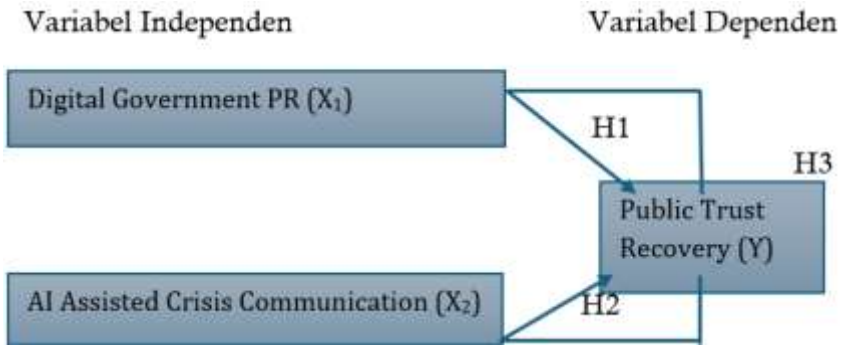

Figure 2. Theoretical Framework

Based on the theoretical framework and empirical findings from previous studies, this study proposed the following hypotheses:

H1**:** Digital Government Public Relations (Digital Government PR) has a positive and significant effect on Public Trust Recovery following the Riau Governor's *gratification of the corruption* case.

H2**:** AI-Assisted Crisis Communication has a positive and significant effect on Public Trust Recovery following the Riau Governor's *gratification of the corruption* case.

H3**:** Digital Government Public Relations (Digital Government PR) and AI-Assisted Crisis Communication simultaneously have a positive and significant effect on Public Trust Recovery following the Riau Governor's *gratification corruption* case.

3. Results

The quantitative findings of this study were obtained through the processing of questionnaire data, which were collected from respondents. Then it was analyzed by using statistical techniques with the assistance of SPSS version 25. The analysis was conducted to determine the influence of Digital Government Public Relations (Digital Government PR) and AI-Assisted Crisis Communication on Public Trust Recovery, both partially and simultaneously**.** The statistical procedures included multiple linear regression analysis**,** t-tests**,** F-tests**,** and the computation of the coefficient of determination (R^2) to evaluate the accuracy, strength, and significance of the relationships among the study variables. These analytical techniques were employed to provide empirical evidence of how digital communication strategies and AI-supported crisis response mechanisms contribute to restoring public trust in the aftermath of the Riau Governor's *OTT* case.

3.1 Profile of Respondent

Table 1. Respondent Data

Category	Group	Frequency	Percentage
Gender	Male	84	56%
	Female	66	44%
Age	18-25 Years old	25	17%
	25-35 Years old	55	37%
	35-45 Years old	65	43%
	>55 Years old	5	3%
Education	Senior high school	15	10%
	Bachelor degree	65	43%
	Master degree	45	30%
	Doctoral degree	25	17%

Based on data from 150 Respondents, 84 were male(56%), and 66 were female(44%). Most respondent were aged 35-45 years(43%), followed by those aged 25-35 years(37%) werethe smallest proportions. This

suggests that the majority of respondents were within a productive age range relevant to the study context. In terms of education, most held a Bachelor's degree(43%), followed by Master's(30%), Doctoral (17%), and high school graduate(10%), indicating that respondents generally had an adequate educational background to understand issues related to digital communication, transparency, and public trust.

3.2 Validity Test and Reliability Test

3.2.1 Validity Test

Table 2. Validity Test

Question Items	***r hitung***	***r table***	***Information***
Public Trust Recovery (Y)			
Question 1	*0,440*	*0,1603*	Valid
Question 2	*0,343*	0,1603	Valid
Question 3	*0,447*	0,1603	Valid
Question 4	*0.483*	0,1603	Valid
Question 5	*0,505*	0,1603	Valid
Digital Government PR (X_1)			
Question 6	*0,403*	*0,1603*	*Valid*
Question 7	*0,560*	0,1603	Valid
Question 8	*0,473*	0,1603	Valid
Question 9	*0,492*	0,1603	Valid
Question 10	*0,512*	0,1603	Valid
AI Assisted			
Crisis Communication (X_2)			
Question 11	*0,364*	0,1603	Valid
Question 12	*0,347*	0,1603	Valid
Question 13	*0,300*	0,1603	Valid
Question 14	*0,255*	0,1603	Valid
Question 15	*0,394*	0,1603	Valid
Question 16	*0,258*	0,1603	Valid
Question 17	*0,296*	0,1603	Valid
Question 18	*0,499*	0,1603	Valid
Question 19	*0,377*	0,1603	Valid
Question 20	*0,246*	0,1603	Valid

All questions on the three variables tested in this study were declared valid. For the public trust recovery variable, all 5 items had a value of 0.343 to 0,0505, which was higher than the r table of 0.1603, so that it could measure the variable validly. In the digital government public relations (X1), the calculated r value ranged from 0.403 to 0.560, indicating that all items were valid for measuring digital government public relations.

