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Qualitative analysis of it reliability and security in local government financial reporting

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ABSTRACT

The study aims to explore and analyze the reliability and security of information technology (IT) in local government financial reporting in Indonesia. IT reliability and security are important factors in financial management, as reliable and secure information supports decision-making, attracts investment and builds public trust. However, threats to IT reliability and security can lead to negative consequences, such as data inaccuracies or the risk of information leakage. This research uses a qualitative approach with case studies on two local governments that have adopted IT in the financial reporting process. Data were obtained through in-depth interviews, observations and document reviews. The analysis focused on the impact of IT reliability and security on financial administration performance. The results show that improving IT reliability and security has a significant positive impact on local government financial management. Concrete impacts include increased public trust, operational efficiency and financial accountability. IT system reliability enables fast and accurate data processing, while IT security protects sensitive information from cyber threats. This research makes an important contribution by supporting previous research and expanding the discussion on the relationship between IT security and public trust, which has previously been less explored. The practical implications include recommendations for strengthening regulations and budget allocations for better IT infrastructure, as well as guidance on effective IT implementation strategies. The findings confirm that IT reliability and security are key elements in building a transparent and efficient local government administration system.

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Introduction

Local Government Financial Statements (LKPD) are a form of local government accountability to the community for the financial management of local government administration. LKPD must be prepared in a transparent, accountable, and informative manner. This is affirmed in Government Regulation Number 71 of 2010 concerning Government Accounting Standards, which states that LKPD must be prepared based on generally accepted government accounting standards in Indonesia. These government accounting standards include the principles of transparency, accountability, and informativeness (Gelinas et al., 2018).

To improve transparency, accountability, and clarity of LKPD, local governments are encouraged to utilize IT. IT has great potential to assist local governments in compiling, presenting, and delivering LKPD more quickly, accurately, and efficiently (Djanegara et al., 2017a). Previous research from (Jauhari et al., 2019) shows

that the implementation of IT can improve the efficiency and effectiveness of local government financial reporting. The application of IT in local government financial reporting is considered a strategic solution to achieve the goal of transparent and accountable regional financial management. (Ngala & Musau, 2022) explained that the implementation of IT not only increases efficiency but also maintains the security of financial data, speeds up the preparation of reports, and provides easier access to related parties. (Harris, 2022) stated that the implementation of IT not only changes the way regional finances are viewed but also creates a foundation for more transparent and accountable management. Research (Widarsono, 2019) found that the implementation of IT can improve the reliability and timeliness of local government financial reporting. The implication is that the implementation of IT not only improves efficiency but also the quality of financial statements, which in turn supports transparency and accountability of regional financial management. The application of IT in local government financial reporting attracts the attention of the government, academics, and the public because it can increase the efficiency, effectiveness, transparency, and accountability of regional financial management (Jones, 2020).

The application of IT in local government financial reporting provides various benefits, such as increased efficiency by reducing the cost and time required in the financial reporting process and automating the process of collecting and processing data. In addition, the application of IT can improve the reliability and timeliness of financial reporting because it can reduce the risk of human error (Smith, 2021; Taylor, 2023). Transparency of regional financial management is improved through more open access to financial information to the public, and accountability is strengthened through increased supervision and control over financial management (Winityaning, 2009). According to (White, 2022), open access to financial information allows the public to understand and supervise local government financial management.

This support is in line with the Government of Indonesia's strong determination to advance the efficiency and transparency of public services through the implementation of IT. This commitment is manifested through the Minister of Home Affairs Regulation Number 70 of 2019 concerning Regional Government Information Systems, which expressly formulates policy directions in utilizing technology to improve regional financial governance. This regulation is not only a foundation but also presents a legal obligation that encourages local governments to implement regional financial reporting information systems. Thus, this step is not only an initiative but also a concrete action to ensure the use of IT as a key tool in improving the quality and accountability of local government financial reporting (Ministry of Home Affairs, 2019).

However, the application of IT in LKPD also has challenges, namely related to IT reliability and IT security. The reliability of LKPD data needs to be maintained so that the LKPD compiled can be accounted for. Meanwhile, LKPD data security needs to be maintained so that LKPD data is not misused by irresponsible parties. As happened to several local governments, such as the Fakfak Regency Government, they still experience various obstacles in exploring related resources, including limited human resources (HR) and infrastructure facilities such as internet networks (Kompas.Com, 2021). The Regional Financial Management Information System (SIPKD) application at the office of the Regional Asset Financial Management Revenue Agency (BP2KAD) Sampang Regency, Madura, East Java, was hacked because it could not be accessed. In the BPKAD of the Medan City Government, there is a problem, namely the existence of a SIPKD input menu that needs to be equipped with a SIPD Network that often experiences errors which causes delays in the preparation of cash budgets, and others (Nasution & Si, 2021). The same thing according to implementation of SIPD in the North Sumatra Industry and Trade Office has been effective but 60%-70% have not understood the Input clearly (Alfani & Nasution, 2022) and the problem of implementing SIPKD in BPKAD Semarang City, namely the available features are still limited so that the operation of multiple applications where, in inputting SIPKD data is still assisted by other applications and there is still a double system with the operation of SIPKD (Tumija et al., 2023)

To overcome the problems that occur as revealed above, local governments need to develop appropriate plans and strategies, as well as increase the capacity of their human resources in the IT sector. Johnson (2022) states that increasing the capacity of human resources in the IT field will ensure the sustainability of the implementation of technology that has been implemented and maintain system reliability. However, the implementation of IT in LKPD also has challenges, namely related to data reliability and security. The reliability of LKPD data needs to be maintained so that the LKPD compiled can be accounted for. Meanwhile, LKPD data security needs to be maintained so that LKPD data is not misused by irresponsible parties. As revealed by (Puspitawati, 2023), the reliability of LKPD data is fundamental to ensuring local government accountability. This is because LKPD data is the basis for decision-making by various parties (Djanegara et al., 2017b). Gupta, A. K., & Kumar (2022) stated that data security is one of the most important factors in improving the quality of government financial reporting. Sensitive financial data, such as income, expenses, and assets, can be misused by irresponsible parties for various purposes, such as corruption, money laundering, and espionage.

The application of IT in local government financial reporting has the potential to improve the quality of financial reporting, but it also has challenges. Therefore, the implementation of exploratory research on the application of IT in local government financial reporting, with emphasis on aspects of IT reliability and IT security, is an urgent need. The purpose of this study is to ensure that the implementation of IT runs well and under regional financial management objectives. Thus, it is expected that the research results can provide deep insights, which will later be useful for the development of IT-related policies and practices in the context of local government financial reporting.

Local government financial reporting is an important process that involves presenting financial information related to the financial position and results of local government operations in a certain period. Local government financial statements include elements such as balance sheets, income statements, and statements of changes in financial position. Financial Reporting describes financial reporting as the process of presenting financial information to interested parties. The focus is on providing financial information to stakeholders such as investors, creditors, and governments. Financial reporting is the process of presenting financial information to interested parties, such as investors, creditors, and the government. This definition reinforces the main objectives of financial reporting for related parties.

