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The Impact of Corporate Information Transparency in Handling BPJS Kesehatan Data Leaks on the Reputation of Digital Companies

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Abstract

The personal data breach involving BPJS Kesehatan has generated increasing public attention toward information transparency in digital-based public institutions. Transparency in crisis communication is often discussed in the literature as an important aspect of public trust and institutional reputation. This study aims to describe the perceptions of active BPJS Kesehatan users regarding information transparency in the handling of data breaches and its relation to the digital reputation of BPJS Kesehatan as a public institution. This study employs a descriptive quantitative method. Data were collected through a questionnaire distributed to 36 active BPJS Kesehatan users using a five-point Likert scale and were analyzed using descriptive statistical techniques with the assistance of SPSS. The results show that respondents rated information transparency relatively high, particularly in terms of openness, clarity of information, and timeliness of communication. However, the regression analysis indicates that there is no statistically significant relationship between information transparency and institutional reputation. These findings suggest that, in this study, information transparency is descriptively associated with public perceptions, while the digital reputation of BPJS Kesehatan is likely influenced by multiple factors beyond transparency alone.

KEYWORDS

information transparency, crisis communication, public institution reputation.

Introduction

In an increasingly open digital age, information transparency is an important element in building public trust and maintaining organizational accountability. Information disclosure is not only a legal obligation, but also a communication strategy that can strengthen reputation and relationships with stakeholders. Transparency refers to the extent to which an organization provides accurate, clear, accountable, and timely information to the public as a form of communication accountability (Holland et al., 2021; Walter, 2024; Zellatifanny & Rumata, 2021). With a high level of openness, companies can reduce information asymmetry and improve positive perceptions of institutional integrity. Corporate reputation itself is understood as the collective public perception of the reliability, integrity, and responsibility of an organization (Rahmanita & Manullang, 2025). A good reputation is formed through consistent communication, honesty, and ethical actions in the long term (Walker Kent, 2010). Organizational reputation is understood as the accumulation of public perceptions of the integrity, competence, and reliability of an institution, which is formed through consistent communication and organizational behavior (Annika et al., 2019). In crisis situations, uncertainty about information tends to increase public anxiety, making open and continuous communication an important element in crisis management (Elfattah, 2024; Hinata et al., 2024). To reinforce this research, the results of a national survey show that 60% of Indonesians believe that the government is not transparent and is not sufficiently accountable in providing public information related to the implementation of programs

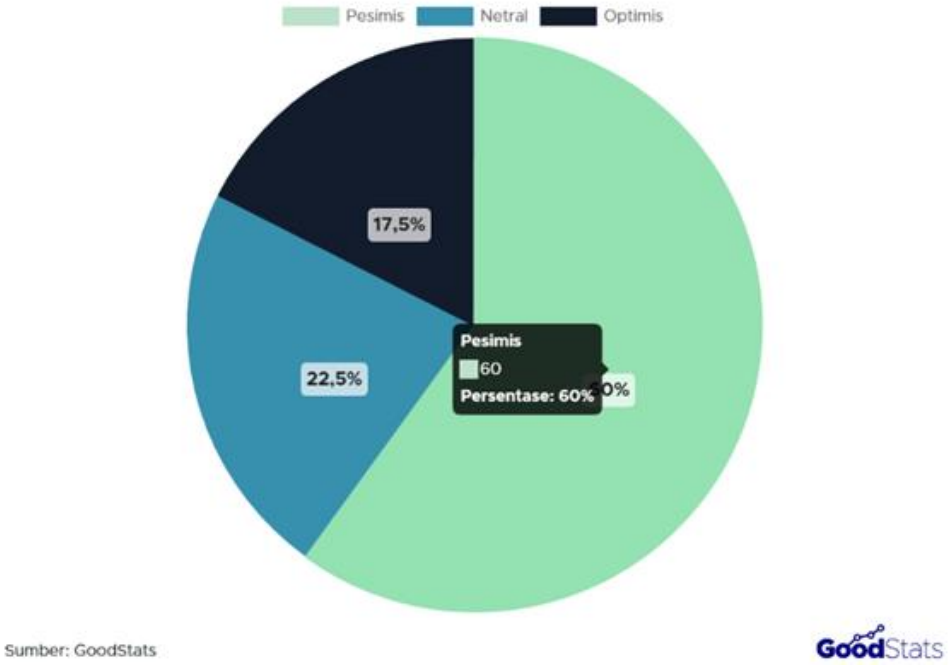


Figure 1. National Survey Results Chart
Source: Goodstats.id, 2025



Figure 2. A Number of Crucial Articles in the Personal Data Protection Law
Source: Kompas.id, 2024

and policies, as presented in Figure 1. This survey involved 1,200 respondents from 34 provinces, and only 28% of respondents said they were satisfied with the transparency of public institutions, while 12% said they did not know the official channels for obtaining accurate data. This condition illustrates that public institution communication is still passive and has not fully opened access for the public to obtain information quickly and clearly (Shahibah, 2025).

