CHALLENGES AND OPPORTUNITIES OF E-GOVERNMENT IN STRENGTHENING THE TRANSPARENCY AND ACCOUNTABILITY OF THE GOVERNMENT

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Abstract
The study aims to understand the challenges and opportunities of implementing e-Government in an effort to improve transparency and accountability of government. Digital technology has changed the way government works, and e-Government can play a key role in driving a more democratic and transparent government. However, the implementation of e-Government also faces challenges. Using a literature research approach, the study identifies and analyzes opportunities and challenges in e-Government implementation. Research results indicate that e-government has significant benefits in increasing transparency and accountability through better provision of information to the public, more inclusive decision-making processes, and more efficient public services. However, it was also found that problems such as inadequate infrastructure capacity, cybersecurity issues, as well as cultural and social barriers could undermine the effectiveness of e-Government. Overall, studies show that despite the challenges, the opportunities offered by e-Government in improving governance are substantive, noting that the issues identified need to be addressed with appropriate policies and multi-stakeholder involvement. Further research is suggested to explore the latest applications of technology in e-Government, such as AI and blockchain, and to evaluate these implementations in a broader context, looking at their social, economic, and political implications in depth.
Keyword: E-Government, Transparansi, Akuntabilitas, Pemerintah.

Introduction

Digital developments have had a significant impact on many aspects of life, including government. The system of government seeks to use digital technology as a way to improve efficiency, transparency, and service to citizens.

Governments use digital platforms to provide faster and more convenient public services. This includes registration for social services, deposit and retrieval of documents, tax payments, and more. (Castro, C., & Lopes, C. 2022). Processes that used to take a long time and are sometimes confusing, can now be executed with just a few clicks. With big data and analytics, governments now have the ability to manage and analyze large amounts of data in a more efficient way. This enables more data-based policy making and ensures that resources are allocated more effectively (Peña-L, I. 2010).

Digital technology enables government documents and data to be more open to the public, enhance transparency and enable citizens to participate in decision-making processes (Castro, C., & Lopes, C. 2022). Transparency and open data portals are now becoming more general, providing access to information about budget usage, auction process, etc. (Fang, Z. 2002).

Social media and digital platforms make it easier for citizens to interact and participate in democratic processes. This could include giving input to a policy draft, participating in public discussions, or even mobilizing support for specific initiatives. With increasing dependence on digital systems, governments are also stepping up their efforts to ensure cybersecurity, including protecting critical infrastructure, citizens' personal data, and preserving the integrity of democratic processes from cyber attacks. (Zhao et al., 2015).

Smart city development is an example of the application of digital technology in urban management. Systems such as data-based traffic management, smart city resource management, and responsive emergency services are some of the features of smart city. E-government services enable interaction between government with citizens,, and even between government departments to be more smooth, efficient, and accessible anytime, anywhere. (Lindgren, I., & van Veenstra, A. F. 2018).

Digital development in government continues as technological innovation increases. Therefore, governments need to adapt continuously to leverage new technologies to better serve their citizens.

On the other hand, the impact of the digital development of governments is seeking to increase transparency and accountability through the use of information and communication technologies. The implementation of e-government is one of the strategic initiatives that is expected to accelerate the achievement of both (Glyptis et al., 2020). (Glyptis et al., 2020). It covers various aspects such as the provision of public services online, transparency in government administration, as well as citizen participation in government decision-making. This application aims to create a more efficient, effective government system, and services that are more accessible to the public. (Shkarlet et al., 2020).

E-government opens up new opportunities to build more open government, capable of delivering effective and efficient services, and facilitating public oversight. (Shkarlet et al., 2020). E-government, or electronic government, refers to the use of information technology, the Internet, as a platform for exchange of information, provision of services and transactions between government and citizens, as well as between various governmental entities. This concept has evolved with increased Internet penetration and digitization of public services. (Apleni, A., & Smuts, H. 2020).

The primary objective of e-government is to improve the quality of services provided by the public sector. Moreover, e-government is looking for ways to be more customer-friendly, consistent, and cost-effective in providing services to the

community. E-government is not just about providing services online, but also about digitizing the processes behind those services to make them more efficient. (Dias, G. P. 2020).