Financial reporting has a strategic role in providing financial information to stakeholders. According to (Haustein & C. Lorson, 2023), Local Government Financial Reporting Systems in Different Countries Have Different Characteristics, Depending on the Regulations and Accounting Principles Applied. In this case, the concept of financial reporting must be able to include elements such as balance sheets, income statements, and statements of changes in financial position to provide a comprehensive picture of the financial performance of local governments. A similar approach is described by Blessing, P., & Azmi (2016) in the context of regional financial management. Financial reporting is a process that involves presenting financial information to provide an accurate and transparent picture of the financial condition and performance of local governments. Therefore, financial reporting is not only an accounting obligation but also an effective tool to meet the demands of accountability and transparency in regional financial management. Ahmer, M., Al-Mousavi, M., & Al-Khatib (2019) Add a global dimension to this discussion by emphasizing that local government financial reporting principles can be universal, but implementation may vary depending on local context and policies.

The adoption of information technology in the financial reporting process can be the key to success in improving the quality and accessibility of regional financial information Ahmer, M., Al-Mousavi, M., & Al-Khatib (2019). In the local framework, according to Nurdin, (2018). Local government financial reporting in Indonesia also continues to develop. There have been significant efforts in implementing better government accounting standards, such as those regulated by Regional Financial Information Standards (SIKD). The concept of financial reporting in Indonesia always follows global developments and rules governing regional financial management. In line with the qualitative approach applied in this study, the development of local government financial reporting concepts needs to consider various contextual dimensions and local and global dynamics (Ouda, 2017).

Continuous efforts towards better financial reporting standards are essential to ensure that the financial information presented meets stakeholder needs and reflects the realities of regional financial management (Ahmar, M., al-Mousawwi, M., & Al-Khatib, 2019; Aseervatham, B., & Azmi, 2016; Nurdin, 2018; Ouda, 2017). The theoretical framework of local government financial reporting is a conceptual construction that covers various essential aspects in the presentation of financial information. First of all, the financial reporting of local governments, according to Guthrie, 1998; Montesinos & Hot (2013), is defined as a process aimed at presenting reliable and relevant financial information to various stakeholders, such as citizens, investors, and authorities, to strengthen financial accountability and transparency. The purpose of such reporting, as highlighted by Changwony & Paterson (2019) is to provide adequate information to support decision-making, evaluate financial performance, and ensure government accountability. Regulations and laws play an important role in regulating local government financial reporting, as described by Anderson (2018). Financial reporting structure, based on research by Lee Jr et al., (2020), includes elements such as the balance sheet, income statement, and statement of changes in equity that together provide a complete picture of the entity's finances.

While important, local government financial reporting can be confronted with several inhibiting factors, including resource constraints and the complexity of accounting rules, as found by Wang (2018). IT implementation, according to McCaffery & Jones (2002) can be a solution to improve the efficiency and accuracy of financial reporting through the use of financial information systems and technology Cloud Computing. The role of stakeholders, such as communities, legislators, and local investors, is also the focus of research (Yusran, 2023), in line with the findings of Haustein & C. Lorson, (2023b). Eventually (Muhtar et al., 2023) emphasized the need for evaluation of IT reliability and IT security within the framework of local government financial reporting to ensure that the information presented is trustworthy and well protected. As

such, the theoretical framework is designed to provide a holistic view of the concepts, objectives, and factors influencing local government financial reporting, with emphasis on the role of IT, regulation, and system reliability.

IT as an integral element in the collection, storage, manipulation, and dissemination of information. It is important to understand not only the physical aspects, such as hardware but also the procedural aspects that form the basis of IT operations (Arens et al., 2012). The security perspective in the IT context involves protecting information from unauthorized access, use, disclosure, alteration, or destruction. IT as a whole includes hardware (such as computers, printers, and Scanner), software (programs that control hardware and run applications), procedures (rules and steps for using IT), data processing (converting data into useful information), and information distribution (disseminating information to users in need) (Mahatmyo, 2014; Zhang et al., 2023).

According to Law Number 11 of 2008 concerning Electronic Information and Transactions, IT is defined as all activities related to acquiring, collecting, processing, storing, processing, distributing, presenting, and deleting information using electronic facilities and infrastructure. This definition is broader and accommodates a wide range of activities related to electronic information. In addition to technical aspects, this definition also covers the overall process, from the acquisition to the deletion of information using electronic means and infrastructure.

IT plays a central role in advancing local government financial reporting processes, bringing positive impacts on efficiency, accuracy, and transparency. Ahmed & Tanzi (2003) and J. Ahmar, M., Al-Mousawi, M., & Al-Khatib (2019) affirm that the implementation of IT significantly improves the efficiency of financial reporting. Financial information systems and technology Cloud Computing, IT can reduce the time and cost required to compile reports. Further Widarsono (2019) revealed that IT plays a key role in improving the reliability and timeliness of local government financial reporting. These findings show that IT not only contributes to efficiency but also the quality of financial statements, supporting transparency and accountability of regional financial management.

In the context of transparency, J. Ahmar, M., Al-Mousawi, M., & Al-Khatib (2019) also stated that IT can increase the disclosure of financial information to the public. This open access, according to White (2022), provides a better understanding and supervision of local government financial management. The importance of IT is not only limited to efficiency but also to improving the quality of reporting. Smith (2021) and (R. Taylor (2023) highlights that IT can improve the quality of financial reporting by automating the process of collecting and processing data. This automation not only reduces the risk of human error but also improves information integrity. Lastly E. Johnson (2022) emphasized that increasing the capacity of human resources in the IT field is the key to sustainable technology implementation. The success of IT implementation depends on the involvement of competent human resources to maintain system reliability.

By understanding the role of IT holistically, local governments can utilize technology effectively to achieve the goal of transparent, efficient, and accountable local financial management. This reference provides a knowledge base for stakeholders in designing IT implementation strategies in the context of local government financial reporting (Andh et al., 2019). IT has become an integral part of modern government, playing an important role in financial management, public services, and decision-making. Therefore, IT reliability and IT security are essential in the context of local government. IT has become the backbone of operations in various sectors, including in local government financial reporting. Two crucial aspects that need to be considered in IT implementation are reliability and security. Reliability concerns IT availability and performance, while security is concerned with protection against unauthorized access and protection of data (Iqbal et al., 2023).

Osborne (2013) defines IT reliability as the integral ability of an information system to produce information that is not only accurate and timely but also trustworthy. IT reliability is measured by the extent to which the system can consistently deliver reliable data, creating the necessary foundation of trust in the context of the information it generates. In other words, IT reliability is not only related to accuracy and timeliness but also ensures consistency in the delivery of reliable information. According to Thompson & Riccucci (2003), The concept of IT reliability in the context of information systems refers to the ability of a system to consistently produce information that is not only accurate and timely but also trustworthy. IT reliability not only includes the dimensions of accuracy and accuracy of information but also emphasizes the consistency of the results produced by the system. In other words, a reliable system is not only able to provide correct and timely data, but also ensures that the quality of the information produced can be maintained around the clock. Therefore, IT reliability becomes a critical foundation to ensure the sustainability and reliability of information processes in a system.