The ideal condition in this study is that information transparency describes a situation in which public and private institutions proactively, clearly, and responsibly convey information to the public, especially when facing crises such as data leaks. Transparency in an ideal context is not only

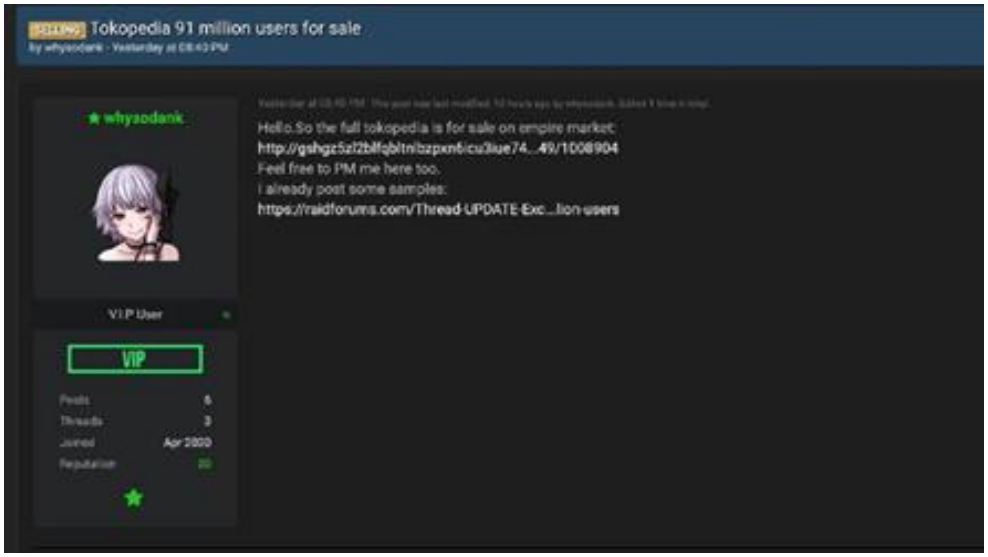


Figure 3. Merchant Data Posts for Sale on Raid Forums
Source: CNN Indonesia, 2020



Figure 4. Notice Posting That Tokopedia Has Been Hacked
Source: Twitter.com, 2020

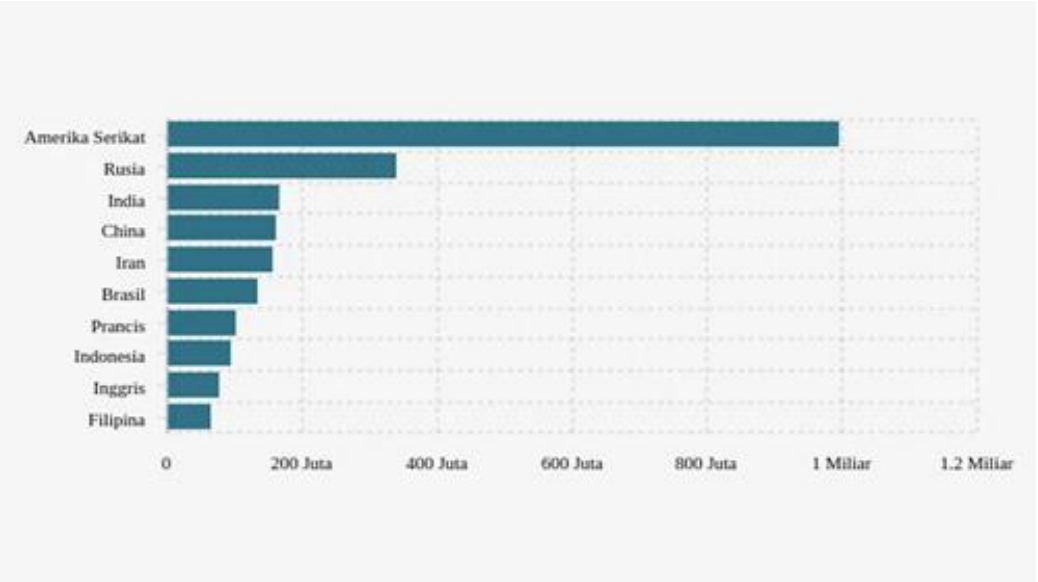


Figure 5. Diagram of the World's Largest Data Breaches
Source: Katadaka.co.id, 2024