Meanwhile, in the Assisted crisis communication variable(X_2), which consisted of 10 items, the calculated r value was above 0.1603, with the highest value reaching 0.394.

3.2.2 Reliability Test

A study instrument is considered reliable when the value of Cronbach's Alpha exceeds 0.60. Therefore, the decision criteria for the reliability test are as follows: if the Cronbach's Alpha value is greater than 0.60, the questionnaire items are deemed reliable. Conversely, if the Cronbach's Alpha value is below 0.60, the questionnaire items are considered unreliable (Ghozali, 2018).

Table 3. Reliability Test

Variable	Number of Items	Cronbach's Alphaa	Information
Public Trust Recovery	5	0,668	Reliabel
Digital Government Public Relations	5	0,801	Reliabel
AI-Assisted Crisis Communication	10	0,611	Reliabel

The reliability test of the three study variables of public trust recovery, digital government public relations, and AI-assisted crisis communication was conducted using Cronbach's alpha, with each variable consisting of 5 items for variable (y) and 15 items for variables x1 and x2. The test results showed a Cronbach's alpha value of 0.668 for public trust recovery, 0.801 for digital government public relations, and 0.611 for AI-assisted crisis communication. These three values are classified as "reliable," which indicates that the instrument used has very strong internal consistency and is suitable for use in this study.

3.3 Classical Assumption Test

3.3.1 Normality Test

Table 4. Normality Test

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		150
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.19874824
Most Extreme Differences	Absolute	.049
	Positive	.036
	Negative	-.049
Test Statistic		.049
Asymp. Sig. (2-tailed)		.200[c,d]

Based on the normality test results shown in the figure, the interpretation was as follows: if the significance value (Sig.) is greater than

0.05, the data are normally distributed; if the significance value is less than 0.05, the data are not normally distributed. The test result shows a significance value of 0.200 > 0.05, indicating that the data were normally distributed.

3.3.2 Multicollinearity Test

Table 5. Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	15.345	1.966		7.807	.000		
Digital Government PR	.045	.077	.049	2.588	.004	.995	1.005
AI-Assisted Crisis Communication	.016	.056	.024	3.286	.002	.995	1.005

a. Dependent Variable: Public Trust Recovery

The interpretation of the multicollinearity test is as follows: if the Variance Inflation Factor (VIF) value is less than 10 and the tolerance value is greater than 0.01, it indicates that there is no multicollinearity. Based on the table, the VIF values for the variables Digital Government PR (X1) and AI-Assisted Crisis Communication (X2) were both 1.005 < 10, and the tolerance values were 0.995 > 0.1. Therefore, it can be concluded that no multicollinearity existed among the independent variables in this study.

Heteroscedasticity Test

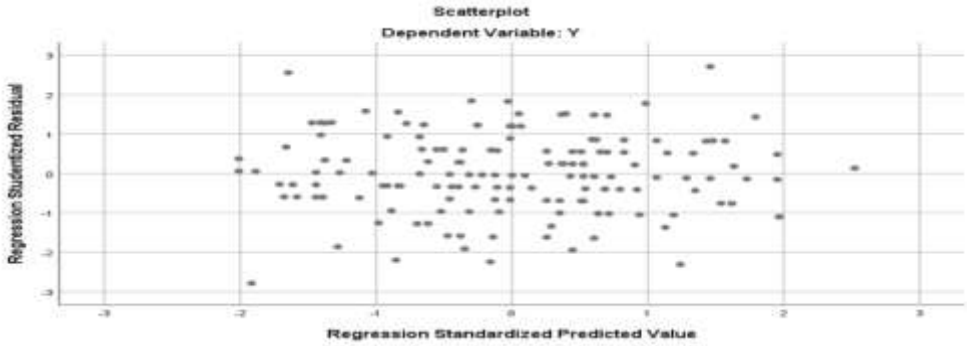

Figure 2. Scatterplott

The results of the heteroscedasticity test can be interpreted as follows: if the scatterplot points are distributed randomly above and below

the horizontal axis and do not form a specific pattern, it indicates that heteroscedasticity does not occur. Based on the scatterplot in the figure, the data points were spread in various directions, and they did not form a clear pattern. Therefore, it can be concluded that no heteroscedasticity was present in the regression model.

