

# Digital Transparency in Village Fund Management: A Case Study of Public Financial Accountability in Merauke

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## Abstract

This study aims to analyze the implementation of digital transparency in Village Fund management, evaluate its impact on public financial accountability, and identify various challenges and supporting factors in its implementation in Merauke. The study used a qualitative approach with an exploratory and descriptive-analytical case study strategy. The research location was in Wasur Village, which was selected purposively because it has begun to adopt a digital-based village financial management system, but still faces limitations in infrastructure and human resource capacity. Data were collected through in-depth interviews, observation, and documentation, and strengthened by focus group discussions (FGDs). The research informants numbered 15 people consisting of village officials, village facilitators, and community members. Data analysis was conducted using the interactive model of Miles, Huberman, and Saldaña through the stages of data condensation, data presentation, conclusion drawing and verification. The results of the study indicate that the implementation of digital transparency has been ongoing, but is still administrative in nature and not fully inclusive in providing access to information to the public. The use of digital systems can improve the efficiency of financial management, but has not significantly strengthened public accountability due to limited access, low digital literacy, and minimal community participation. Furthermore, infrastructure, human resource capacity, and organizational culture are key challenges, while government support and village facilitators are supporting factors. This study concludes that digital transparency is only effective in increasing accountability if supported by information accessibility and strong public participation.

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## Introduction

Digital transformation has driven the emergence of a new paradigm in global governance that emphasizes the importance of *digital*

*transparency, open government, and good governance* (Maheshwari et al., 2025) Digital transparency is no longer merely a complementary instrument, but has transformed into a key element in ensuring public information transparency, data accessibility, and public participation in the decision-making process. (Matheus et al., 2023). In this context, the use of information technology through the *systeme-government* enables the government to present financial information in real-time, structured and accessible to the public at large (Al-Besher & Kumar, 2022) This is in line with global demands for improving the quality of public governance that is not only efficient, but also responsive, participatory, and accountability-based. Furthermore, digital transparency has a strategic role in strengthening public accountability, preventing corrupt practices, and increasing public trust in government institutions. (Shenkoya, 2023) The availability of open and digitalized information allows the public to directly monitor the management of public finances, thereby minimizing the potential for abuse of authority. (Boufounou et al., 2024). The phenomenon of increasing adoption *e-government* Advances in public financial management in various countries indicate a shift toward more transparent and integrated administrative systems. However, implementing digital transparency still faces serious challenges, particularly in developing and remote areas with limited technological infrastructure, human resource capacity, and institutional readiness.

The Village Fund Program in Indonesia is a strategic national policy designed to promote equitable development and strengthen the economic and institutional capacity of villages. Through significant annual budget allocations, the government strives to improve the quality of infrastructure, public services, and the welfare of communities at the grassroots level. This policy also reflects the state's commitment to reducing disparities between regions and strengthening village autonomy as independent government entities. In its implementation, Village Fund management requires a transparent, participatory, and accountable governance system to ensure that each budget allocation truly provides optimal benefits to the community. In practice, various problems still hamper the effectiveness of Village Fund management, such as budget misuse, low levels of transparency, and weak internal and external oversight systems. Limited capacity of village officials, limited access to public information, and suboptimal use of technology are factors that exacerbate these conditions. Therefore, digitalization in village financial management is an urgent need to increase information transparency, strengthen oversight systems, and encourage better public accountability. (Ardiputra et al., 2025) Indonesia is a particularly important context for study, given the sheer scale of Village Funds managed and the complexity of local governance, which involves diverse actors and social dynamics.

From a theoretical perspective, digital transparency in public financial management can be explained through integration. Transparency Theory *on* Accountability Theory, as well as approaches *E-Government or Digital Governance* (Maulan & Fitriani, 2025). Transparency Theory emphasizes the importance of information transparency as a foundation for democratic and responsive governance, where public access to information is a key prerequisite for reducing information asymmetry between the government and the public. Accountability Theory emphasizes that every government action and decision must be openly accountable to the public, both in terms of process and results. In this context, the application of digital technology through *e-government* Digital transparency serves as a strategic instrument that enables the integration of financial information systems, real-time data presentation, and ease of access for the public to monitor government performance. Furthermore, the relationship between digital transparency and public financial accountability is causal and mutually reinforcing. Digital transparency enables the availability of accurate, open, and easily accessible information, thereby encouraging increased accountability in public financial management. Broad access to information not only minimizes the opportunity for irregularities but also increases public participation in the policy oversight and evaluation process. Thus, digital transparency and public financial accountability are two key interrelated variables within the framework of modern governance, where optimizing digital technology is key to creating a transparent, participatory, and integrity-based public administration system.