about openness, but also includes clarity and accountability for every piece of information communicated to the public. Organizations that are ideal in terms of transparency are characterized by their ability to disclose information comprehensively, convey messages in clear and easy-to-understand language, and demonstrate concrete actions as a form of accountability (Walter, 2024). Ideal transparency includes clarity of message, completeness of information, and the ability of institutions to explain the reasons behind every policy or action (Paula, 2021). Ideal conditions for implementing information transparency require the presence of an independent personal data supervisory agency. However, according to a Kompas report, even though the PDP Law will come into effect in October 2024, such a supervisory agency has not yet been formed because the policy harmonization process is still ongoing (Purnamasari, 2024), as illustrated in Figure 2.

The actual situation is that many companies in Indonesia still take a defensive stance when dealing with data breaches. For example, in the case of Tokopedia in 2020, 91 million user accounts and 7 million merchant data were leaked and sold on the Raid Forums online forum, as shown in Figure 3. But the company only issued a general statement without revealing the cause and clear steps to address the issue (Wicaksono, 2020). This lack of transparency in the context of digital services actually increases public uncertainty and lowers the assessment of the quality of institutional communication (Bhimaraya, 2021). This case was revealed after the cybersecurity news platform Hackread.com posted about it on its official account on social media X (Twitter), as illustrated in Figure 4.

A similar case occurred at BPJS Kesehatan in 2021, involving the alleged sale of 279 million Indonesian citizens' data on an online forum. Both cases demonstrate the weakness of open communication and transparency of digital institutions when facing data breach crises. In the Tokopedia case, the company only said that they were improving their security system, without providing an explanation of the cause of the data breach and the steps that had been taken to prevent it. The focus of this study is the phenomenon of data leaks that befell BPJS Kesehatan in 2021, which became one of the biggest digital communication crises in Indonesia. This incident was not only a technical data security issue, but also concerned the failure of crisis communication strategies carried out by public institutions in maintaining trust and reputation in the eyes of the public.

Indonesia is now among the top 10 countries with the largest data breaches in the world, with a total of 94.22 million digital accounts leaked between 2020 and 2024, as presented in Figure 5. The Tokopedia (2020) and BPJS Kesehatan (2021) cases were the two main incidents that drove the increase in national data leakage cases. This condition is reinforced by data from the Ministry of Communication and Information Technology (Kominfo), which states that throughout 2023–2024 there has been an increase in reports of data leakage from various public and private agencies. Kominfo emphasized that every institution is required to report and follow up on data breaches in accordance with the provisions of the Personal Data Protection Law (PDP Law), as a form of public responsibility (Kasih, 2024). These findings are in line with studies showing increased public expectations for transparency in digital institutions amid rampant data breach incidents (Madsen, 2023).

Data breaches not only result in financial losses but may also affect organizational reputation in the long term. Previous studies suggest that transparent disclosure of data breach incidents and mitigation measures is often associated with faster reputational recovery compared to more secretive approaches (Jing Chen, Elaine Henry, 2023). Information disclosure is also discussed as a strategy that may contribute to rebuilding public trust more effectively than material compensation alone. Therefore, transparency is widely recognized as an important consideration in reputation management during digital crisis situations(Leydesdorff & Porto-Gomez, 2019).

Methods

Research Type

This study uses a descriptive method with a quantitative approach. This approach was chosen to obtain an empirical description of active BPJS Kesehatan users' perceptions of information transparency in handling data leaks and their implications for the reputation of BPJS Kesehatan as a digital-based public institution. Quantitative descriptive research aims to present data systematically, factually, and accurately regarding the characteristics of a phenomenon based on numerical measurements without testing the causal relationship between variables. The quantitative approach allows for objective data processing through statistical analysis to produce measurable and scientifically accountable descriptions (Sugiyono, 2019).

This study uses independent and dependent variables. The independent variable (X) in this study is information transparency, which is defined as the level of openness of BPJS Kesehatan in conveying information to the public regarding the handling of data leaks. Information transparency reflects the extent to which institutions provide clear, complete, and timely information as a form of communication responsibility to the public. The dependent variable (Y) in this study is corporate reputation, which is the public's perception of the image and credibility of BPJS Kesehatan as a digital-based public institution. Corporate reputation is formed through the public's assessment of the professionalism, accountability, and trust given to the institution in carrying out its functions, especially in crisis situations. Both variables are measured using a five-point Likert scale questionnaire, which allows for quantitative measurement of respondents' attitudes and perceptions. The relationship between information transparency and corporate reputation is analyzed to obtain an empirical picture of the role of open communication in shaping the reputation of public institutions in the digital age.