Implementation of e-government can vary widely, ranging from web-based platforms for accessing public services, to sophisticated systems for managing big data and analytics to assist in decision-making in government. It is important to note that e-government is not only about technology, but also about restructuring units and working processes, as well as changing attitudes and behaviors. (Shkarlet et al., 2020).

The development of e-government has provided various benefits to governments and their citizens, including improved access to public services, improved transparency and accountability of governments, and improved efficiency and productivity in public services. (Rozhkova et al., 2021).

Overall, e-government is a paradigm shift in the way governments interact with their citizens and provide services to them.

However, the adaptation of e-government does not always go smoothly. There are many challenges to face, ranging from inadequate IT infrastructure, issues of security and data privacy, to challenges in changing management and culture of government equipment. The importance of transparency and accountability of government becomes a major focus in this context, as both are key pillars of good governance. (Rozhkova et al., 2021; Dias, G. P. 2020; Apleni, A., & Smuts, H. 2020). Therefore, this study addresses the challenges and opportunities of e-government in increasing transparency and accountability of government.

Research Method

The method of research carried out in this study is literature. Literature research is one method in research that focuses on collecting data from existing sources such as books, scientific articles, journals, and other documents relevant to research issues. (Marshall et al., 2013; Punch, 2013). This method allows researchers to explore and analyze a variety of perspectives, theories, results of previous research, and conceptual development related to their research topics. Literary research plays an important role in providing a strong theoretical foundation for research, as well as identifying gaps in existing research that can form the basis for new research. (Adhabi & Anozie, 2017; Champe & Kleist, 2003).

One of the major steps in literary research methods is the search for relevant keywords on a variety of databases and information sources. The search was aimed at finding reliable and relevant sources for the research topic. Researchers need to be selective and critical in choosing the literature to refer to, to ensure that the data collected is valid and accountable. (Tharenou et al., 2007; Basrowi, 2008; Zed, 2004).

Result and Discussion

E-Government

E-Government, or Electronic Government, is the use of information and communication technology (ICT), especially the Internet, by the government sector with the aim of improving the quality and availability of information as well as public services to citizens,, and other government agencies. The concept covers a series of digital processes aimed at making government operations more efficient, transparent, and participatory. (Rozhkova et al., 2021).

The concept of e-Government covers several aspects, including: 1) Electronic Transactions: Conducting various government transactions online, such as tax payments, vehicle registration, and administrative document management. 2) Transparency and Transparency: Providing access to information about government policies, programmes, and activities to the public widely and easily accessible through government websites and portals. 3) Electronic Interaction: Enhancing communication and interaction between government with the public, private sector, and other government entities through web-based services and online applications. 4) Knowledge Management: Managing and sharing knowledge in the form of data and information accessible by all departments of government to improve coordination and efficiency of decision-making. 5) Public participation: Provide opportunities for the public to participate actively in policymaking through public consultation, polling, and online discussion forums. (Farida et al., 2020; Dias, G. P. 2020; Tsybulnyk et al., 2020).

The objective of e-Government is to facilitate interaction between government and society, increase transparency, reduce bureaucracy, and improve the quality of public services. In the long run, implementation of the e-government project is expected to transform the way government works to be more open, responsive, and needs-oriented. (Tsybulnyk et al., 2020).

Benefits of e-Government in Transparency and Accountability of Government

Transparency is a principle or quality that allows individuals, communities, or other stakeholders to easily obtain accurate, clear, and complete information about the activities, decisions, and policies of institutions, organizations, or governmental bodies. In other words, an entity is considered transparent if it does not hide relevant information from the public or stakeholders, thus enabling actions and decision-making processes to be accountable and supervised. (Ibrahimy et al., 2023).

In the context of governance, transparency is essential because it provides an opportunity for the public to monitor and evaluate the performance of the government, which in turn encourages the government to act in the public interest, perform its functions and duties efficiently, and prevent corruption and abuse of authority. (Doran et al., 2023).