Although studies on transparency in public administration have grown rapidly, most research still focuses on the concept of transparency in general and tends to be conducted in urban areas or

countries with high levels of institutional development. This situation limits understanding the dynamics of digital transparency implementation in more complex contexts, particularly in remote or border areas with limited infrastructure, human resource capacity, and institutional readiness. Furthermore, existing research has not yet explored how digital technology is implemented in the actual practice of public financial management, nor how local socio-cultural factors influence the effectiveness of such transparency. Therefore, there is still limited research examining how digital transparency actually functions to improve accountability in areas with limited infrastructure and institutional capacity.

This research makes significant scientific contributions both theoretically, practically, and policy-wise to contemporary public administration studies. Theoretically, this study enriches the literature on *digital governance* by presenting a contextual perspective from rural and peripheral areas, which have so far received little attention in global research. Furthermore, this study integrates the concept of digital transparency with the local socio-cultural dynamics of Papua, resulting in a more contextual and relevant approach to understanding the relationship between transparency and accountability at the village level. Practically, the results of this study are expected to provide strategic recommendations for local governments and Village Fund managers in optimizing the use of digital technology to increase transparency and accountability in public finances. Meanwhile, from a policy perspective, this research contributes to supporting village financial governance reform by strengthening digital-based transparency systems, while simultaneously encouraging the realization of the principles of *good governance* which is more effective, inclusive, and sustainable. The purpose of this study is to analyze the implementation of digital transparency in the management of Village Funds, evaluate its impact on public financial accountability, and identify various challenges and supporting factors in its implementation in Merauke Regency.

## **Method**

This research uses a qualitative approach with a case study strategy is exploratory and descriptive-analytical in nature to examine in-depth the practice of digital transparency in the management of Village Funds in Merauke. This approach was chosen because it is able to capture empirical reality holistically through an understanding of the social, institutional, and local cultural contexts that influence the implementation of public policies at the village level. Through case studies, researchers can comprehensively explore the interactions between actors, digital systems, and accountability mechanisms that occur in real situations, resulting in a more contextual and in-depth analysis. In addition, the exploratory character allows for the identification of phenomena that have not been widely studied, while the descriptive-analytical approach provides space for systematic interpretation of findings in explaining the relationship between digital transparency and public financial accountability.

This research was conducted in Kampung Wasur as a case study location, considering its characteristics as an area that has begun to adopt a digital-based village financial management system, but still faces limitations in infrastructure and human resource capacity. Kampung Wasur was chosen purposively because it represents the condition of villages in border areas that are transforming towards digital governance. The units of analysis in this study include the village government as the main implementer of Village Fund management, digital systems such as Siskeudes as transparency instruments, and the community as service recipients who have a role in public oversight. This location selection is expected to provide a comprehensive empirical picture of how digital transparency is implemented in a real context and the extent to which it contributes to improving public financial accountability at the village level.

The types and sources of data in this study consist of primary and secondary data, which complement each other to obtain a comprehensive picture of digital transparency in Village Fund management in Kampung Wasur Village. Primary data were obtained through in-depth interviews with key informants such as village officials, financial system operators, village facilitators, and the community, to gather information regarding the practices, perceptions, and dynamics of digital

transparency implementation. In addition, direct observations were conducted to observe the village financial management process and the actual use of digital systems, while focus group discussions was used to strengthen the findings through the interaction of various perspectives. Meanwhile, secondary data was obtained from various official documents such as village financial reports, the Village Revenue and Expenditure Budget (APBDes), and relevant Village Fund policies, including data sourced from digital systems where available. Scientific literature and government regulations were also used as conceptual and normative references to strengthen the analysis and provide a theoretical foundation for this research.

The data collection techniques in this study were conducted through three main methods, namely in-depth interviews, observation, and documentation, in order to obtain comprehensive and valid data related to the implementation of digital transparency in the management of Village Funds in Kampung Wasur. In-depth interviews was conducted with purposively selected key informants, including village heads, village officials such as treasurers or financial system operators, village facilitators, and community members, including traditional leaders, to gather information on transparency practices, the use of digital systems, and perceptions of financial accountability. Furthermore, direct observations were made of the village financial management process, the use of digital systems such as Siskeudes (Village Financial Management System), and the accessibility of public information available to the community. Meanwhile, documentation techniques were used to collect empirical evidence related to transparency, such as the existence and use of village websites, budget information boards, and digital applications used in Village Fund management. The combination of these three techniques is expected to produce triangulated and in-depth data to support research analysis.