Population and Sample/Informants

The population in this study was all active users of BPJS Kesehatan. This population was selected because active users of BPJS Kesehatan are directly involved and affected by BPJS Kesehatan's digital services, including in the context of information delivery and handling of data leaks. Thus, this population was considered relevant to provide an empirical picture of public perceptions of information transparency and the reputation of BPJS Kesehatan as a digital-based public institution. The data collected in this study is primary data obtained directly from respondents through the distribution of questionnaires. The data describes the perceptions of active BPJS Kesehatan users regarding the transparency of information in handling data leaks and the reputation of BPJS Kesehatan as a digital-based public institution. All data is quantitative because it was obtained from measurements using a five-point Likert scale. The questionnaire data was then classified based on research variables, namely independent variables (information transparency) and dependent variables (company reputation). The collected data was then processed and analyzed using descriptive statistics to obtain frequency values, percentages, and averages as a basis for describing the respondents' perception trends. The use of primary data through questionnaires allows researchers to obtain relevant and accurate empirical information in accordance with the

Table 1. Operationalization of Variables

Variables	Dimension	Indicators	Measurements
Information Transparency (X)	*Responsiveness* (Response Speed)	PR response speed to incidents Frequency of information updates	Likert Scale
	Information Transparency	Clarity of explanations regarding leaks Openness regarding risks Solutions	Likert Scale
	Accountability	Admission of mistakes Apologies Recovery actions	Likert Scale
	Corrective Action (recovery)	Technical data protection measures Continued security guarantees	Likert Scale
Digital Company Reputation (Y)	*Integrity*	Public trust in the company's honesty Accountability	Likert Scale
	Competence	Public confidence in the company's ability to protect data	Likert Scale
	Reliability	Consistency in security promises Data protection measures	Likert Scale
	Emotional Security	Sense of security No fear of using digital services	Likert Scale

Source: Research Findings, 2025

research objectives, so that the data collected can be used to explain the objective conditions related to the transparency of information and reputation of BPJS Kesehatan.

The sample in this study comprised 36 active BPJS Kesehatan users who completed the questionnaire. The respondents were selected based on their eligibility as active users and their willingness to participate in the study. The data obtained from these respondents were used to represent perceptions of BPJS Kesehatan users toward information transparency and institutional reputation.

Research Location

This study was conducted in Indonesia and focused on the perceptions of active BPJS Kesehatan users regarding information transparency in the handling of the data breach case and its implications for the institutional reputation of BPJS Kesehatan. Data collection was carried out online to enable broader respondent participation and to ensure efficiency in reaching active users across different regions.

Instrumentation or Tools

Table 1 presents the operationalization of the research variables, including dimensions, indicators, and measurement scales used in the questionnaire instrument

Data Collection Procedures

The data collection technique in this study was conducted through a questionnaire. The questionnaire was used as the main instrument to obtain quantitative data on the perceptions of active BPJS Kesehatan users regarding the transparency of information in handling data leaks and the reputation of BPJS Kesehatan as a digital-based public institution. The questionnaire was structured based on the research variable indicators and designed to measure the attitudes and perceptions of respondents objectively. The questionnaire instrument used a five-point Likert scale, namely strongly disagree, disagree, neutral, agree, and strongly agree. The use of the Likert scale aims to convert respondents' subjective perceptions into numerical data that can be analyzed statistically (Tanujaya et al., 2022). The questionnaire was distributed online to respondents who met the criteria as active users of BPJS Kesehatan, enabling efficient data collection and reaching a wide range of respondents. A questionnaire is a data collection technique conducted by providing a set of written questions or statements to respondents to answer, and this method is widely used in quantitative research because it can produce measurable and easily analyzed data (Sugiyono, 2019). Therefore, the use of questionnaires is considered appropriate to describe empirical conditions and public perceptions in the context of this study.

Data Analysis

The data used in this study were primary quantitative data obtained from respondents' answers to the Likert-scale questionnaire. The collected data were first classified according to the research variables, namely information transparency (X) as the independent variable and corporate reputation (Y) as the dependent variable. Data analysis was conducted using descriptive statistical techniques with the assistance of SPSS software. The analysis included calculating frequencies, percentages, and mean scores to describe respondents' perceptions of each variable. Although simple linear regression is applied, the analysis is intended to examine the tendency of association between variables rather than to establish causal relationships. Therefore, the regression results are interpreted descriptively and contextually in line with the study's quantitative descriptive design.