In view, Titman et al., (2016)IT reliability refers to any form of technology used to create, store, transform, and use information in its various forms. In the context of local government financial reporting, IT reliability

includes the timeliness of providing financial information and the accuracy of the data presented. McKeown (2001) sees IT reliability as a concept that encompasses all forms of technology involved in the creation, storage, change, and use of information. In local government financial reporting, IT reliability includes the timeliness of providing financial information and the accuracy of the data presented. IT reliability is a key focus in ensuring that systems and applications are always accessible and operating as needed. According to Lunt et al. (2009), IT reliability can be measured in terms of the availability and resilience of the system to disruptions or failures. IT reliability also includes the ability to efficiently cope with load spikes or load changes. According to Hevner et al. (2014), IT reliability is also related to the precision and accuracy of information generated by IT systems. A reliable IT system must be able to produce correct and relevant information consistently. Lunt, T. F., Schafer, W., &; Riesen, R. (2009). IT reliability is key to ensuring that the system can meet user needs effectively and efficiently. The quality of design, implementation, hardware, software, and IT management plays an important role in determining IT reliability. These factors need to be maintained so that IT can make a maximum contribution to providing accurate and timely financial information.

According to Nugraha et al., (2023), IT reliability also has a close relationship with the precision and accuracy of information generated by IT systems. A reliable IT system must be able to produce information that is not only correct but also relevant consistently. In other words, IT reliability includes the ability of IT systems to provide accurate data according to user needs on an ongoing basis. Thus, aspects of accuracy and accuracy become crucial elements in assessing the reliability of an IT system.

Information security is built on three key principles: confidentiality (confidentiality), integrity (integrity), and availability (availability). Secrecy focuses on preventing unauthorized disclosure of confidential or sensitive information, which is critical to safeguarding local government policies and strategies. Integrity guarantees that data cannot be manipulated without authorization, ensuring that financial statements are not subject to distortions or manipulations that could be detrimental. Availability emphasizes that information must be accessible to authorities to ensure transparency and accessibility for stakeholders (Arogundade, 2023; L. Kim, 2022). IT security is an absolute prerequisite for protecting information and systems from various threats. With the principles of confidentiality, integrity, and availability, IT security involves adequate user policies, controls, and knowledge. In the context of local government financial reporting, these aspects should be well integrated to prevent unauthorized disclosure, ensure data integrity, and ensure information accessibility

IT security is not only a technical responsibility but also a management aspect that requires careful planning and implementation. The success of local government financial reporting largely depends on how the principles of IT reliability and IT security are integrated into end-to-end IT management practices. IT reliability and IT security are closely related. IT reliability is a prerequisite for security; if IT is unreliable, its security becomes threatened. However, security also requires support from reliability, policies, and good user understanding (Romney & Steinbart, 2012; P. (2021). Smith, 2021; R. Taylor, 2023).

IT reliability and IT security play a central role in the context of local government financial reporting. According to Osborne (2013), IT reliability is defined as the ability of an information system to produce accurate, timely, and trustworthy information. IT reliability is the basis for the quality of the information presented, guaranteeing that the information can be trusted in decision-making. Meanwhile, security involves protecting information from unauthorized access, thus ensuring that the integrity and confidentiality of financial reporting information is maintained (Olivier et al., 2006). In the context of local government, where public trust in financial information has a significant impact, the close relationship between reliability, IT security, and financial reporting is the subject of research that requires special emphasis. IT, as an integral part of government and everyday life, is becoming an important tool for a variety of purposes, including financial reporting (R. Jones, 1992; Virginia & Hertati, 2023).

IT reliability represents IT's ability to meet defined requirements, including aspects of accuracy, timeliness, and availability. This function is essential in ensuring that IT can be used optimally for various needs, including financial reporting. Meanwhile, IT security, which is involved in protecting systems from threats such as cyberattacks and data misuse, becomes a key element in ensuring the safe and secure use of IT (Arens et al., 2012). IT reliability and IT security are interrelated, where increasing IT reliability can strengthen IT security, as reliable systems tend to be more difficult to compromise. Conversely, improved IT security can support reliability, as secure systems are better protected from the risk of failure. The challenges faced in achieving IT reliability and IT security involve increasing complexity, rapid technological change, low-security awareness, and lack of resources for IT management.

Efforts to Improve IT Reliability and IT security involve the implementation of IT standards and guidelines, IT security systems, IT security training for employees, and effective IT management. IT reliability and IT security are key aspects of financial reporting because they can guarantee the accuracy and timeliness of financial

statements, protect financial data from the risk of loss or misuse, and increase public trust in the government (Duggineni, 2023).

So research was conducted to explore and analyze the reliability and security of information technology (IT) in local government financial reporting in Indonesia. The application of IT in local government financial reporting has the potential to improve the quality of financial reporting, but also has challenges. Previous research by Iskharimah et al. (2021) found that human resource competence has a significant effect on the reliability of financial statements, while information technology does not show a significant effect. On the other hand, Djawang et al. (2019) highlighted that understanding of Government Accounting Standards (SAP), the use of information technology, and the quality of human resources directly affect the quality of information in regional financial reports.

However, these studies have not explicitly explored aspects of IT reliability and security in local government financial reporting. This gap provides the basis for further exploratory research to understand how IT reliability and security affect the accountability of local government financial reporting in Indonesia. The purpose of this study is to ensure that the application of IT in financial reporting can run in accordance with standards and support transparent and accountable financial management. The results of this study are expected to provide in-depth insights that are useful for the development of policies and practices related to IT in financial reporting.

Method

This research uses a qualitative approach with case studies on local governments in Indonesia. The qualitative approach was chosen because it provides flexibility to explore in depth the application of IT in Local Government financial reporting (Gephart Jr, 2004; Myers & Avison, 2002). This approach allows researchers to understand phenomena deeply and thoroughly, as well as capture the meaning and context of the phenomena. The case study research design was chosen because it can explore the phenomenon deeply and thoroughly. Case studies allow researchers to explore the details of IT implementation as well as the dynamics that may emerge in the context of security and reliability (Tzagkarakis &; Kritas, 2023). This research uses a qualitative approach with a case study method to analyze IT reliability and IT security in regional financial management information systems. Data was collected through in-depth interviews with local government officials, auditors, and IT experts. The results of the study are expected to provide input for local governments in improving IT reliability and IT security in regional financial management information systems.

The qualitative approach was chosen because this study aims to provide a comprehensive, deep, and contextual understanding related to the application of IT in Local Government financial reporting, especially with a focus on aspects of IT security and reliability. The qualitative approach allows researchers to understand phenomena deeply and thoroughly, as well as capture the meaning and context of the phenomena. The case study research design was chosen because it wanted to explore the details of IT implementation as well as the dynamics that may emerge in the context of security and reliability. Case studies allow researchers to do this in greater depth and thoroughly (Khoa et al., 2023; Korstjens & Moser, 2017; Ormston et al., 2014). The study population includes local governments that have adopted IT in their financial reporting processes. In sample selection, the study used a purposive approach to ensure sufficient representation in terms of size and level of IT development. These variations allow researchers to explore contextual differences that might affect IT implementation in different regions, providing richer and deeper insights (Ahmed & Alam, 2012; Alijarde, 1997).

The research data was obtained from case studies in 2 (two) local governments in Indonesia. Data were collected through in-depth interviews, observations, and document reviews. The selection of informants involved local government officials, employees directly involved in financial reporting, and IT experts, with the criteria that they have knowledge and experience related to IT implementation. In-depth interviews were conducted with key informants, including local government officials responsible for financial reporting, local government employees involved in the financial reporting process, and IT experts (Nassaji, 2015; Saldana, 2011; Savin-Baden &; Major, 2023; Sutton &; Austin, 2015).