Determining the number and criteria of informants in this study used the technique purposive sampling which is adjusted to the data depth requirements in the case study in Kampung Wasur Village. The number of informants was set at 15 people by considering the principle of data saturation, which occurs when the information obtained is repetitive and does not yield significant new findings. Informants were selected based on certain criteria, namely individuals directly involved in Village Fund management, understanding the digital systems used, such as Siskeudes, and being able to represent government and community perspectives. The composition of informants included the village head as the main policy maker, village officials such as treasurers and system operators responsible for financial management, village facilitators who play a role in supervision and guidance, members of the Village Consultative Body as representatives of the control function, and the community consisting of traditional leaders, community leaders, and beneficiary residents. Thus, this selection of informants is expected to produce rich, in-depth data that reflects the empirical conditions comprehensively.

The data analysis technique in this study uses an interactive analysis model developed by Matthew B. Miles, A. Michael Huberman, and Johnny Saldaña, which allows for a continuous analysis process from the data collection stage to drawing conclusions. The analysis process begins with the following stage: data condensation, namely the activity of selecting, simplifying, and grouping data relevant to the research focus, particularly regarding digital transparency and financial accountability. Next, the data is presented in the form of a matrix, table, or diagram to facilitate understanding of patterns, relationships, and important findings. The final stage is conclusion drawing and verification, namely drawing conclusions systematically and verifying them through data triangulation to ensure the validity of the findings. The analysis in this study focuses on identifying the level of digital transparency applied in Village Fund management, the resulting form of public financial accountability, and the relationship between the two in the context of implementation in Kampung Wasur.

## **Results and Discussion**

This section presents empirical research findings regarding the implementation of digital transparency in the management of Village Funds and its implications for public financial

accountability in Merauke. The research results were obtained through qualitative data analysis sourced from in-depth interviews, field observations, and documentation studies of village financial management practices. The results are presented thematically, referring to a predetermined analytical framework, namely digital transparency and public financial accountability. Systematically, the research findings include an overview of digital system implementation at the village level, the level of public accessibility to financial information, accountability practices, the relationship between digital transparency and accountability, and various challenges and supporting factors in its implementation. With this approach, the research results not only describe empirical conditions but also provide a deeper understanding of the dynamics of village financial governance in border areas.

Table 1. Profile of Digital Transparency Implementation in Village Fund Management in Merauke

Dimensions	Analytical Indicators	Empirical Findings	Scientific Interpretation
Digital System Infrastructure	Platform and system integration	Usage is dominated by Siskeudes with simple application support; not yet integrated in real-time	Shows a digital governance baseline with low system integration capacity
Technology Adoption	Adoption level (full, partial, minimal)	The majority of villages are at the partial stage (hybrid system), a small number are full, and some are still manual.	Describes variations in digital maturity and the existence of a digital divide between villages.
Human Resource Capacity	Actor competence and dependency	Village operators become key actors with high dependency	Indicates over-reliance on technical actors and risks to system sustainability.
Actor Governance	The role of the village head and treasurer	The dominant role is administrative and hierarchical supervision.	Shows that the administrative compliance approach has not yet moved towards strategic transparency governance.
Information Accessibility	Openness and ease of public access	Financial information is not yet widely and in real-time available to the public.	Transparency is still at the internal accountability level, not yet public-oriented transparency.
Accountability Orientation	Direction of accountability	Reporting is more directed towards supra-village government	Dominated by upward accountability, while downward accountability to the community is still weak.

The implementation of digital transparency in the management of Village Funds in Merauke shows that the use of digital systems such as the Village Financial Management System (Siskeudes) has become a foundation for village financial governance, but has not been optimally integrated. Technology adoption remains dominated by a partial (hybrid) pattern, reflecting the gap in digital maturity levels between villages. In terms of capacity, implementation relies heavily on village operators as the primary technical actors, while the roles of village heads and treasurers remain oriented toward administrative fulfillment and hierarchical oversight. Furthermore, public access to financial information remains limited, resulting in transparency that is not fully open and participatory. Current practices emphasize upward accountability to higher levels of government rather than horizontal accountability to the community. This indicates that digital transparency is still in its infancy and has not yet fully functioned as an instrument to promote inclusive public accountability.