Result and Discussion

The research results were obtained from processing questionnaire data filled out by 36 respondents who are active users of BPJS Kesehatan. Data analysis was performed using descriptive statistics to describe respondents' perceptions of information transparency in handling data leaks and the reputation of BPJS Kesehatan as a digital-based public institution. Table 2 presents the characteristics of respondents based on gender, which provides an overview of the composition of respondents in this study.

Table 2. Informant Research Data

No.	Gender	Frequency	Percentage
1.	Laki-laki	9	25%
2.	Perempuan	27	75%
Total		**36**	**100%**

Source: Questionnaire (Primary Data Processing Results, 2025)

Table 3. Recapitulation of Variable X Scores

No	Indicator	Cumulative Total	Average Score
1.	**Frequency**		
	BPJS Kesehatan provided initial information about the data breach quickly.	145	4.028
	BPJS Kesehatan responded immediately to public concerns after the incident occurred.	144	4.000
	BPJS Kesehatan updated information about the handling of the data breach regularly.	148	4.111
2.	**Duration**		
	BPJS Kesehatan openly stated that a data breach had occurred.	147	4.083
	BPJS Kesehatan clearly explained the types of data affected by the incident.	145	4.028
	The information provided by BPJS Kesehatan was easy for the public to understand.	141	3.917
3.	**Attention**		
	BPJS Kesehatan has demonstrated responsibility for the data breach.	148	4.111
	BPJS Kesehatan has provided an official explanation regarding the steps taken to handle the incident.	143	3.972
	BPJS Kesehatan is working with relevant agencies to follow up on the data breach incident.	145	4.028
	BPJS Kesehatan has provided information regarding the recovery measures that have been taken.	148	4.111
	BPJS Kesehatan improved its data security system after the incident occurred.	149	4.1389
	The recovery measures taken by BPJS Kesehatan have increased my sense of security as a service user.	142	3.9444

Source: Research Findings, 2025

Table 4. Recapitulation of Variable Y Scores

No	Indicator	Cumulative Total	Average Score
1.	**Cognitive**		
	The transparency of BPJS Kesehatan makes this institution appear honest and trustworthy.	143	3.972
	The way BPJS Kesehatan handled the data leak demonstrates its competence in managing digital crises.	151	4.194
	Affective		
	The way BPJS Kesehatan manages information during a crisis demonstrates the institution's professionalism.	149	4.139
	The information and actions taken by BPJS Kesehatan have helped alleviate my concerns about the security of my personal data.	146	4.056
2.	**Conative**		
	BPJS Kesehatan's handling of the crisis has increased my confidence that the institution is reliable.	152	4.222
	BPJS Kesehatan's handling of the data leak has reduced my concerns about personal data security.	151	4.194

Source: Research Findings, 2025

Gender

Based on respondent characteristics, this study was dominated by female respondents (75%), while male respondents accounted for 25%. This composition shows a difference in the proportion of respondent participation based on gender in this study. This difference provides a demographic picture of the respondents and serves as a context for understanding the perceptions of active BPJS Kesehatan users regarding information transparency and the reputation of the institution. Table 3 presents an assessment of the information transparency variable.

Variable Recapitulation (X) Information Transparency

Based on the descriptive statistical analysis, respondents' perceptions of information transparency at BPJS Kesehatan can be categorized as relatively positive, with percentage index values exceeding 78% across all measured dimensions. In the frequency dimension, the average score was in the range of 4.00–4.11, which is equivalent to a percentage index of around 80%–82%. This shows that most respondents consider BPJS Kesehatan to be quite frequent and consistent in conveying and updating information related to data leaks. This finding is in line with recent research showing that the frequency and consistency of information delivery are important indicators in assessing the transparency of public institutions' communication, especially in digital-based services (Grimmelikhuijsen, 2016). In the duration dimension, the average score ranged from 3.91 to 4.08, equivalent to a percentage index of around 78% to 82%. These findings indicate that respondents rated the openness of information and clarity of delivery as quite good, although there is still room for improvement in terms of the ease of understanding the information. This condition indicates that even though information is openly available, clarity and ease of understanding remain challenges in digital public service communication (Bhimaraya, 2021; Waymer & Robert, 2022). In terms of attention, the highest average score reached 4.14, which is equivalent to a percentage index of around 83%. This shows that BPJS Kesehatan's attention and seriousness in handling incidents, including recovery measures and data security system improvements, were rated most strongly by respondents. These