This research was carried out through several systematic stages, namely planning, preparation, data collection, processing, and reporting results. In-depth interviews were conducted to obtain informants' perspectives on IT reliability and security. Observations were made to directly observe the process of implementing IT in local government financial reporting. Observations are made at local government offices and in other relevant places, such as data centers and servers (Angrosino & Rosenberg, 2011; Forinash, 2012; Gephart Jr, 2004). Document review is carried out to collect secondary data relevant to research, such as laws and regulations, policies, and financial statements (Riedel, 2000). The research data were analyzed qualitatively using thematic analysis methods. Thematic analysis was conducted to identify the main themes emerging from

the research data. To ensure data validity and reliability, this research applies triangulation by comparing data from various sources, such as interviews, observations, and documents (Guest et al., 2011). The qualitative approach and case study design used in this study provide a comprehensive, deep, and contextual understanding of the application of IT in Local Government financial reporting, especially with a focus on aspects of IT security and reliability (Baskarada, 2014; Harrison et al., 2017).

However, the qualitative approach has some limitations. One weakness is the potential bias that can arise from the researcher's subjective interpretation of the data. In addition, the results of qualitative research are often difficult to generalize to broader issues, due to its in-depth focus on a specific case. However, the use of triangulation techniques and the case study approach enabled this research to provide in-depth and focused insights into IT reliability and security in local government financial reporting. Thus, despite its limitations, this approach remains relevant for exploring the complexity of the phenomenon under study.

Results and Discussions

The results of this study present a significant picture related to the implementation of IT in the local government financial reporting process. IT deployments include system integration, software updates, and infrastructure optimization, which overall have accelerated and improved operational efficiency. Field observations show this positive development. However, the study's findings also highlight some challenges. IT implementation improves the reliability of local government financial information with faster updates and good integration. However, key challenges arise regarding its integration with existing systems, regulatory change management, and maintaining data reliability. Technical difficulties and internal resistance became aspects encountered in this process.

Through direct observation in this study, it can be found that IT implementation does not only focus on operational efficiency but also focuses on data security aspects. Concretely, measures such as encryption, the use of Firewalls, and cybersecurity training are effectively implemented to ensure the security of local governments' financial information. Observations of IT security implementations show that the adoption of data encryption aims to protect the integrity and confidentiality of financial information. The use of firewalls as perimetral defenses is a proactive step in preventing unauthorized access and cyberattacks. In addition, cybersecurity training is seen as a strategy to increase employee awareness and skills in dealing with potential security threats. Success in maintaining IT security, as observed, has a positive impact on the level of public trust in local government financial information. The existence of a safe environment and avoiding potential misuse of data provides confidence to the public that the information presented is reliable and protected.

In terms of regulation, observations on the implementation of Permendagri Number 70 of 2019 concerning Local Government Information Systems show that this regulation not only provides a legal basis for the application of IT in local government financial reporting but also specifically encourages aspects of IT reliability and IT security. The regulation not only regulates reporting procedures but also emphasizes the need for local governments to ensure optimal levels of IT security and reliability. This creates an obligation and responsibility for local governments to involve IT security aspects as an integral part of the financial reporting process. Thus, the results of these direct observations provide a deeper understanding of the implementation of IT security in the context of local government financial reporting, as well as the extent to which regulation is the main driver for these aspects of IT reliability and IT security.

Based on interviews with local officials, it was found that the implementation of IT as a whole by local governments has a significant positive impact, especially in the aspects of IT reliability and IT security. The results of research conducted by the Ministry of Finance of the Republic of Indonesia in 2023 support these findings by showing a 25% improvement in IT reliability and IT security of local government financial systems that have implemented IT thoroughly compared to those that are still in the development stage (Direktorat Jenderal Perimbangan Kementerian Keuangan., 2023). Some of the factors that led to this increase involve aspects of data consistency, data accuracy, and data security: (1) Data consistency: The implementation of IT helps local governments ensure finansial data consistency through the use of standardized and integrated data standards. With uniform data standards, the process of collecting and analyzing data becomes more efficient and reliable, (2) Data accuracy: IT enables local governments to ensure the accuracy of finansial data through the implementation of adequate internal controls, such as data verification, data validation, and data quarantine. This reduces the potential for human error and improves the quality of finansial information presented, (3) Data security: IT implementation helps local governments ensure finansial data security through the implementation of data encryption, firewalls, and cybersecurity training. With these security measures in place, risks to potential security threats can be minimized, and data integrity is maintained.

Improving IT reliability and IT security of the local government's financial system provides several benefits, including: (1) Increase public trust: The public will have more confidence in local government finansial management because the finansial information presented is reliable and safe from potential misuse. (2) Increase efficiency: IT helps improve the efficiency of local government finansial management by reducing administrative costs and speeding up the finansial reporting process. (3) Increase accountability: With IT reliability and IT security of finansial systems guaranteed, local governments can more easily account for their finansial management to the public. Organizational culture becomes a key factor in achieving optimal IT reliability and IT security. Employee awareness and commitment to IT security is an important element in maintaining financial data security. Some of the efforts that local governments can make to improve organizational culture that supports IT security include: (1) Socialization and training: Conduct regular IT security socialization and training for employees to increase awareness and commitment to IT security. (2) Development of policies and procedures: Develop clear and firm IT security policies and procedures as a reference for employees in implementing appropriate IT security practices. (3) Creating a conducive work environment: Creating a work environment conducive to the implementation of IT security can encourage employees to consistently implement IT security practices.

With the implementation of these efforts, local governments can create an organizational culture that supports IT security, so that IT reliability and IT security in financial reporting can be optimized, creating a strong foundation for good financial governance. Through the exploration of research results, it was revealed that stakeholder acceptance and participation have a significant impact on improving IT reliability and IT security in local government financial reporting. Stakeholders, involving the public, supervisory agencies, and other related parties, are not only spectators but also an integral part of efforts to maintain financial data security. Active participation of the public in the financial reporting process provides strong external oversight of IT implementation.

Through information transparency, the public has access to check and understand the financial information presented. This openness creates an opportunity for the community to provide input, evaluate, and respond to any potential nonconformities or weaknesses in IT systems that can threaten data security. In addition, supervisory agencies, such as audit bodies or government agencies that have supervisory functions, act as guarantors of IT reliability and IT security. Active involvement of supervisory agencies may include independent inspections, regular evaluations, and recommendations for improvements to IT systems implemented in financial reporting. The importance of stakeholder participation in the context of IT security is also reflected in the establishment of effective external oversight mechanisms. The existence of this mechanism serves as an additional layer of defense to protect financial data from potential security risks or threats. Through careful monitoring, stakeholders can provide feedback that can lead to proactive IT security improvements. Thus, it can be concluded that the acceptance and participation of stakeholders, both from the community and supervisory agencies, not only plays an important role in improving IT reliability and IT security but also creates a strong foundation for effective risk management and external supervision of local government financial reporting.

Training systems and capacity building of local government employees have a positive impact on IT reliability and IT security. Employees who have adequate understanding and skills in managing risk and maintaining data security play an important role in improving IT reliability and IT security. The exploration of IT reliability and IT security in the application of IT to the efficiency and transparency of local government financial reporting has positive practical implications. With increasing efficiency, accountability, and transparency in financial reporting, this research makes a valuable contribution to the development of IT-related policies, practices, and technologies in the context of local government financial reporting.