Accessibility of village financial information in Merauke The use of conventional media, particularly village information boards, is still dominated by the use of conventional media. Nearly all villages surveyed have installed information boards containing a summary of the Village Revenue and Expenditure Budget (APBDes) and budget realization. However, this media has limitations in terms of reach and lack of real-time information updates. This situation indicates that the transparency being established remains administrative in nature and is not fully digital. Meanwhile, the utilization of digital media such as village websites and social media remains relatively low and suboptimal. Some villages do have official websites, but they are not actively managed and are rarely updated. Social media such as Facebook and WhatsApp are primarily used to convey general village information, rather than as a means of systematic and structured financial transparency. This indicates that digital transformation in village financial information management is still in its early stages. These findings are reinforced by interviews with village officials, who stated that limited human resource capacity is a major obstacle in managing digital platforms. One village official stated:

"We actually already have a village website, but there's no dedicated operator to manage it regularly, so it's rarely updated, especially for financial reports."

From the community's perspective, access to village financial information tends to be easier through direct or face-to-face mechanisms than through digital platforms. This is due to limited internet access and low digital literacy among the community. One community leader stated:

"If we want to know about village funds, we usually look on the notice board or ask village officials directly, because not all residents have internet access."

Furthermore, the frequency of village financial data updates on digital platforms remains low. Available information is often not updated regularly, thus not reflecting the current financial situation. In fact, in some cases, discrepancies were found between information presented offline and online. This indicates weaknesses in information system integration and a lack of commitment to maintaining data consistency. Overall, these findings indicate that despite transparency efforts, digital accessibility of village financial information remains limited and non-inclusive. Communities continue to rely more heavily on offline mechanisms for information acquisition, ultimately limiting the potential of digital transparency to enhance public accountability. Therefore, strengthening the capacity of village officials, improving digital infrastructure, and adopting more adaptive public communication strategies are needed to promote more effective and participatory transparency.

Table 2. Public Financial Accountability Practices

Aspects Analyzed	Indicator	Empirical Findings	Analysis
Reporting Mechanism	Internal government report	Village financial reports are prepared routinely through the administration system (for example Siskeudes) and reported to the local government.	Shows that administrative accountability is running well, but is still upwardly oriented (upward accountability)
Reporting Mechanism	Report to the public	Financial information is conveyed through village information boards and discussion forums, but is not routinely updated digitally.	Transparency to the public is still limited and technology has not been utilized optimally.
Accountability Process	Village deliberation	Accountability is carried out through village deliberation forums involving officials and some of the community.	Community participation is still representative, not inclusive
Accountability Process	Public forum	Public forums are available, but not all members of the public are actively involved in the financial evaluation process.	Shows that there is room for participation, but it has not been utilized optimally.
Transparency Level	Openness of reports	Financial reports have not been fully published digitally (village website/social media is limited)	Transparency is still conventional and less accessible to the wider community.

Transparency Level	Accessibility of information	People must come directly to the village office to obtain detailed information.	Demonstrates limited access to digital information and low levels of technology-based openness.
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Public financial accountability practices in Merauke demonstrate that reporting mechanisms have been formally implemented through the preparation of internal government reports and the dissemination of information to the public through village deliberations and public forums. However, the resulting transparency remains administrative and conventional, characterized by limited digital information access and low frequency of financial data publication through technology-based media. Public participation in the accountability process also tends to be less than inclusive (Tjilen et al., 2019), because involvement is still dominated by certain representatives and has not yet encouraged broad public control. Thus, although administrative accountability has been fulfilled, public accountability practices have not fully reflected the principles of digital transparency that are open, participatory, and easily accessible to all levels of society.