Transparency covers several aspects, including but not limited to: 1) Openness of information: Making information about activities and policies easily accessible to the

public. 2) Accountability: Having clear mechanisms to hold actions and decisions accountable to the general public. 3) Public participation: Enabling the public to participate in the decision-making process, especially in matters that affect them. 4) Clear and effective communication: Providing information that is easily understood and relevant to stakeholders. (Hochstetter et al., 2023).

Transparency is seen as one of the key pillars of good governance, enabling healthier and more effective democratic systems, as well as building confidence between governments and the public. (Hochstetter et al., 2023).

Government accountability, also known as government responsibility, is a principle or mechanism that ensures that governments and their public officials are responsible for the actions and decisions they take. This means that they have to explain and respond to the general public, regulators, and other relevant institutions. (Ibrahimy et al., 2023).

Aspects of government accountability include: (1) Administrative responsibility: Governments must carry out their duties and responsibilities properly in accordance with the rules, procedures, and standards established. (2) Policy responsibility : Governments should be able to explain and uphold the policies they make and implement. They must also be prepared to accept criticism and advice from the public and strive to make improvements when necessary. 3) Legal liability: Governments must abide by applicable laws and regulations. If a violation is committed, they must accept the consequences, such as legal or administrative sanctions.4) Financial accountability: Governments must manage public budgets well and transparently. Audits and financial reports must be provided to show how the funds are used. 5) Political accountability: Public officials must be accountable to the society they serve. They can be tried through general election or through other mechanisms such as a motion of disbelief. (Zou et al., 2023; Shenkoya, T. 2023).

Government accountability is essential to ensuring that governments act in the public interest, not in the interests of a particular individual or group. It also helps prevent abuse of power, corruption, and injustice. Besides, it allows people to have confidence in their government (Doran et al., 2023).

Implementation of e-Government has a number of benefits in increasing transparency and accountability in government, including: 1) E-government benefits to transparency: a) Easier and faster access to information: the public can easily access government information such as policies, government work plans, public statistics, and financial information through online portals or applications, which are available 24/7 without having to visit government offices; b) Information standardization: E-Goverment enables the creation of standards in information presentation that make data more consistent, comparable, and analyzed; c) Enhanced Data Disclosure: With the use of digital platforms, more data that was previously not easily accessible or even

unpublished can now be disclosed to the public in a structured and sustainable manner (Fernández et al., 2023; Shenkoya, T. 2023).

E-Government Benefits Against Accountability: (a) Creation of Responsible Digital Track Record: All government electronic transactions leave auditable digital records, thus facilitating the tracking and evaluation of government activities; (b) More Open Service Provision Process: Public services provided online reduce the chances of manipulation and corruption by minimizing manual intervention in the service process; (c) Higher Public Participation Rate: e-government platforms are often equipped with tools such as discussion forums, online surveys, and social networking systems that allow the public to participate in policy-making processes; (d) Efficient Feedback Mechanisms: The public can provide feedback, complaints, and through the advice of e-governing portals, which force government agencies to respond and take appropriate action; (e) Audit and Reporting Online: Through E-goverence, administrative reporting and financial audit can be made accessible by the administration, not simply because it facilitates more effective public oversight of financial activities, but also because it simplifies government-based activities, (e. g.

E-Government Opportunities in Increasing Transparency and Accountability of Government

E-Government has a significant opportunity to increase transparency and accountability of government through various implementable initiatives as well as through the improvement and development of existing technology.

Here are some opportunities to consider: 1) Open Data: Through the open data initiative, governments can open access to databases that contain information that can be used by the public to carry out analysis and build applications that use the data. 2) Service Portability: Integrating various government services into one easy-to-use platform will facilitate public access so that transparency and accountability can be increased. 3) Blockchain: The use of blockchain for public applications can enable a very transparent process, as all transactions will be recorded permanently and cannot be modified. 4) Participatory Budgeting: E-Government can facilitate the budget planning process involving public participation, enabling the public to provide insights on how the budget should be allocated. 5) E-Procurement: Implementing an electronic procurement system for government transactions that enables more open and transparent tendering process for suppliers and the public. 6) E-Voting: The development of secure and reliable electronic voting system technology will enhance the integrity of the general election process and facilitate public monitoring. 7) Public Reporting Portal: Create a system that allows citizens to report issues or inconsistencies directly to the government, anonymously or openly. 8) Digital ID: Implementing a secure digital identity for all citizens will facilitate access to government services and increase accountability of transactions. 9) Automation & AI: Using automation and artificial

