

Evaluation Of Village Administration Service Information System To Improve Public Transparency

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Abstract

Abstract: This study aims to evaluate the effectiveness of the Village Administration Service Information System in enhancing public transparency within village governance. The research employs a qualitative descriptive approach, using literature review and document analysis to examine how information systems support transparency, accountability, and public access to administrative services. The analysis is grounded in information system evaluation models, public transparency theory, and e-government concepts. The results indicate that village administration information systems contribute positively to transparency by improving access to service information, accelerating administrative processes, and strengthening accountability mechanisms. However, several challenges remain, including limited human resource capacity, uneven technological infrastructure, and insufficient policy support. This study highlights the importance of integrating technological readiness, institutional commitment, and human resource development to maximize the role of information systems in fostering transparent village governance. The findings provide a conceptual foundation for future empirical research and policy development related to village digital governance and public transparency.

Keywords: Village Information System; Administrative Services; Public Transparency; E-Government; Information System Evaluation

I. INTRODUCTION

Public transparency has become a fundamental principle in contemporary public administration, particularly in the context of village governance as the level of government closest to citizens (Purba, 2019). Villages play a crucial role in delivering administrative services, managing public resources, and implementing development programs that directly affect community welfare (Chrisna et al., 2024; SRIYONO et al., 2022; Utaminingsih et al., 2022). Consequently, village governments are increasingly required to provide open, accessible, and accurate information regarding administrative procedures, service standards, decision-making processes, and the management of village resources. Transparency at the village level is not only a normative demand but also a practical necessity to strengthen accountability, prevent maladministration, and enhance public trust (Siregar & Irawan, 2021).

The rapid development of information and communication technology has significantly transformed public administration practices (Hariyanto & Wahyuni, 2020). Traditional, paper-based administrative processes are gradually being replaced by digital systems that enable faster service delivery, more efficient data management, and broader dissemination of public information. In this context, information systems have become an essential instrument for governments to improve

service quality and promote transparency. Digital-based administrative service systems allow communities to access information (Sebayang et al., 2021; Wahyuni et al., 2022) without spatial and temporal limitations, reducing dependency on face-to-face interactions and minimizing opportunities for discretionary practices (Noviani et al., 2024).

Previous studies have demonstrated that information systems contribute positively to improving public service quality, administrative efficiency, and transparency. Research in urban and regional government settings indicates that e-government initiatives enhance information accessibility, reduce bureaucratic complexity, and increase public participation. However, most existing studies focus on higher levels of government or urban contexts, where technological infrastructure and human resource capacity are relatively well-developed (Chrisna et al., 2024). Empirical and conceptual studies that specifically examine information system implementation at the village level remain limited, despite villages facing unique challenges such as limited infrastructure, lower digital literacy, and stronger social dynamics (Handoko et al., 2024).

This gap indicates the need for a focused conceptual analysis that addresses village administration service information systems as a distinct governance context. Village governance

differs from urban administration in terms of institutional capacity, organizational structure, and community characteristics. Therefore, analytical frameworks used in urban or regional studies cannot be directly applied without adaptation. A village-based perspective is required to understand how information systems function within local administrative realities and how they influence transparency outcomes (M. D. T. P. Nasution et al., 2023a).

Theoretically, this study is grounded in information system success models, public transparency theory, and e-government frameworks, which are contextualized within village governance settings. Information system success models emphasize the importance of system quality, information quality, service quality, system use, and user satisfaction as determinants of system effectiveness. Transparency theory highlights openness, accessibility, and clarity of public information as key dimensions of accountable governance (Warsito et al., 2023). Meanwhile, e-government frameworks emphasize the integration of technology, organizational processes, and policy support in improving public service delivery. Unlike prior studies that primarily focus on technical system implementation, this research adopts an integrative perspective by incorporating organizational commitment, human resource capacity, and policy support as critical factors influencing transparency at the village level (M. D. T. P. Nasution et al., 2023b; Sembiring et al., 2023).

Therefore, the objective of this study is to conceptually evaluate the role of village administration service information systems in enhancing public transparency and to identify key factors that influence their effectiveness. By synthesizing relevant theories and previous research, this study seeks to develop a comprehensive conceptual understanding of how information systems can support transparent and accountable village governance (D. A. D. Nasution, 2019, 2020). The findings of this study are expected to provide a theoretical foundation for future empirical research and to inform policymakers and village governments in designing and implementing more effective digital governance strategies (Irawan et al., 2022).

II. RESEARCH METHODOLOGY

This study employs a conceptual qualitative research design. The research does not involve field data collection but focuses on theoretical synthesis and document analysis.

A. Research Approach and Design

The research framework integrates:

1. Information Quality
2. System Quality
3. Service Quality

4. Human Resource Competency
5. IT Infrastructure Readiness
6. Organizational and Policy Support
7. System Usage and User Satisfaction

These variables are conceptually linked to public transparency outcomes.