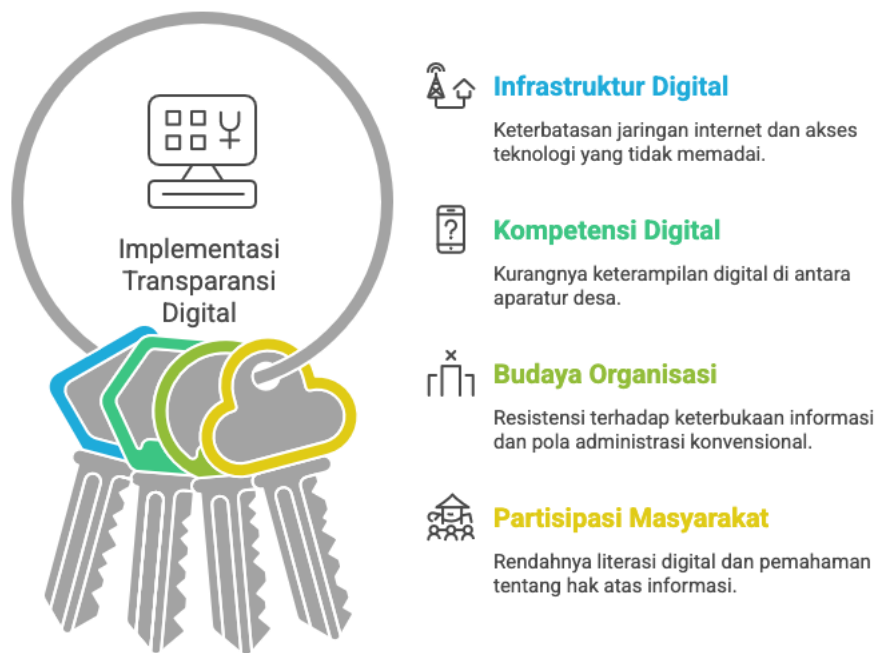


Figure 1. Challenges of Digital Transparency in Merauke

The research findings indicate that the challenges of implementing digital transparency in Village Fund management in Merauke stem not only from technical aspects but are also significantly influenced by structural and cultural factors. In terms of infrastructure, limited internet access is a major obstacle to optimizing the use of digital systems, resulting in suboptimal access to and distribution of financial information. Furthermore, the low digital competence of village officials demonstrates a gap in human resource capacity in operating technology that supports transparency. Culturally, organizational resistance to information disclosure persists, demonstrated by a tendency to maintain conventional administrative patterns and a lack of initiative to disclose data to the public. Furthermore, public participation in accessing and utilizing information is also relatively low, due to limited digital literacy and understanding of the right to public information. Thus, the barriers to implementing digital transparency in this region are multidimensional, encompassing the interaction between limited

infrastructure, institutional capacity, organizational culture, and low public participation, necessitating a more comprehensive and contextual policy approach.

Implementation of digital transparency in the management of Village Funds in Merauke shows quite progressive development, particularly in strengthening the village financial administration system. The use of digital platforms has helped village officials prepare financial reports in a more systematic, documented, and standardized manner. This indicates that digitalization has significantly contributed to improving the orderliness of financial governance while minimizing the potential for administrative errors that previously frequently occurred in manual systems. Within the theoretical framework, digital governance, these findings reflect a constructive initial phase, where technology is leveraged to improve the internal efficiency of organizations before being extended into the realm of public transparency. (Sharmin & Chowdhury, 2025). A focus on administrative efficiency is not a weakness, but rather a crucial foundation for building a broader and more sustainable transparency system. With a digitally organized system, village governments have a stronger database ready to evolve toward more inclusive information transparency. (Djatmiko et al., 2025).

The ongoing practice of digital transparency demonstrates efforts toward fulfilling the principle of accountability, albeit in a gradual manner. Digitized village financial information opens up significant opportunities for public access and utilization, especially if supported by strengthened publication mechanisms and digital literacy. In this context, conditions previously viewed as administrative compliance. In fact, it can be interpreted as a transitional stage towards more mature substantive transparency. Scientifically, this finding confirms that digital transparency at the village level is on a positive development path toward transformative governance (Yar, 2024). The current instrumental phase provides a strategic foundation for promoting the integration of bureaucratic efficiency and public transparency. With policy support, increased human resource capacity, and strengthened public participation, digital transparency has the potential to become a key instrument for realizing more inclusive, responsive, and sustainable public financial accountability.

Limited public access to village financial information in Merauke remains a critical issue in the implementation of digital transparency. Although digital systems have been used in Village Fund management, information distribution to the public is not yet fully optimized. Financial information tends to be stored internally or only disseminated through specific media that do not yet reach all levels of society. This demonstrates that the existence of technology does not automatically guarantee widespread and equitable information transparency. From a broader perspective, open government and information accessibility. This condition reflects the gap between normative principles and practice in the field. (Wirtz et al., 2022). Ideal transparency requires not only the availability of data, but also ease of access, understandable information, and affordability for the entire community. (Mubarak, 2026). When access remains limited due to infrastructure constraints, digital literacy, or information dissemination mechanisms, the goal of transparency to encourage public participation and social control is not fully achieved.