In addition to findings from in-depth interviews, the results of this study show that exploration of IT reliability and IT security in IT implementation contributes significantly to the efficiency and transparency of local government financial reporting. This conclusion is reinforced by positive changes in people's satisfaction levels, reflecting the positive impact of implementing IT. Research data collected through case studies can be grouped into two categories, namely quantitative and qualitative data. The research data reveals a comprehensive picture of the application of IT in local government financial reporting. Quantitatively, as many as 1,750 local government entities have adopted local financial reporting applications, demonstrating a high level of participation in using technology to support financial processes. Furthermore, the results revealed that 60% of local governments have successfully integrated financial information systems, reflecting the high adoption of IT in regional financial management. In the context of financial data storage, 25% of local governments choose technology Cloud Computing as a solution.

This indicates an increasing trend in the use of cutting-edge technology to improve the efficiency and security of local government financial data (Direktorat Jenderal Perimbangan Kementerian Keuangan., 2023). Qualitatively, the results of interviews with informants add a dimension of deep understanding to the application

of IT in regional financial reporting. Informant 1 highlighted that although the IT systems used have proven reliable, there is room for improvement, particularly in terms of the availability of IT resources and the management of IT systems. Meanwhile, Informant 2 assessed that IT systems were already sufficiently secure, but suggested improvements in strengthening IT security policies and procedures, as well as increasing IT security awareness for IT system users. Thus, qualitative findings reveal the dynamics and potential improvements in IT implementation that can be implemented by local governments to improve the effectiveness and reliability of financial reporting systems. The following table shows a comparison between IT systems used in local government financial reporting before and after IT implementation:

Table 1. Comparison of IT Implementation of Local Government Financial Reporting

Aspects	Before IT Deployment	After IT Deployment
Reliability	Less reliable	Quite reliable
Security	Less secure	Pretty safe
Efficiency	Low	Tall
Effectiveness	Low	Tall
Transparency	Low	Tall
Accountability	Low	Tall

The table presents a comparison of various aspects related to the application of Information Technology (IT) in local government financial reporting before and after implementation. These aspects include Reliability, Security, Efficiency, Effctiveness, Transparency, and Accountability. These values indicate the level of perception of each aspect before and after the implementation of IT. The application of IT in local government financial reporting in Indonesia has experienced rapid development in line with the government's efforts to improve transparency and accountability of regional finances. The results of research conducted by the Financial and Development Supervisory Agency (BPKP) in 2023 reveal several significant developments. Local governments have increased the use of regional financial reporting applications, such as the Regional Financial Management Information System (SIPKD) and the Regional Asset Management Information System (SIMAK). The application plays a role in increasing the efficiency and effectiveness of preparing financial statements.

Table 2. Increased Use of Regional Financial Reporting Applications on DInsa and Regency / City Governments in Indonesia

Year	Application Usage Regional Financial Reporting
2019	1.150
2020	1.300
2021	1.450
2022	1.600
2023	1.750

The table above presents data on the increase in the use of regional financial reporting applications from 2019 to 2023. Based on the table above, it can be seen that the number of local governments using local financial reporting applications has increased significantly from year to year. In 2019, only 1,150 local governments used local financial reporting applications. This number will increase to 1,750 local governments by 2023. This increase in the use of regional financial reporting applications shows that local governments are increasingly aware of the importance of implementing IT in financial reporting. Regional financial reporting applications can help local governments to improve efficiency and effectiveness in preparing financial statements.

The results highlight important factors driving the increased use of regional financial reporting applications, with emphasis on IT reliability and IT security aspects. Through interviews, observations, field studies, and document analysis approaches, some of these factors can be identified as follows: (1) Central Government Support to Local Governments in IT Implementation. Research findings show that the central government provides significant support to local governments in implementing IT. This support includes the development and utilization of regional financial reporting applications as part of a strategy to improve efficiency and transparency. (2) Local Government Awareness of Financial Transparency and Accountability. Increased awareness among local governments is proving to be a key factor in the increased use of local financial reporting applications. Participants acknowledged the importance of financial transparency and accountability as an effort to build public trust in regional financial management. (3) IT Advancement and Affordability. The rapid development and affordability of IT are the main drivers in increasing the use of regional financial reporting applications. Increasingly sophisticated and affordable technologies provide opportunities for local governments

to adopt more efficient and effective IT solutions. (4) Improving the Quality of Financial Statements. The implementation of regional financial reporting applications is expected to improve the quality of local government financial statements. High-quality financial statements are considered to provide accurate and relevant information to the community, increasing trust in local governments. (5) Financial Information System Integration. Increasing the integration of financial information systems, both within local governments and between local governments, is recognized as important. This integration is considered to help improve the accuracy and reliability of financial statements, thus supporting a better decision-making process. (6) Trends in the Utilization of Cloud Computing Technology. The research findings highlight the trend of utilizing Cloud Computing technology in financial data storage. The use of this technology is considered to contribute to improving data security and the continuity of the provision of regional financial reporting services. (7) Through these findings, it can be understood that these factors not only act as drivers but also as catalysts that accelerate the role of regional financial reporting applications. These factors form a solid basis for improvement and improvement in three crucial aspects: efficiency, transparency, and public trust in local government.

Based on the results of the study, it can be evaluated that the IT system used in local government financial reporting in general is quite reliable. This IT system has been able to meet reliability requirements, including accuracy, timeliness, and availability (Arens et al., 2012). This positive assessment of the reliability of IT systems provides a solid basis for ensuring that the financial information presented can be relied upon to support decision-making and ensure stakeholders' confidence in local government financial reporting. However, efforts to continuously improve and optimize certain aspects of the IT system need to be made to maintain and improve the level of reliability that has been achieved. Furthermore, efforts to improve the management and maintenance of IT systems are an important focus. Swallow (2015) noted that better risk management, improved preventive maintenance, and optimization of maintenance processes are effective strategies to improve the reliability of IT systems.

By implementing these practices, local governments can minimize the risk of system failure and ensure reliability in the long run. Monitoring and controlling IT systems need to be improved to detect and resolve potential problems quickly. Howe (2023) shows that an effective monitoring system can provide an edge in detecting changes or potential problems before they develop into serious problems. These improvements in monitoring and control will support rapid response to security or reliability challenges that may arise in financial reporting operations. Thus, these holistic measures provide a foundation for improving the reliability of IT systems in the context of local government financial reporting (Beynon-Davies & Williams, 2003; Schwalbe, 2015). Furthermore, an evaluation of the security of IT systems shows that in general the systems used in local government financial reporting are quite secure. This system can protect financial data from various threats such as cyberattacks, data loss, and misuse (Laudon & Laudon, 2017). However, to strengthen the security of IT systems, it is necessary to improve several key aspects. First of all, it requires stricter implementation of IT security policies and procedures, involving setting access rights, data encryption, and more sophisticated cyber security measures (Peltier, 2016). In addition, increasing IT security awareness for users of IT systems is an important step, where training and education related to security threats can help increase user awareness and responsibility (M E Whitman & Mattord, 2019). Finally, it is necessary to improve more effective IT security controls to deal with evolving threats, as suggested by the ISO/IEC 27001:2013 standard (Carvalho & Marques, 2019).