3.4 The Result of the T-Test and the F-Test

3.4.1 The Result of the T-Test

Table 6. The Result of- T-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.345	1.966		7.807	.000
	Digital Government PR(X_1)	.045	.077	.049	2.588	.004
	AI Assisted Crisis Communication(X_2)	.016	.056	.024	3.286	.002

a. Dependent Variable: Public Trust Recovery

The interpretation of the t-test results is as follows: if the significance value (Sig.) is less than 0.05 or the calculated t value is greater than the t-table value, it indicates that the independent variable (X) has a significant effect on the dependent variable (Y), and vice versa. The t-table value in this study was 1.966.

Conclusion:

Effect of X1 on Y: The significance value was 0.004 < 0.05, and the calculated t value was 2.588 > 1.966. Therefore, H1 was accepted, indicating that Digital Government PR (X1) had a significant positive effect on Public Trust Recovery (Y).

Effect of X2 on Y: The significance value was 0.002 < 0.05, and the calculated *t* value was 3.286 > 1.966. Therefore, H2 was accepted, indicating that AI-Assisted Crisis Communication (X_2) also had a significant positive effect on Public Trust Recovery (Y).

3..4.2 The Result of the F-Test

Table 7. F-Test

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4.207	2	2.103	6.203	.017[b]
	Residual	1524.567	147	10.371		
	Total	1528.773	149			

Model	Sum of Squares	df	Mean Square	F	Sig.

a. Dependent Variable: Public Trust Recovery
b. Predictors: (Constant), Digital Government PR, AI Assisted Crisis Communication

The interpretation of the F-test results is as follows: if the significance value (Sig.) is less than 0.05 or the calculated *F* value is greater than the *F*-table value, it indicates that the independent variables (X) collectively have a significant effect on the dependent variable (Y), and vice versa. The *F*-table value in this study was 3.06.

Conclusion:

The significance value was 0.017 < 0.05, and the calculated *F* value was 6.203 > 3.06. Therefore, H3 was accepted, indicating that Digital Government PR (X_1) and AI-Assisted Crisis Communication (X_2) simultaneously had a significant effect on Public Trust Recovery (Y).

3.5 Multiple Linear Regression Analysis

Table 8. Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.345	1.966		7.807	.000
	Digital Government PR (X_1)	0.045	.077	.049	2.588	.004
	AI Assisted Crisis Communication(X_2)	.016	.056	.024	3.286	.002

Interpretation of Regression Analysis:

The multiple linear regression equation is formulated as follows:

$$Y = a + b1.\ X_1 + b2.\ X_2$$

Based on the analysis results, the regression equation obtained was:

$$Y = 15{,}345 + 0{,}045 + 0{,}016$$

The constant value (a) of 15.345 indicated the baseline level of Public Trust Recovery (Y) when both independent variables, Digital Government (X_1) and AI-Assisted Crisis Communication (X_2), were assumed to have no effect (i.e., equal to zero). This means that without the influence of these independent variables, the public trust recovery level remains constant at 15.345. The regression coefficient (b1) for Digital Government (X_1) was 0.045, suggesting a positive relationship between Digital Government and Public Trust Recovery. This implied that for

every one-unit increase in Digital Government (X_1), Public Trust Recovery (Y) increased by 0.045 units, assuming other variables remain constant. Similarly, the regression coefficient (b2) for AI-Assisted Crisis Communication (X_2) was 0.016, also indicating a positive relationship. This meant that every one-unit increase in AI-Assisted Crisis Communication (X_2) contributed to an increase of 0.016 units in Public Trust Recovery (Y), under the assumption that other influencing factors were not included in this model. Overall, these findings suggested that both Digital Government and AI-Assisted Crisis Communication played a constructive role in enhancing Public Trust Recovery, with Digital Government showing a relatively stronger influence in this model.

3.6 Coefficient of Determination Analysis(R2)

Table 9. Adjusted R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.052[a]	0.323	-0.011	3.22043

a. Predictors: (Constant), X_1, X_2

Based on the regression output, the coefficient of determination (R^2) was found to be 0.323, or 32.3%. This indicated that the independent variables (Digital Government Public Relations (X_1) and AI-Assisted Crisis Communication (X_2) collectively explained 32.3% of the variance in Public Trust Recovery (Y). Meanwhile, the remaining 67.7% was influenced by factors outside the study model, such as policy transparency, institutional reputation, and media communication patterns. These factors indicated that public trust recovery is a multidimensional process, shaped not only by *Digital Government* and *AI-Assisted Crisis Communication*, but also by broader institutional, social, and psychological dynamics within society.