These findings also corroborate previous studies showing that digitalization in public administration does not automatically increase transparency. Technology often serves only as an administrative tool if not accompanied by an inclusive openness strategy. In other words, digitalization without public-oriented policy design has the potential to create new gaps between government and the public in access to information. (Scarano & Colfer, 2022). Critically, these conditions can be categorized as pseudo-transparency, a situation where information is technically available in a digital system, but not truly accessible or usable by the public. This form of transparency fails to generate substantive accountability, as the public lacks the capacity or opportunity to conduct oversight. Therefore, strategic efforts are needed to ensure that digital transparency extends beyond data provision and ensures open, inclusive, and meaningful access for all citizens.

The relationship between digital transparency and accountability in the management of Village Funds in Merauke shows a positive relationship, but has not yet reached an optimal level. The implementation of digital systems has encouraged increased reporting regularity and the availability of financial data, which are essential prerequisites for public accountability. (Tariq, 2025). However, this

increase has not been fully accompanied by a strengthening of the public oversight function, so its impact on accountability remains limited. This finding is in line with the theoretical framework which states that transparency is a prerequisite for accountability, but this relationship is conditional. This means that transparency does not automatically result in accountability without other supporting factors. In this context, digital transparency will only be effective when the information provided is not only available but also widely accessible to the public, presented in an easily understood format, and relevant to public needs.

This study found that the effectiveness of transparency in promoting accountability depends heavily on the community's ability to utilize that information as a tool of social control. When communities have adequate information literacy and participation capacity, digital transparency can serve as an instrument that strengthens oversight of village financial management. Conversely, if information is difficult to access or misunderstood, transparency becomes merely an administrative formality with no real implications for accountability. These findings make an important contribution by emphasizing that public accountability is determined not only by the existence of digital technology or systems, but also by the social capacity surrounding them. Therefore, approaches to strengthening village financial governance need to simultaneously integrate technological aspects and community empowerment. Digital transparency will achieve maximum effectiveness when supported by information accessibility, increased public literacy, and active community participation in the oversight process (Asimakopoulos et al., 2025).

Contextual factors play a crucial role in implementing digital transparency in Village Fund management in Merauke, a peripheral region. The geographic, social, and institutional characteristics of this region present distinct dynamics compared to more developed regions. Therefore, digital transparency practices cannot be understood solely from a technological perspective but must be viewed within the context of local conditions that influence how these policies are implemented and accepted by the community. One key factor is limited digital infrastructure, such as unequal internet access and unstable network quality.(Emmachika et al., 2026)This situation directly limits the effectiveness of digital systems in disseminating village financial information to the public. Furthermore, low technological literacy, both among village officials and the public, also hinders the optimal use of digital platforms. Available technology becomes less meaningful if it isn't matched by users' ability to access and understand the information presented.

Beyond technical factors, bureaucratic culture also plays a significant role. Administrative practices, which tend to be closed and oriented toward formal compliance, mean that transparency has not yet been fully embraced as a core value in village governance. This organizational culture, which does not fully support openness, reinforces the tendency for information to be managed more for internal purposes than as a means of public communication.(Grover et al., 2022). Thus, the challenges of digital transparency are not only technological, but also cultural and institutional. This finding strengthens the perspective contextual governance theory, which emphasizes that the success of public policy implementation is greatly influenced by the local context. Scientifically, this shows that the digital transparency model cannot be applied uniformly (one-size-fits-all), but must be adapted to specific regional conditions. In other words, an adaptive and contextual approach is key to developing effective digital transparency, addressing local challenges while simultaneously promoting sustainable improvements in public accountability.

The implementation of digital transparency in the management of Village Funds in Merauke is inseparable from various interrelated structural and cultural challenges. From a structural perspective, limited internet network infrastructure is a major obstacle to optimizing digital systems, particularly in ensuring fast and equitable access to information. Furthermore, limited human resource capacity, both in technology mastery and digital data management, also impacts the effectiveness of transparency implementation. This situation demonstrates that technical readiness and competency of the apparatus are fundamental factors in the successful digitalization of village financial governance. On the other hand, cultural challenges also have a significant influence. Resistance to information transparency is still found in village bureaucratic practices, which tend to maintain conventional and closed work

patterns.(Sofyani et al., 2022)Furthermore, low public participation in accessing and utilizing village financial information demonstrates that transparency has not yet fully met a shared need. This suggests that barriers to digital transparency stem not only from technological limitations but also from the values, norms, and customs that have developed within bureaucratic and community environments.