Table 5. Results of the Information Transparency Validity Test

Item Number	$t_{calculate}$	t_{table}	Description
X1	5.752	2.032	Valid
X2	7.142		Valid
X3	8.075		Valid
X4	5.364		Valid
X5	6.401		Valid
X6	4.167		Valid
X7	4.257		Valid
X8	6.209		Valid
X9	7.735		Valid
X10	6.532		Valid

Source: Researcher's Findings, 2025

Table 6. Results of the Digital Company Reputation Validity Test

Item Number	$t_{calculate}$	t_{table}	Description
X1	3.284	2.032	Valid
X2	3.059		Valid
X3	3.286		Valid
X4	2.298		Valid
X5	2.607		Valid
X6	2.279		Valid

Source: Researcher's Findings, 2025

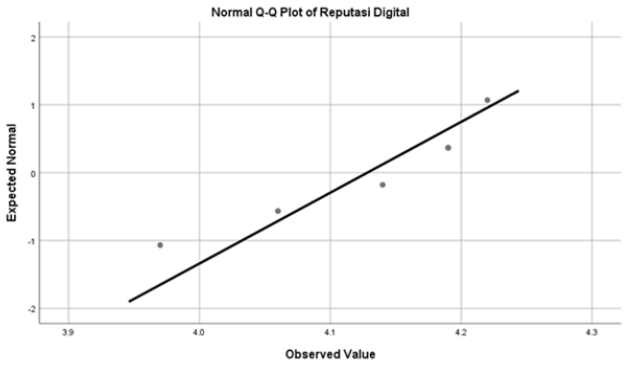


Figure 6. Simple Regression Plot

results reinforce the findings of previous studies which state that institutional attention and clarity of corrective actions contribute significantly to positive public assessments of public service agency responses (Einwiller, 2021).

Variable Recapitulation (Y) Digital Company Reputation

Table 4 presents the recapitulation of respondents' perceptions regarding the digital company reputation variable across cognitive, affective, and conative dimensions.

Based on the results of the analysis of public digital institution reputation variables, BPJS Kesehatan received a positive perception, with a percentage assessment index above 79%. In the cognitive dimension, the average score ranged from 3.97 to 4.19, which is equivalent to a percentage index of around 79% to 84%. This shows that respondents rationally assess BPJS Kesehatan as having good competence in managing digital crises and as being sufficiently trustworthy as a public institution. In the affective dimension, the average score ranges from 4.05 to 4.14, equivalent to a percentage index of around 81% to 83%. This finding shows that emotionally, respondents tend to have positive feelings towards the professionalism of BPJS Kesehatan and its efforts to reduce concerns regarding personal data security. In the conative dimension, the highest average score reached 4.22, which is equivalent to a percentage index of around 84%. This shows that the majority of respondents have confidence and a positive attitude toward BPJS Kesehatan as a reliable institution in handling digital crises. The respondents' assessment indicates that clarity of information remains a major challenge in digital-based public service communication. This condition shows that even though information is available, its presentation is not yet fully able to meet the public's need for understanding (Waymer & Robert, 2022).

The results of the validity test for the information transparency variable are presented in Table 5.

The validity test results for the digital company reputation variable are presented in Table 6.

Simple Regression Plot Results

A normal Q-Q plot, as presented in Figure 6, is used to visually assess whether the distribution of respondent perception data approximates a normal distribution. This test is important in quantitative communication research to ensure that questionnaire data meets the assumptions of parametric statistical analysis (Bungin, 2017). In quantitative communication science research, normality testing is necessary to ensure that audience or public perception data can be analyzed using parametric statistical techniques validly (Newman et al., 2021). Based on the results of normality testing using the Normal Q–Q Plot on the digital reputation variable, it can be seen that the data points are scattered around and follow the direction of the diagonal line. This distribution pattern suggests that the residual data generally follows the diagonal line, indicating an approximate normal distribution without extreme deviations. This condition indicates that the digital reputation data in this study meets the normality assumption. With these assumptions fulfilled, the data is deemed suitable for further analysis using statistical analysis techniques that require normal distribution. Based on the ANOVA table, the significance value in the Deviation from Linearity row is 0.952, which is greater than 0.05. This result indicates that there is no deviation from linearity, so that the relationship between information transparency and digital reputation can be stated as linear and eligible for regression analysis. The linearity test in quantitative communication research aims to ensure that the relationship between variables is proportional and can be explained statistically through a linear regression model (Jose & Hayes, 2021). The overall ANOVA test shows a significance value of 0.957 (> 0.05), indicating that the regression model is not statistically significant. This suggests that the relationship between information transparency and digital reputation cannot be statistically confirmed within the analyzed data.