4. **Discussion**

Hypothesis 1 (H1) was accepted, indicating that Digital Government Public Relations (DGPR) significantly contributed to the recovery of public trust following the *gratification corruption case involving the Governor of Riau (AW)*. The majority of respondents agreed that the existence of government digital communication channels supported the efforts toward transparency, issue clarification, and open crisis management. However, not all indicators received equally strong support. The *information function* indicator recorded the lowest level of agreement at

3.21%, suggesting that information dissemination alone was insufficient to rebuild trust.

Furthermore, the findings of this study were consistent with several previous studies. (Frinaldi et al., 2024) emphasized that government public relations functions as a liaison between institutions and the public in achieving organizational objectives. However, this study also identified an important difference from previous research, particularly in terms of the effectiveness of information delivery. The information function indicator received the lowest level of agreement, indicating that one-way information dissemination is insufficient to restore public trust. This finding extended the studies of (Imtihan et al., 2025; Nurfurqonah & Rahmanto, 2018), which highlighted the importance of public communication, by demonstrating that the main issue lies not in the availability of information but in the limited public involvement in the communication process.

In addition, this study reinforced the findings of (Jin et al., 2014; Salsabila et al., 2024) regarding the importance of two-way communication and citizen participation. However, unlike previous studies, this research empirically showed that in the context of a political communication crisis and corruption involving the Governor of Riau, public engagement through digital channels had a greater impact on trust recovery than merely delivering formal information. Therefore, this study asserted that the success of Digital Government Public Relations was determined not by how much information is communicated, but by the extent to which the Riau Provincial Government was able to build dialogue and actively involve the public.

Hypothesis 2 (H2) was also accepted, demonstrating that AI-assisted crisis Communication had a positive impact on public trust recovery after the corruption case. About 3.44% of respondents agreed that the use of AI-assisted tools helps the government deliver more structured and responsive crisis communication. The highest level of agreement emerged for indicators related to accuracy, consistency of information, and real-time monitoring of public sentiment. These findings were consistent with the studies of (Bonsón et al., 2015; Qian et al., 2022), which emphasized that digital platforms can strengthen the relationship between governments and citizens through more open and responsive interactions. In addition, this study also supported the findings of (Stieglitz et al., 2018; Uzun et al., 2022), which demonstrated that the use of AI-assisted communication enhanced the government's ability to respond more rapidly to emerging issues and to continuously monitor crisis

developments. Through fast and well-targeted responses, governments have a greater opportunity to rebuild public trust.

Furthermore, (Loof et al., 2023) highlighted that the use of artificial intelligence in crisis communication can influence the level of public trust in the messages being conveyed. This argument reinforced the results of the present study, which indicated that AI-assisted crisis communication functions as a supporting instrument in accelerating the response of the Riau Provincial Government, monitoring public opinion, and maintaining message consistency during the crisis period. However, unlike previous studies, which focused primarily on public perceptions of AI as a source of messages, this study positions AI as an integral component of the government's crisis communication strategy and examines its impact quantitatively on the recovery of public trust.

Finally, Hypothesis 3 (H3**)**, which posits that Digital Government PR and AI-Assisted Crisis Communication simultaneously influence public trust recovery, was also accepted, albeit with a moderate level of contribution. The findings emphasized the pivotal role of transparency and digital communication in strengthening public legitimacy. When the Riau Provincial Government optimized its digital communication platforms within public relations practices, citizens perceived greater accountability and responsiveness, leading to a quicker restoration of trust.

These findings were consistent with the study of (Coombs, 2022), which emphasized the importance of ethical and accountable communication responses in crisis situations. However, this study extended that perspective by empirically demonstrating the integrative role of Digital Government Public Relations and AI-assisted communication within the context of local government. In contrast to previous studies by (Mergel, 2013), which focused on digital transformation as a driver of public service innovation, and (Lee & VanDyke, 2015) which emphasized transparency as the main determinant of public trust, this study argued that public trust was more effectively restored when digital-based government public relations practices were synergized with the use of AI-assisted tools as responsive, dialogic, and public-oriented crisis communication instruments.

Nevertheless, this study also differs from several previous studies in terms of analytical focus, research methods, and respondent characteristics. One notable difference can be seen when compared to the study by (Kumalasari et al., 2024) entitled "How Digital Communication Transparency and Public Trust Shape Crisis Communications through Public Engagement," which focuses on the formation and strengthening of public trust during an ongoing crisis by examining the relationships

between digital communication transparency, public trust, and public engagement in a general crisis communication context.