These findings provide important insights that digital transformation in public administration is not simply a matter of technology adoption, but also involves a comprehensive change in organizational culture. Digitalization that is not accompanied by a shift in mindset toward openness and participation will only result in partial innovation. Therefore, a holistic transformation approach encompassing technical, institutional, and cultural aspects is crucial to ensuring that digital transparency can be implemented effectively and sustainably. Amid these challenges, several supporting factors play a role in strengthening the implementation of digital transparency. The role of local governments in providing policies, budget support, and infrastructure is a key factor in encouraging digitalization at the village level. Furthermore, the presence of village facilitators, who serve as technical and administrative facilitators, helps increase the capacity of village officials in managing digital systems. Training programs and improving digital literacy are also crucial elements in accelerating technology adaptation, both for village governments and communities.(Sugiartini, 2025).

The success of digital transparency is greatly influenced by the application of the principles collaborative governance, where various government actors, communities, and facilitators work synergistically to support open and accountable governance. This collaboration enables knowledge exchange, capacity building, and increased public participation in the oversight process. Thus, digital transparency is not solely the responsibility of the village government, but rather the result of mutually supportive multi-actor interaction and collaboration. Implicitly, this research confirms that the success of digital transparency in Village Fund management is highly dependent on synergy between actors and strengthening institutional capacity. Efforts to improve infrastructure must be balanced with human resource competency development and organizational culture shifts toward openness. With an integrated and collaborative approach, digital transparency has great potential to become a strategic instrument in strengthening public financial accountability at the village level.

The development of the conceptual model in this study resulted in a more comprehensive relationship formulation, namely Digital Transparency, Information Accessibility, Public Participation, Public Accountability, which is based on empirical findings in Merauke. This model emphasizes that digital transparency does not directly result in accountability, but rather requires intermediate stages such as information accessibility and public participation. Thus, this study broadens the understanding of the classical model, which tends to be linear, to be more contextual and gradual, particularly in peripheral settings. Analytically, the addition of the variable information accessibility and public participation is a key differentiator from previous models. Information accessibility serves as a prerequisite for the data available in digital systems to be truly utilized by the public, while public participation serves as a mechanism that connects transparency to social oversight practices. Without these two elements, digital transparency has the potential to stop at the administrative level without generating substantive accountability. Therefore, this model positions the public as a central actor in activating the transparency function.

The theoretical contribution of this research lies in strengthening the perspective that the implementation of digital governance must consider the local context, particularly in rural and border areas. These findings enrich the literature by demonstrating that the relationship between technology and accountability is indirect and heavily influenced by social and institutional factors. Thus, this study confirms that technology is not the sole determinant in improving public accountability, but rather part of a broader ecosystem encompassing access, capacity, and participation. In terms of practical and policy implications, the results of this study recommend the need to strengthen village digital infrastructure to ensure more equitable access, as well as increase human resource capacity to manage and utilize digital systems optimally. Furthermore, the development of a transparency platform that user-friendly It is crucial for information to be understood by the wider community. Efforts to improve

community digital literacy also need to be carried out continuously to encourage active participation in overseeing village financial management. However, this study has several limitations that require attention. The focus of the research on only one study area limits the generalizability of the findings, especially in the context of the diversity of village conditions in Indonesia. Furthermore, limited access to digital data and variations in the level of transparency implementation between villages also affect the depth of analysis. Therefore, further research is recommended to conduct cross-regional comparative studies and integrate quantitative approaches to test the resulting conceptual model more broadly.

## Conclusion

This study shows that the implementation of digital transparency in the management of Village Funds in Merauke has begun, but is still at the administrative stage and does not fully reflect inclusive information transparency and easy access by the public. Although the use of digital systems such as village financial management applications can improve the efficiency of financial reporting and recording, public information accessibility is still limited. As a result, the expected increase in public financial accountability has not been optimally achieved, because the existing transparency has not been followed by understanding and active participation of the public in the oversight process. Furthermore, this study confirms that the relationship between digital transparency and accountability is conditional, influenced by infrastructure factors, human resource capacity, as well as organizational culture and community participation. In the context of border areas such as Merauke, limited access to technology and low digital literacy are the main challenges that hinder the effectiveness of digital transparency. Therefore, a more comprehensive approach is needed through strengthening the capacity of village officials, improving digital infrastructure, and developing participatory mechanisms so that digital transparency is not only formal, but is truly able to encourage the realization of substantive and sustainable public financial accountability.