Based on the Model Summary results, the correlation coefficient (R) value of 0.351 indicates a positive relationship with a relatively low level of strength between information transparency and the digital reputation of BPJS Kesehatan. The R Square value of 0.123 indicates that information transparency can explain 12.3% of the variation in digital reputation, while the remaining 87.7% is influenced by factors other than the research variables. This finding is in line with communication research showing that single communication variables, such as information transparency, generally only explain a small portion of the variation in organizational reputation, because reputation is a multidimensional construct that is formed through a long-term process (Coombs, 2022; Linjauan Rita Men et al., 2022). The Adjusted R Square value of -0.096 indicates that the regression model used is not yet strong enough to optimally explain the variation in digital reputation. This may be due to the limited number of respondents and the possibility of other variables that are more dominant in shaping the digital reputation of public institutions.

Based on the Coefficients table, the regression coefficient for the Information Transparency variable is B = −0.508 with a significance value of 0.495 (> 0.05), indicating a negative but

statistically insignificant association with digital reputation. This indicates that, although the coefficient shows a negative direction, the relationship between information transparency and the digital reputation of BPJS Kesehatan is not statistically significant. Therefore, the regression analysis does not provide sufficient statistical evidence to confirm a significant relationship between the two variables in this study. The standardized beta coefficient (β = −0.351) suggests that the strength of the association between information transparency and digital reputation is relatively low. These findings are consistent with previous studies indicating that information transparency does not always correlate strongly with digital reputation, particularly in public service institutions where user experience and perceived service quality play a more dominant role (Dwivedi, 2021; Harabin, 2022). Furthermore, public trust that develops cumulatively through repeated interactions has been shown to exert a stronger influence on digital reputation than information disclosure alone (Pandey, 2022). Communication research also suggests that transparency, while important, is often insufficient by itself to alter institutional reputation, as reputational judgments are formed through long-term experiences and organizational responses (Meer, 2021). In line with recent empirical findings, this study indicates that the digital reputation of BPJS Kesehatan as a public institution operating digital-based services is likely influenced by factors beyond information transparency, including user experience, service quality, and long-term public trust (Madsen, 2023; Meijer, 2021).

This study provides insights into how active users of BPJS Kesehatan perceive information transparency in the context of a data breach and how these perceptions relate to the institution's digital reputation. The descriptive analysis indicates that respondents generally evaluate BPJS Kesehatan's information transparency positively, as reflected in high mean scores across all dimensions, including frequency, clarity, and institutional attention. However, the regression analysis demonstrates that information transparency does not have a statistically significant effect on the digital reputation of BPJS Kesehatan. This apparent discrepancy can be explained by the multidimensional nature of institutional reputation and the specific context of BPJS Kesehatan as a mandatory public service institution. As a public organization providing compulsory health insurance services, BPJS Kesehatan operates in an environment where users have limited alternatives, and reputational judgments are shaped not only by crisis communication practices but also by cumulative service experiences, long-term institutional trust, and perceived service reliability. Consequently, while information transparency is positively perceived at a descriptive level, it does not function as a direct determinant of digital reputation within the regression model. This finding suggests that information transparency may play a supportive role rather than a causal one, and that mediating or moderating variables—such as service quality, prior trust, or user dependency—should be considered in future research to better explain reputation formation in mandatory public service contexts.

Intrepretation of Key Findings

The results show that respondents rated BPJS Kesehatan's information transparency relatively high across all measured dimensions, as reflected by mean scores above 3.9 for frequency, duration, and attention. This suggests that, at a descriptive level, BPJS Kesehatan has been considered sufficiently open and responsive in communicating about the data breach incident. These results are consistent with (Grimmelikhuijsen, 2016) and (Einwiller, 2021), who argue that communication consistency and visible institutional responsibility are key indicators of perceived transparency in public organizations. However, the regression analysis shows that information transparency does not have a statistically significant effect on BPJS Kesehatan's digital reputation (sig. = 0.495 > 0.05). This finding indicates that institutional reputation is not determined solely by transparency, but is also influenced by other factors such as user experience, service quality, and long-term trust. This supports the arguments of (Dwivedi, 2021) and (Pandey, 2022) that reputation is a multidimensional construct shaped by cumulative experiences over time. The low coefficient of determination (R^2 = 0.123) further supports this interpretation, indicating that transparency explains only a small proportion of the variance in reputation. This aligns with (Linjauan Rita Men et al., 2022) and (Coombs, 2022), who emphasize that organizational reputation cannot be adequately explained by a single communication variable.