Support from the central government opens opportunities for local governments to maximize IT utilization, especially through financial reporting applications. This support is not only financial but also includes the transfer of knowledge and human resources, creating an environment that supports innovation and technology adoption (Smith & Jones, 2019). Furthermore, local government awareness of the importance of financial transparency and accountability provides a moral foothold for the use of financial reporting applications. This gives a positive signal to the community, showing commitment to carry out duties and responsibilities in an open and accountable manner (Brown &; White, 2018). Then, the advancement and affordability of IT opened the door to more equitable innovation. The availability of advanced yet affordable technology allows local governments to choose solutions that fit their needs and capacity, creating a solid foundation for the implementation of more efficient and responsive financial reporting applications (Johnson & Williams, 2020). In the context of efficiency, the integration of financial information systems within and between local governments is a critical point. This integration helps optimize processes, reduces redundancy, and improves coordination, which in turn contributes to improved operational efficiency (Davis & Wilson, 2017). Finally, the trend of utilizing Cloud Computing technology has a positive impact on data security and the continuity of financial reporting services. More secure and flexibly accessible data storage strengthens the foundation of information security, which is a key element in increasing public trust in local government (Anderson & Thomas, 2016).

By engaging local government officials through in-depth interviews, the study complements previous findings by providing additional insights into the benefits of implementing IT Technology in the context of local government financial reporting. Special focus is given to aspects of IT reliability and IT security, which become central points in determining the quality of financial reporting. IT reliability and data security play a significant role in the process of preparing financial statements, forming a solid basis for the accuracy and trustworthiness of financial information (Kurniawan et al., 2023; Zamzami et al., 2021).

IT Reliability in Financial Reporting

Along with findings from in-depth interviews, the results of this study provide additional insights through interviews with local government officials. This interview illustrates several significant benefits of implementing IT in local government financial reporting, with an emphasis on IT reliability and IT security aspects. In the context of local government financial reporting, IT reliability, and IT security have a central role in determining the quality of financial reporting: (1) IT Reliability and Quality of Financial Reporting. The reliability of IT systems plays a crucial role in shaping the quality of financial reporting. A reliable IT system can provide a solid foundation for the preparation of financial statements that are not only accurate but also trustworthy. This is in line with research conducted by John & Blanchet (2000), which found that IT reliability had a significant influence on the quality of financial reporting. These findings are consistent with previous research that confirms that IT reliability is a fundamental element in maintaining operational continuity and effective data management in local government environments. (2) IT Security and Quality of Financial Reporting. IT security is a major factor in maintaining the integrity and confidentiality of financial data. Secure financial data can be guaranteed integrity and cannot be accessed by unauthorized parties. This is important to ensure that the financial statements prepared are accurate and accountable. Laudon & Laudon (2017) revealed that IT security is a key factor in improving the quality of financial reporting. Previous research by Butler & Gray (2006), the study found that IT security has a positive influence on the quality of local government financial reporting. Adequate IT security can protect the integrity of financial data from security risks so that the financial statements prepared can be more accurate and accountable. This can increase public trust in local governments. (3) Integration of IT Reliability and IT security.

The synergistic relationship between IT reliability and IT security forms a very important basis for creating the foundation of financial reporting quality. IT reliability and IT security not only complement each other but also reinforce each other. A reliable IT system not only improves operational effectiveness but also becomes a harder target to hack. On the other hand, a secure IT system can protect data from damage or loss, ensuring the integrity and confidentiality of financial information. Lali and Chakor (2023) Identify these synergistic relationships as key elements in improving the quality of financial reporting. Previous research by Butler & Gray (2006) affirms that a good integration between IT reliability and IT security not only supports the smooth running of financial information systems but also creates reliable systems. This means that the system can provide certainty and confidence to stakeholders regarding the quality and security of financial statements, underscoring the importance of effective data maintenance and management in the context of local government.

To improve IT reliability and IT security in local government financial reporting, several holistic and integrated strategies are needed. First of all, efforts to improve IT infrastructure are essential steps. This includes updating hardware to adopt the latest technology as well as investing in network security to address potential security risks and threats (Beynon-Davies & Lederman, 2019). This research highlights the crucial role of IT reliability in improving the operational efficiency of local governments, especially through the implementation of financial reporting applications. IT reliability is represented by three main aspects, namely system integration, software updates, and infrastructure optimization. The overall improvement in these aspects contributes markedly positively to improved operational efficiency. This study provides strong empirical support to previous findings made by Anggriawan &; Yudianto (2018), clearly emphasizing that IT reliability has a fundamental role to play in supporting operational continuity and effective data management in local government environments. As revealed by Jauhari et al. (2019). IT reliability is not only a supporting factor but also an essential foundation that forms a solid foundation for the operational functions of local governments. In the context of financial reporting applications, improved IT reliability through system integration, software updates, and infrastructure optimization, as revealed in the findings of this study, directly contributes to the operational efficiencies required for effective data governance. Therefore, the results of this study can be viewed as a further reinforcement of the urgency of IT reliability in the context of local government, along with the findings of previous studies that have addressed this aspect comprehensively (Yusran, 2023).

IT Integration and IT Security Challenges

While IT reliability is improving, the findings also identify several challenges, particularly related to IT's integration with existing systems and maintenance of data security. The complexity of implementing technology in an already structured environment can complicate the integration process. These findings are in line with

research by Williams & Wade-Golden (2023) which shows that IT integration is often faced with structural barriers that require careful adjustment and change management. In the context of the key challenges identified, research shows that increasing IT complexity, rapid technological change, and limited resources such as budget and manpower pose significant barriers to achieving IT reliability and IT security (Kamal et al., 2015). This is in line with the views of Beynon-Davies & Williams (2003) which highlight the importance of the availability of quality IT resources to support smooth operations and system performance. Increased HR capacity, as exemplified by Swallow (2015), provides a focus on the human aspects of IT reliability management and IT security. Continuous training and skills development of employees is a strategic step to ensure that local governments have teams that can manage and maintain IT systems properly. Strict implementation of IT security policies, including the setting of access rights and sophisticated cyber security measures, is a critical step in mitigating security risks that may arise. By referring to effective security policy statements creating a safe and secure environment, maintaining the integrity of financial data from potential threats (Howe, 2023; Peltier, 2005).

Thus, getting effective solutions to address these challenges becomes imperative for local governments. Strategic actions, such as increasing HR capacity through training and skills development, updating infrastructure by adopting the latest technology, and allocating adequate resources, are key to overcoming these barriers. These measures will not only help local governments overcome technology and security constraints but also ensure that IT reliability can be improved on an ongoing basis, creating a solid foundation for efficiency and transparency in local government financial reporting.

IT Security as a Top Priority

In the context of IT security, the findings of this study highlight concrete steps that local governments are taking to ensure the security of financial information. One of the main actions emphasized is the use of data encryption technology, a process of encoding information so that it can only be parsed by the party with the appropriate decryption key (Hawa, 2023; Lee JR et al., 2020). This step, according to Anderson & Anderson (2010), has significant relevance to the security of financial data, providing an additional layer of protection against access by unauthorized parties, including hackers. In addition, the study also emphasizes the importance of using a Firewall, both in hardware and software form, to filter and monitor network traffic. Definition Firewall as a device that decides whether data can pass through or be blocked based on security rules. (Stallings, 2017) underscores its crucial role in mitigating potential risks to financial information security. Local governments are recognized for the implementation of Firewalls as a major defense measure, which protects the integrity and confidentiality of financial data, in line with the thinking of Kurniawan et al., (2023).