intelligence to process government data can make processes more efficient and reduce the risk of abuse of authority and corruption. 9) E-Auditing: The use of electronic audit tools to monitor and inspect government financial activities that enable real-time surveillance and investigation of defaults. 10) E-Participation: Developing a platform that enables people to give feedback, participate in public dialogue and take part in online policy-making processes. 11) Capacity Building: Training government officials in the use of ICT will increase work efficiency and enable them to better serve the public (Halachmi, A., & Greiling, D. 2013; Carlo Bertot et al., 2012; Abu-Shanab, E. A. 2013). The opportunities of e-government are not only limited to improving services and efficiency, but also have great potential in shaping more accountable government, strengthening governance, and building public trust through greater transparency. (Halachmi, A., & Greiling, D. 2013).

The challenges of e-Government in increasing transparency and accountability of government

Although e-Government has great potential in increasing transparency and accountability in government, there are still a number of challenges to overcome.

Here are some key challenges: 1) Infrastructure and Technology Access Infrastructure issues and accessibility are major challenges. In many regions, in developing countries, access to the Internet and information technology is still limited. Without access to adequate digital infrastructure, e-Government cannot function effectively. 2) Digital literacy. Low digital literacy of the population can hinder the use of e-Government services. Education and training on how to use online services need to be enhanced so that all layers of society can benefit from them. 3) Data Security and Privacy issues. Data security and privacy are major concerns in e-Government. The risk of data leaks, hacking, and misuse of personal data by irresponsible parties needs to be tackled with robust security policies and technologies. 4) Lack of Skill and Competence in Government. Weak IT management skills and competencies among government officials can hinder the implementation and management of an effective e-Government system. Capacity-building and routine training are essential. 5) Cultural change and resistance. The shift from conventional to digital systems requires cultural change in governmental institutions and amongst the public. Resistance to change and adaptation to new technologies can be an obstacle. 6) Laws and Regulations. Policies, laws, and regulations that have not fully supported the implementation of e-Government can be an obstacle. A strong legal framework is needed to support operational, transparency, and accountability mechanisms in e-Government. 7) Interoperability. Information systems in various government agencies are often not well integrated, making it difficult to exchange data and information between agencies. Interoperability between systems is a technical challenge that needs to be overcome. 8) Availability and Quality of Data. Available open and quality data is an important

foundation in e-Government. The challenge lies in ensuring the integrity, accuracy, and availability of data widely without compromising privacy and security. 9) Financing and Continuation. Developing andining e-Government infrastructure requires huge investments. Ensure financing and its continuation is a challenge, especially in countries with limited resources. 10). Adapting to the latest technology. Technology is changing very fast. There is a challenge to continue to adopt and adapt to the latest technological innovations so that e-Government services are not out of date (Ibrahimy et al., 2023; Fernández et al, 2023).

Addressing these challenges requires strong commitment and collaboration between governments, the private sector, and society. With the right solution, e-Government can maximize its potential in increasing transparency and accountability of government.

Conclusion

E-government provides a great opportunity to increase transparency and accountability in government. This includes increased access to government data, integration of services, the use of cutting-edge technologies such as blockchain, and the implementation of democratic practices such as public participation in decision-making. However, the implementation of e-government also faces a number of challenges. Unequal technology infrastructure and access, low digital literacy, issues of data security and privacy, as well as barriers to cultural change and organizational resistance are some of the major challenges. In addition, challenges in law and regulation, interoperability between systems and data quality also need to be taken into account. To optimize the benefits of e-government and address its challenges, synergies are needed between governments, the private sector, and society. Training and education to improve digital literacy, improving technological infrastructure, and building a supportive legal and policy framework are some of the solutions that can be done.