In contrast, the present study adopts a quantitative approach but is situated in a more specific post-crisis empirical context, namely the 2025 gratification case involving the Governor of Riau. This study not only measures public perceptions of government digital communication but also specifically examines the roles of Digital Government Public Relations and AI-assisted crisis communication in restoring public trust. Therefore, the main methodological difference lies in the crisis context being examined (general crisis versus specific post-crisis) as well as in the analytical objective, which shifts from trust formation to trust recovery.

Furthermore, both the study of (Kumalasari et al., 2024) and the present study positions government digital communication as a crucial factor in crisis management and public trust building. Both emphasize that information openness and public engagement through digital platforms enable government public relations to maintain relationships with citizens. In this regard, public trust is understood as the outcome of a transparent and participatory communication process rather than merely a consequence of policy decisions or legal actions.

To clarify the causal relationship between the dependent variable (public trust recovery) and the independent variables (Digital Government Public Relations and AI-assisted crisis communication), the findings of this study are further analyzed and illustrated in Figure 3 below:

Figure 3. Public Trust Recovery

The figure illustrates the process of public trust recovery following the gratification case involving the Governor of Riau, who served as the regional head in 2025. It can be observed that Digital Government Public

Relations and AI-Assisted Crisis Communication function as two main intervention pathways operating in parallel. The findings indicated that both variables exert a positive and significant influence on public trust recovery. It implied that transparent, responsive, and technology-driven communication strategies can strengthen public perceptions of governmental legitimacy. Specifically, Digital Government Public Relations enhanced information transparency and digital interaction, while AI-Assisted Crisis Communication accelerated crisis response and provided accurate analysis to reassure the public. Ultimately, these two pathways converge at the point of public trust recovery, underscoring that the integration of digital communication and AI assistance was an effective approach to managing and overcoming political crises.

Therefore, the main contribution of this study lies in the integration of Digital Government Public Relations and AI-assisted Crisis Communication within a contextual and applicable framework for public trust recovery, particularly in addressing political crises at the local government level, specifically in the Province of Riau. This approach enriches the study of government communication by incorporating a digital and adaptive perspective and reinforces the relevance of technology-based communication governance in strengthening legitimacy, credibility, and public trust in the digital era. In practical terms, the Public Relations Office of the Riau Provincial Government can optimize official digital channels such as the government website, social media platforms, and public service applications as spaces for two-way communication, rather than merely as tools for one-way information dissemination.

4. Conclusion

This study illustrated that Digital Government Public Relations (DGPR) and AI-Assisted Crisis Communication played complementary roles in the process of restoring public trust following the *hand-catching operation (OTT)* involving the Governor of Riau. The findings revealed that the recovery of public trust was not solely determined by legal proceedings or leadership changes, but also by how the government constructs open, consistent, and digitally present communication in the post-crisis period.

The practice of Digital Government Public Relations strengthens perceptions of governmental legitimacy when public information is conveyed in a clear, accountable, and accessible manner. Meanwhile, the adoption of AI-driven crisis communication tools enabled the government to monitor public sentiment and respond to emerging issues more swiftly and effectively. While these approaches were not the sole determinants of public trust recovery, they served as integral components within a broader

process influenced by policy integrity, governance quality, public service performance, and socio-political dynamics. Hence, this study did not claim that digital technology and AI represented the primary solutions to rebuilding public trust. Rather, the findings emphasized that when governmental public relations practices embody transparency, responsiveness, and data-driven communication, they become crucial supporting elements in re-establishing the trust relationship between the Riau Provincial Government and its citizens following the corruption-related crisis involving the Governor.

Practically, this study recommended that the Government Public Relations Office of Riau Province strengthen open and responsive digital communication, while ethically utilizing AI-assisted tools to monitor public sentiment, counter disinformation, and support evidence-based crisis communication decision-making. Two-way dialogue should be enhanced through online forums, public Q&A sessions, and citizen feedback mechanisms to ensure greater inclusivity and transparency in communication processes. However, this study has certain limitations. The study was conducted only within the Pekanbaru City District and focused on a single case, which restricted the generalizability of the findings. Moreover, the data relied primarily on respondents' perceptions and did not incorporate behavioral or longitudinal data that could provide deeper insights into trust dynamics over time. Additionally, the study model did not include other potentially influential factors such as public service performance, organizational culture, or local political dynamics. These limitations presented opportunities for future study to broaden the study scope, adopt mixed-method approaches, and integrate additional variables that may further explain the process of public trust recovery in post-crisis governance contexts.

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