This study uses a qualitative approach with a conceptual research design. The choice of a conceptual qualitative approach is based on the research objective of developing a comprehensive evaluation framework for village administrative service information systems in the context of increasing public transparency. Unlike empirical evaluative research that involves direct data collection from system implementation in specific villages, this conceptual research focuses on theoretical synthesis, policy document analysis, and the development of an evaluation model based on the existing body of knowledge in the literature on information systems, public administration, and e-government. The choice of a conceptual approach for this evaluation research on village administrative service information systems is based on several fundamental considerations. First, the complexity of village administrative service information systems, which encompass various technical, organizational, social, and policy aspects, requires a deep theoretical understanding before an effective empirical evaluation can be conducted. Without a strong conceptual framework, empirical evaluations risk being ad hoc and not comprehensive in capturing all dimensions relevant to public transparency. Second, there is a significant gap in the literature regarding information system evaluation frameworks specifically designed for the context of village administration in Indonesia with its unique characteristics such as limited infrastructure, variations in human resource competencies, and diversity of organizational support between villages. Third, the development of a robust conceptual model will provide a strong foundation not only for further empirical research but also serve as a practical guideline for local governments and policymakers in evaluating and improving their village administration service information systems. The conceptual design used in this study follows the principles of systematic literature review and theory synthesis, which have been widely used in information systems and public administration research. The researchers conducted an in-depth and systematic exploration of relevant literature to identify key concepts, applicable theories, best practices from various contexts, and lessons learned from the implementation of similar systems in various countries. In-depth analysis of the relationships between concepts was conducted to understand the causal and contextual mechanisms linking information system characteristics to public transparency outcomes. Findings from various sources were then synthesized into a coherent, comprehensive, and applicable evaluation framework

for the context of village administration in Indonesia. This study did not involve research subjects or field data collection through surveys, interviews, or observations. However, this does not mean that the research is less rigorous or less valuable. Rather, conceptual research has high strategic value in building the necessary theoretical foundation before making significant investments in empirical research. This research relies on a critical and in-depth analysis of academic documents, public policies, and validated theories to develop an evaluative construct that can explain the phenomenon of public transparency through village administrative service information systems. Thus, this research serves as a foundation study that conceptualizes evaluation dimensions, key indicators, and theoretical relationships between variables, which can then serve as a basis for the development of evaluation instruments and empirical validation in subsequent research stages.

B. Data Sources

This conceptual research utilizes secondary data obtained from various credible, relevant, and authoritative sources. Secondary data was chosen because this study aims to synthesize existing knowledge in the literature and integrate it into an evaluation framework applicable to the context of village administrative service information systems. Data sources include:

Secondary data were obtained from:

1. Scientific journals related to information systems and transparency
2. Government regulations and policy documents

Textbooks on public administration and e-government.

C. Data Analysis Technique

Although this research did not involve primary field data collection, systematic and rigorous procedures were still required to identify, access, and document secondary data sources.

1. Systematic Literature Search

The literature search was conducted following a systematic literature review protocol to ensure comprehensiveness and reproducibility.

2. Snowballing Technique

In addition to database searches, backward snowballing (searching for references from relevant articles) and forward snowballing (searching for articles citing relevant articles using Google Scholar or Scopus citation trackers) were also used.

3. Access Policy Documents

Online Access: Through official government portals and JDIH

Institutional Request: If the document is not available online, send an official letter to the relevant agency

Expert Consultation: Consult with practitioners or academics familiar with relevant regulations

4. Reference and Data Management

All data sources are managed using:

- a. Reference Management Software: Mendeley, Zotero, or EndNote to store metadata, organize, and generate citations
- b. Spreadsheet/Database: Excel or Google Sheets for a data extraction matrix with the following columns: Author, Year, Title, Source, Methodology, Key Findings, Relevance to Dimensions, Quality Score
- c. Cloud Storage: Google Drive or Dropbox for backing up all PDFs and documents
- d. Annotation Tool: PDF annotation tools for highlighting and note-taking

The data collection techniques used were:

Data analysis was conducted through:

- 1) Literature selection and reduction
- 2) Concept categorization
- 3) Theory synthesis

The literature search was conducted following a systematic literature review protocol to ensure comprehensiveness and reproducibility.

III. RESULTS AND DISCUSSION

A. Result

The conceptual analysis reveals that information quality is the most influential factor in enhancing transparency. Accurate, updated, and relevant information increases public trust and facilitates citizen oversight. System quality, including accessibility and security, determines user willingness to utilize digital platforms. Poor system performance discourages public participation and undermines transparency goals.

Human resource competency remains a critical challenge. Limited digital literacy among village officials restricts effective system utilization. Moreover, inadequate technological infrastructure and inconsistent policy support further constrain system effectiveness.