Comparison with Previous Studies

On the other hand, research in Indonesia is still limited to the legal and regulatory aspects of personal data protection. Previous studies have examined internal factors that influence the disclosure of cyber risks, such as company size and the existence of a risk management committee, but have not examined the impact on public perception (Kahar, 2025). Other previous studies analyzed the weaknesses of data breach notification regulations in Indonesia compared to South Korea, but did not discuss the relationship between transparency and organizational reputation. Thus, there are still research gaps that need to be filled, particularly regarding how the level of corporate information transparency affects the reputation of public digital institutions (Situmeang et al., 2025).

The results of this study are reinforced by a number of previous studies that explain that transparency in digital communication plays an important role in shaping public perceptions of trust and reputation of institutions, especially in crisis situations. Transparency of information allows the public to obtain clarity of messages, understand the steps taken, and assess the level of responsibility of public institutions more objectively (Kumalasari et al., 2024). In the context of a digital crisis, information disclosure also serves as a mechanism to reduce public uncertainty and concerns about the risks faced. Research in both global and Indonesian contexts shows a relatively similar pattern, namely that public information disclosure and rapid communication through digital channels contribute positively to the formation of trust and reputation of public institutions (Jannah et al., 2025). Institutions that are able to convey information openly, consistently, and in a timely manner tend to be perceived as more credible and professional in the eyes of the public. In this context, the transparency of BPJS Kesehatan's information can be understood as an institutional effort to maintain legitimacy and public trust amid the data leak crisis.

The results of this study are in line with previous findings which state that information transparency contributes to the formation of positive public perceptions, although its influence is not always directly significant to reputation (Belle, 2015; Grimmelikhuijsen, 2016). Several empirical studies confirm that information transparency not only affects the cognitive aspects of the public, but also has an impact on affective and conative dimensions, such as a sense of security, trust, and attitudes toward public institutions (Jannah et al., 2025; Kumalasari et al., 2024). Thus, information transparency has the potential to be one of the supporting factors in the formation of the digital reputation of public institutions, although its influence can be affected by other factors such as user experience, long-term trust, and the overall effectiveness of crisis management.

Limitations and Cautions

This study has several limitations that should be considered

when interpreting the findings. First, the sample size was relatively small (36 respondents), which limits the generalizability of the results to the broader population of BPJS Kesehatan users in Indonesia. Second, this study examined only one independent variable, namely information transparency, whereas institutional reputation is a complex construct that may be influenced by multiple factors such as service quality, user experience, trust, and satisfaction with digital systems. Third, the data were collected using a perception-based questionnaire, meaning that the findings are influenced by respondents' subjectivity and their individual conditions at the time of completing the survey. Therefore, the findings of this study should be interpreted with caution and understood as a limited empirical representation rather than a comprehensive depiction of all BPJS Kesehatan users.

Conclusion

This study analyzes the effect of information transparency on the digital reputation of BPJS Kesehatan as a digital-based public institution in the context of handling data leaks. Information transparency is understood as the institution's efforts to convey information quickly, openly, clearly, and responsibly to the public, while digital reputation represents public perception, assessment, and trust in the credibility of institutions in the digital space. Based on the results of questionnaire data processing from 36 active BPJS Kesehatan users, information transparency is generally perceived to be in the good category, particularly in the dimension of attention, which shows the institution's concern and responsibility in responding to crises. However, the regression analysis results indicate that there is no statistically significant relationship between information transparency and the digital reputation of BPJS Kesehatan. This finding indicates that the formation of a public institution's digital reputation is not solely determined by information disclosure in a single crisis event, but is influenced by various other structural and sustainable factors. These factors include the public's experience in using services, the consistency of the institution's communication in the long term, the reliability of digital systems, and the level of trust that has been established previously. Thus, information transparency serves more as an ethical and normative prerequisite in crisis communication, rather than as the sole determinant of digital reputation. In the context of digital crisis communication, the results of this study confirm that information transparency needs to be integrated with a more comprehensive communication strategy, including strengthening service quality, continuously restoring trust, and systematic digital risk management. For public institutions, these findings indicate the importance of not only focusing on information disclosure during crises, but also building long-term relationships with the public through consistent and responsive communication. This study has limitations in terms of the number of respondents and the scope of variables studied. Therefore, further research is recommended to involve a broader sample and add other variables such as public trust, digital service quality, and crisis communication effectiveness to obtain a more comprehensive picture of the formation of the digital reputation of public institutions.

Author contributions

The author was responsible for the conceptualization of the study, data collection, data analysis, interpretation of findings, and the writing of the manuscript. The author approved the final version of the manuscript.

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