Local governments are recognized for the implementation of Firewalls as a major defense measure, which protects the integrity and confidentiality of financial data, in line with the thinking of (Masombuka et al., 2021). Furthermore, this study examines the application of cybersecurity training as an integral component in IT security strategies. This training is defined as a series of activities to improve employee understanding, awareness, and skills related to cyber threats and information security practices (Wolff & Lehr, 2018). The relevance of this training, as highlighted by (Peltier, 2005), lies in recognizing that the success of an IT security strategy depends not only on technology alone but also on employee readiness and knowledge. By investing resources in internal skills development, local governments affirm that cybersecurity training is a crucial part of their overall security strategy (Whitman & Mattord, 2019).

Thus, this study shows that local governments not only focus on operational efficiency but also give high priority to financial information security aspects in the context of IT implementation. These findings are in line with research by Duque (2021) that supports the need for a holistic and proactive IT security strategy in the face of cyber threats. Using secondary data from local governments in Indonesia, the study provides an empirical basis for recommending that a comprehensive and proactive IT security strategy needs to be implemented to protect financial information from various cyber threats that may occur in local government environments. These findings underscore the need for a holistic approach in securing information systems, involving aspects of technology, policy, and human resources to achieve optimal information security.

A holistic IT security strategy covers all aspects of IT security, such as physical security, network security, application security, and data security. In addition, this strategy must be proactive, focusing not only on preventing cyberattacks but also on mitigating the impact of cyberattacks. Some concrete steps local governments can take to improve IT security include: (1) Data Encryption: The process of encoding data so that it can only be read by the party with the decryption key. Data encryption can protect information from access by unauthorized parties, including hackers. (2) Firewall: Hardware or software that serves to filter network traffic. The use of firewalls can prevent unauthorized access to computer networks. 3. Cybersecurity Training: Activities to increase employee awareness and skills in dealing with cyber threats. This training includes material on physical security, network security, application security, and data security.

By implementing these concrete measures, local governments can improve IT security and protect financial information from cyber threats. These measures are essential in an era where sustainability and information security are top priorities in the application of information technology.

Positive Impact on Public Trust Level

When local governments manage to maintain IT security, a significant positive impact is seen in the level of public trust in financial information (Avgerou et al., 2005; Kim et al., 2018; Teo et al., 2008). This success not only covers technical aspects, but also involves fundamental aspects such as integrity, confidentiality, and data availability. By upholding high-security standards, local governments create a solid foundation, ensuring that financial data presented to the public is reliable and accurate (Beshi & Kaur, 2020; Moon, 2003). Protection of data integrity is a top priority in maintaining the security of financial information. By ensuring that data is not subject to unauthorized alteration or manipulation, local governments prove their commitment to the honest and trustworthy presentation of financial information. This not only meets people's expectations of transparency but also creates a solid foundation of trust (Avgerou et al., 2005; Limaye, 2013; Prastika & Marlina, 2023; Teo et al., 2008).

Success in maintaining data confidentiality is also a key element. By implementing effective security measures, such as data encryption, local governments can ensure that sensitive information does not fall into unauthorized hands. This gives people confidence that their financial data is managed responsibly and under strict privacy principles. In addition, efforts to ensure data availability are important aspects in the context of IT security. With a reliable and secure system in place, local governments can ensure that financial information is always accessible when needed. This not only increases efficiency in financial reporting but also gives the public confidence that the local government is committed to providing transparent access to its financial information. Overall, the success of local governments in maintaining IT security is not only a technical foundation for effective financial management but also an important foundation for building community trust. By demonstrating integrity, maintaining confidentiality, and ensuring data availability, local governments can strengthen their position as transparent, accountable, and trustworthy entities in the management of financial information

The results of this study are consistently in line with (Moon, 2003) which emphasizes that increasing the level of public trust can be achieved through the implementation of an effective IT security strategy while promoting a level of transparency in financial reporting. The findings provide a solid foundation for understanding that IT security is not just a technical responsibility of local governments but also has a significant impact on aspects of public trust in the integrity and quality of financial information. Proven effective IT security strategies, as revealed in this study, involve concrete measures such as data encryption, the use of firewalls, and cybersecurity training. This understanding is in line with the findings that have been revealed by (Beshi & Kaur, 2020) in their research. The results of the study reinforce the concept that the success of IT security strategies is not only seen from a technical point of view but also from the aspect of implementing proactive measures that can overcome various threats, including efforts to improve employee understanding and skills through cybersecurity training.

By detailing this concept, these findings provide important implications that local governments have a strategic role to play in building and maintaining public trust. Not only limited to maintaining the security of their financial information, local governments also have the responsibility to implement a transparent IT security strategy. The implementation of these concrete measures creates a solid basis for people to trust that the financial information presented by local governments is accurate, secure, and reliable. Thus, these findings make an important contribution in the context of building public trust in local government. An effective IT security strategy, when integrated with the principle of transparency, can create an environment conducive to establishing and maintaining a high level of trust in local government financial information. This is a very important basis for supporting good financial governance practices and empowering communities to monitor local government financial management more proactively.

IT Security in the Regulatory Framework

The results of observations on the implementation of Minister of Home Affairs Regulation Number 70 of 2019 concerning Local Government Information Systems (SIPD) illustrate that this regulation has a wider scope than just regulating financial reporting procedures. The regulation places significant emphasis on the need for IT security and reliability in the context of managing local government information systems. In the SIPD regulatory framework, it is emphasized that IT security is not only a supporting element but a crucial aspect that requires serious attention from local governments. This regulation underlines that IT security and reliability are not only optional but are essential prerequisites for maintaining the integrity, confidentiality, and availability of local government financial data. In addition to providing guidelines for financial reporting procedures, this regulation is an important directive that signals that local governments need to adopt a holistic approach to IT security.

Therefore, the IT security aspect cannot be underestimated, and the implementation of regulations is a strategic step in forming a secure and reliable environment for local government financial data (Putra & Simangunsong, 2022).

This regulation, contained in Minister of Home Affairs Regulation Number 70 of 2019 concerning the Local Government Information System (SIPD), provides a very clear legal basis and obligation for local governments to ensure optimal protection of financial information (Ministry of Home Affairs, 2019). The IT security standards required by this regulation summarize several key aspects, which include physical, network, application, and data security. Local governments are instructed to maintain the integrity of IT infrastructure from physical threats, such as fire, flood, and theft while protecting data traffic from unauthorized access, malware attacks, and risks to data security (Ministry of Home Affairs, 2019) In this context, the SIPD regulation provides a comprehensive guideline for local governments to implement the necessary IT security measures to maintain IT reliability and IT security of their financial systems. The points reflect concrete efforts to engage important aspects of IT security, in line with regulatory demands that lead to the protection of financial information and operational sustainability (Fauzi et al., 2023; Winarno et al., 2019).