Comparatively, these findings align with previous studies emphasizing that technological solutions alone are insufficient without institutional commitment and human capacity development. Thus, transparency enhancement through information systems requires an integrated governance approach

B. Discussion

This study aims to disseminate a village administration service information system in an effort to increase public transparency. The analysis shows that information quality, system quality, and service quality play a crucial role in creating effective transparency at the village level.

1. Information Quality

The results indicate that the quality of information provided by the village information system significantly influences public understanding

of public services. Clear, accurate, and timely information increases public trust in the village government. Users tend to be more satisfied if the information they receive meets their expectations and needs. Good information quality also leads to more active public participation in the administrative process.

2. System Quality

An evaluation of system quality indicates that ease of use and system functionality significantly impact user adoption. Findings indicate that intuitive and user-friendly systems are more likely to be used optimally. Improving system performance, including access speed and data consistency, is also crucial in maintaining user satisfaction.

3. Service Quality

Service quality is another determining factor in public transparency. Respondents reported that fast and responsive service creates a positive image of the village government. Average response time in services is a key indicator of how well a village is able to meet community needs. Training for village administrative officers has also been shown to improve the quality of services provided, as more competent officers can provide better information and more effective solutions to the community.

4. Human Resource Competence

Human resource competence at the village level is a key variable that should not be overlooked. Research has found that improving administrative officers' knowledge and skills in using information systems has a positive impact on system effectiveness. Therefore, training and development programs need to be continuously improved to ensure optimal performance.

5. IT Infrastructure Readiness

The availability of information technology infrastructure also plays a crucial role in the implementation of village information systems. Research shows a correlation between infrastructure readiness and a village's ability to manage public information. Villages with IT infrastructure are able to run information systems more efficiently, thereby increasing data accessibility and transparency for the community.

6. Organizational and Policy Support

Organizational and policy support are driving factors in the implementation of information systems. This research emphasizes the need for policies that support the development and maintenance of information systems, as well as encouragement from local stakeholders to increase transparency. Policy uncertainty can hinder successful implementation.

Overall, this study shows that evaluating village administrative service information systems has a significant impact on public transparency. By improving the quality of information, systems, and services, as well as paying attention to human resource competency and infrastructure readiness, villages can increase transparency and public trust.

Recommendations for further research include a longitudinal analysis of these implementation systems and their impact on public participation in decision-making.

IV. CONCLUSION

Based on the conceptual evaluation conducted in this study, several important conclusions can be drawn regarding the role of the Village Administration Service Information System in enhancing public transparency. First, village administration service information systems play a significant and strategic role in promoting public transparency within village governance. Through digital platforms, information related to administrative procedures, service standards, and village governance processes can be disseminated more openly and efficiently. This contributes to reducing information asymmetry between village governments and communities, thereby strengthening public trust and accountability. Second, the effectiveness of transparency enhancement is highly dependent on the quality of information and the usability of the system. Accurate, relevant, up-to-date, and easily understandable information increases public confidence in the system. At the same time, user-friendly system design, reliable performance, and adequate data security encourage both village officials and citizens to actively utilize the information system as a primary source of public information. Third, human resource capacity and technological infrastructure readiness remain critical constraints in the implementation of village information systems. Limited digital literacy among village officials, insufficient technical skills, and unequal access to internet connectivity significantly affect system performance and information update consistency. Without adequate human resource development and infrastructure support, the potential of information systems to enhance transparency cannot be fully realized. Finally, organizational commitment and policy support are essential determinants of system sustainability. Strong leadership commitment, clear regulatory frameworks

V. RECOMMENDATIONS

Based on the findings of this conceptual study, several recommendations are proposed to strengthen the effectiveness and sustainability of village administration service information systems in enhancing public transparency.

1. Future research is strongly encouraged to conduct empirical testing of the proposed conceptual model. Quantitative, qualitative, or mixed-method approaches can be employed to validate the relationships between information quality, system quality, human resource capacity, organizational support, and public transparency outcomes. Empirical evidence will provide a stronger basis for generalizing the conceptual framework and for

measuring the actual impact of village information systems across different village contexts and consistent budget allocation are necessary to ensure continuous system operation and improvement. Villages that institutionalize transparency values through supportive policies are more likely to maintain effective and sustainable information systems.

2. Village governments should prioritize systematic digital literacy and technical capacity-building programs for village officials. Continuous training in system operation, data management, and information updating is essential to ensure that information systems are utilized effectively and consistently. Strengthening human resource capacity will reduce dependency on external technical assistance and improve the accuracy, timeliness, and reliability of public information provided through digital platforms.

3. Policy frameworks at the village and local government levels should explicitly mandate transparency-oriented information system utilization. Clear regulations regarding mandatory information disclosure, data updating schedules, and accountability mechanisms are necessary to institutionalize transparency practices. Policy support should also be accompanied by adequate

Overall, this study concludes that increasing public transparency through village administration service information systems requires not only technological solutions but also integrated support from human resources, organizational structures, and governance policies. This integrated approach is crucial to achieving transparent, accountable, and participatory village governance

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