## References

- Al-Besher, A., & Kumar, K. (2022). Use of artificial intelligence to enhance e-government services. *Measurement: Sensors*, 24, 100484.
- Ardiputra, S., Milyan, M., Akhmad, Z., Sulthan, M., & Ardiputra, MA (2025). Optimizing budget policy in village fund allocation (ADD): a governance and public administration perspective on rural development. *Frontiers in Political Science*, 7, 1581806.
- Asimakopoulou, G., Antonopoulou, H., Giotopoulos, K., & Halkiopoulos, C. (2025). Impact of Information and Communication Technologies on Democratic Processes and Citizen Participation. *Societies*, 15(2), 40.
- Boufounou, P., Eriotis, N., Kounadeas, T., Argyropoulos, P., & Poulopoulos, J. (2024). Enhancing internal control mechanisms in local government organizations: a crucial step towards mitigating corruption and ensuring economic development. *Economies*, 12(4), 78.
- Djatmiko, GH, Sinaga, O., & Pawirosuarto, S. (2025). Digital Transformation and Social Inclusion in Public Services: A Qualitative Analysis of E-Government Adoption for Marginalized Communities in Sustainable Governance. *Sustainability*, 17(7), 2908.
- Emmachika, O.L., Nnatu, A.U., & Okechukwu, N.N. (2026). Impact of Poor Internet Connectivity on Electronic Library Services and the Development of Offline-Accessible Digital Library Software. *Journal of Innovation in Information and Computer Technology*, 3(1), 1–11.
- Grover, V., Tseng, S.-L., & Pu, W. (2022). A theoretical perspective on organizational culture and digitalization. *Information & Management*, 59(4), 103639.
- Maheshwari, N., Mohan, G., & Mishra, D. (2025). Digital transformation in governance: Preconditions for achieving good governance. *Public Policy and Administration*, 09520767251355715.
- Matheus, R., Faber, R., Ismagilova, E., & Janssen, M. (2023). Digital transparency and the usefulness for open government. *International Journal of Information Management*, 73, 102690.
- Maulan, PA, & Fitriani, N. (2025). E-Government and public trust: examining the impact of digital

- transparency on citizen engagement in Southeast Asia. *Dinamika: Journal of Socio-Economic Management*, 5(1), 242–252.
- Mubarak, F. (2026). Digital health literacy and the ethics of information access: a systematic review of global trends, equity challenges and policy responses. *Journal of Information, Communication and Ethics in Society*, 1–30.
- Scarano, G., & Colfer, B. (2022). Linking active labor market policies to digitalisation—a review between remote and automated possibilities. *International Journal of Sociology and Social Policy*, 42(13–14), 98–112.
- Sharmin, S., & Chowdhury, R. H. (2025). Digital transformation in governance: The impact of e-governance on public administration and transparency. *Journal of Computer Science and Technology Studies*, 7(1), 362–379.
- Shenkoya, T. (2023). Can digital transformation improve transparency and accountability of public governance in Nigeria? *Transforming Government: People, Process and Policy*, 17(1), 54–71.
- Sofyani, H., Pratolo, S., & Saleh, Z. (2022). Do accountability and transparency promote community trust? Evidence from village government in Indonesia. *Journal of Accounting & Organizational Change*, 18(3), 397–418.
- Sugiartini, P. (2025). Transformation of Village Digital Governance through Digital Literacy Education Program in the Implementation of Smart Villages in Indonesia. *Journal of Village Development Innovation*, 2(2), 115–137.
- Tariq, M.U. (2025). Digital accountability: Revolutionizing public sector transparency and service delivery. In *Enhancing public sector accountability and services through digital innovation* (pp. 129–154). IGI Global Scientific Publishing.
- Tjilen, AP, Ririhena, SW, & Manuhutu, FY (2019). Local community empowerment in the implementation of the village fund program in the Naukenjerai district of Merauke regency. *Local Community Economic Empowerment and Corporate Social Responsibility (Theory, Concept, and Implementation of Public Policy)*, 54.
- Wirtz, B. W., Weyerer, J. C., Becker, M., & Müller, W. M. (2022). Open government data: A systematic literature review of empirical research. *Electronic Markets*, 32(4), 2381.
- Yar, F.M. (2024). Digital transformation in rural communities: Enhancing village governance and citizen participation. *Journal of Village Development Innovation*, 1(1), 39–50.