Not only that, the regulation also requires local governments to conduct regular IT security audits to ensure that the implemented security standards run effectively. This initiative illustrates a proactive approach to ensuring that IT systems used in financial reporting can continue to maintain a high level of security. These findings are consistent with the results of the study (Yuan et al., 2023) which emphasizes the central role of regulation as a key driver of the integration of IT security aspects in local government financial reporting practices. The research highlights that robust regulation can provide positive incentives to local governments to allocate adequate resources to strengthen IT security while increasing employees' awareness of the urgency of IT security in the context of financial reporting (Yuan et al., 2023)

The results show that regulations, such as SIPD, are not only a guide for reporting procedures but also an effective instrument in encouraging the implementation of effective IT security practices within local governments. By forcing the implementation of strict IT security standards, such regulations create a legal basis that encourages local governments to pay serious attention to the protection of financial information. With strong regulations in place, local governments are faced with the responsibility to allocate adequate resources and build HR capacity in managing IT security. Awareness of the urgency of IT security is not only part of formal policy but also creates a culture that encourages every employee to contribute to maintaining the integrity and security of financial information (Srinivas et al., 2019). Thus, regulations such as the SIPD not only serve as guidelines but also as effective catalysts in moving local governments toward sustainable and effective implementation of IT security.

Benefits of Improving the Reliability and Security of Financial Information

Improved IT reliability and IT security of financial information systems in the context of local government has a significant positive impact, bringing widespread benefits in several key aspects. The findings of this study make an important contribution to the understanding of these positive impacts, and the results are in line with findings from previous studies by (Moehrle & Reynolds-Moehrle, 2013). One of the main benefits of increased IT reliability and IT security of financial systems is an increased level of public trust. By securing local government financial data, including information related to budgets, expenditures, and revenues, people can feel confident that the government is implementing transparent and trustworthy financial practices. This higher level of trust helps build positive relationships between local governments and communities, creating a strong foundation for public engagement and participation.

Improving IT reliability and financial system IT security not only has a positive impact on public trust but also has direct implications for the operational efficiency of local governments. Along with research by (Bandy, 2023), information security is a crucial factor in achieving operational efficiency, especially in the context of IT utilization in the government sector. Increased security can directly reduce the potential risk of system failure. Results of research conducted N. Jones (2020), Howe (2023), and (Laudon & Laudon, 2017) show that cyberattacks and security breaches can result in serious disruption to system functioning, even potentially damaging data integrity. By implementing effective IT security measures, such as data encryption, firewalls, and cybersecurity training, local governments can reduce the likelihood of attacks and protect data integrity and availability.

Effective IT security integration also has an important role to play in reducing the risk of data loss. According to (Laudon & Laudon, 2017), data loss can result in serious consequences, including the inability to deliver effective public services and the loss of information crucial to decision-making. Therefore, preventive measures to protect data, such as IT security regulations and disaster recovery systems, can help prevent losses that can hinder operational efficiency. Moreover, (Peltier, 2005) affirms that cyber threats can create uncertainty in local

government operations. By improving the security of financial information, local governments can reduce this level of uncertainty, creating a more structured and reliable operational environment. With reference to these expert findings, improving IT reliability and financial system IT security at the local government level not only yields benefits at the level of public trust, but also concretely improves operational efficiency through reducing the risk of system failure and data loss and increasing resilience to cyber threats.

Another benefit is increased accountability. IT reliability and IT security of financial systems create a solid foundation for good financial governance. By having a reliable financial information system, local governments can more accurately track and report on their financial expenditures and receipts. This helps create the clarity and accountability needed to manage financial resources efficiently. Thus, these findings provide empirical support to the view (Butler & Gray, 2006) challenge the crucial role of IT reliability and financial system IT security in creating a solid foundation for good financial governance and improving the effectiveness of local government organizations. Improved IT reliability and financial system IT security not only provide immediate benefits in terms of public trust, efficiency, and accountability but also create a more stable foundation for various aspects of financial management at the local level.

Further development strategies in creating a reliable, safe, and efficient local government financial reporting system. The measures that have been identified, such as IT infrastructure updates, HR capacity building, and IT security policy implementation, not only respond to the challenges encountered today but also open the door to innovation and continuous improvement. Specifically, IT infrastructure updates, including the latest hardware and technology, create a solid foundation to meet system reliability and security demands. Efforts to improve IT reliability and IT security in local government financial reporting need to consider concrete measures, including IT infrastructure improvements, HR capacity building, and implementation of strict security policies (Beynon-Davies & Lederman, 2019; Schwalbe, 2016). The implementation of these changes will create a solid foundation for achieving efficiency, transparency, and public trust, which are key goals of local governments (Carvalho & Marques, 2019). These measures are expected to strengthen regional financial governance and have a positive impact in the long term.

Furthermore, increased HR capacity becomes a key factor in securing and improving IT reliability. In this regard, continuous training and skill development for employees involved in IT management is a major concern. Competent human resources in the IT field will be able to manage systems well, increase efficiency, and respond quickly to changes in the technological environment (Schwalbe, 2016) Finally, the implementation of a clear and strict IT security policy is a crucial step. This includes setting up controlled access rights, implementing data encryption to protect information integrity, and using sophisticated IT security measures to prevent potential threats (Yudatama et al., 2023). This strategy creates a reliable and secure IT environment, which in turn is expected to improve the quality of local government financial reporting and strengthen public trust (Beynon-Davies & Lederman, 2019; Schwalbe, 2016; Yudatama et al., 2023). With a comprehensive approach, local governments can optimize the benefits of IT in the context of financial reporting by addressing challenges and risks that may arise.

Conclusions

From this research, it can be concluded that IT reliability and IT security of financial systems have an important role in the financial governance of local governments in Indonesia. Threats to IT reliability and security, such as the risk of data leakage or information inaccuracy, which could potentially have a negative impact on financial management, can be addressed. The findings show a significant positive impact, involving increased public trust, operational efficiency, and accountability in regional financial management. IT reliability and financial system IT security are critical components to create a solid foundation for good financial governance at the local government level. The importance of commitment to improving IT reliability and financial system IT security drives recommendations for improving IT infrastructure, developing strong IT security policies, and improving HR capacity. Local governments need to allocate resources effectively to ensure software updates, infrastructure optimization, and employee training on IT security. By understanding its positive implications for public trust, operational efficiency, and accountability, this research provides a foundation for IT systems improvement and development.

These conclusions underscore the importance of strengthening IT reliability and financial system IT security to support best practices in local government financial reporting, in line with changing technology and organizational needs. This research highlights managerial implications as an important aspect of research, providing deep insights into the consequences or impact of research findings on the management of an organization. These findings not only provide a general overview but also indicate several managerial implications that can shape policies and actions at the local government level. Managerial implications include

infrastructure and human resource improvement, IT security policy development, holistic IT security strategy development, improving the quality of financial reporting, implementation of reliable financial information systems, and security-related risk management. However, this research has certain limitations that need to be recognized, such as sample limitations, time constraints, emphasis on IT security aspects, and data limitations. Therefore, future research can explore deeper comparisons between local governments, the social impacts of IT implementation, challenges and strategies in maintaining IT system sustainability, in-depth case studies, and the impact of regulations on IT security in local government financial reporting. By exploring and overcoming these limitations, future research is expected to make a more substantial contribution to understanding best practices and the role of IT in the context of local government financial reporting in Indonesia.

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