Despite the challenges, e-Government has great potential to help more transparent, accountable, and democratic governance if properly managed and implemented.

References

Abu-Shanab, E. A. (2013). The relationship between transparency and e-government: An empirical support.

Adhabi, E., & Anozie, C. B. (2017). Literature review for the type of interview in qualitative research. International Journal of Education, 9(3), 86–97.

Apleni, A., & Smuts, H. (2020). An e-government implementation framework: A developing country case study. In Responsible Design, Implementation and Use of Information and Communication Technology: 19th IFIP WG 6.11 Conference on e-Business, e-Services, and e-Society, I3E 2020, Skukuza, South Africa, April 6–8, 2020, Proceedings, Part II 19 (pp. 15-27). Springer International Publishing.

Basrowi, S. (2008). Memahami penelitian kualitatif. Jakarta: Rineka Cipta, 12(1), 128–215.

Carlo Bertot, J., Jaeger, P. T., & Grimes, J. M. (2012). Promoting transparency and accountability through ICTs, social media, and collaborative e-government. Transforming government: people, process and policy, 6(1), 78-91.

Castro, C., & Lopes, C. (2022). Digital government and sustainable development. *Journal of the Knowledge Economy*, *13*(2), 880-903.

Champe, J., & Kleist, D. M. (2003). Live supervision: A review of the research. The Family Journal, 11(3), 268–275.

Dias, G. P. (2020). Determinants of e-government implementation at the local level: an empirical model. Online Information Review, 44(7), 1307-1326.

Doran, N. M., Puiu, S., Bădîrcea, R. M., Pirtea, M. G., Doran, M. D., Ciobanu, G., & Mihit, L. D. (2023). E-government development—A key factor in government administration effectiveness in the European Union. Electronics, 12(3), 641.

Fang, Z. (2002). E-government in digital era: concept, practice, and development. International journal of the Computer, the Internet and management, 10(2), 1-22.

Farida, I., Setiawan, R., Maryatmi, A. S., & Juwita, M. N. (2020). The implementation of E-government in the industrial revolution era 4.0 in Indonesia. International Journal of Progressive Sciences and Technologies, 22(2), 340-346.

Fernández, L. Á. V., Fernández, Y. O., Hidalgo, C. V. S., Aliaga, J. C. C., & Guillén, D. F. (2023). E-Government and its Development in the Region: Challenges. International Journal of Professional Business Review: Int. J. Prof. Bus. Rev., 8(1), 11.

Fernández, L. Á. V., Fernández, Y. O., Hidalgo, C. V. S., Aliaga, J. C. C., & Guillén, D. F. (2023). E-Government and its Development in the Region: Challenges. International Journal of Professional Business Review: Int. J. Prof. Bus. Rev., 8(1), 11.

Glyptis, L., Christofi, M., Vrontis, D., Del Giudice, M., Dimitriou, S., & Michael, P. (2020). E-Government implementation challenges in small countries: The project manager's perspective. Technological Forecasting and social change, 152, 119880.

Halachmi, A., & Greiling, D. (2013). Transparency, e-government, and accountability: Some issues and considerations. Public Performance & Management Review, 36(4), 562-584.

Hochstetter, J., Vásquez, F., Diéguez, M., Bustamante, A., & Arango-López, J. (2023). Transparency and E-government in electronic public procurement as sustainable development. Sustainability, 15(5), 4672.

Ibrahimy, M. M., Virkus, S., & Norta, A. (2023). The role of e-government in reducing corruption and enhancing transparency in the Afghan public sector: a case study. Transforming Government: People, Process and Policy, 17(3), 459-472.

Ibrahimy, M. M., Virkus, S., & Norta, A. (2023). The role of e-government in reducing corruption and enhancing transparency in the Afghan public sector: a case study. Transforming Government: People, Process and Policy, 17(3), 459-472.

Lindgren, I., & van Veenstra, A. F. (2018, May). Digital government transformation: a case illustrating public e-service development as part of public sector transformation. In Proceedings of the 19th Annual International Conference on Digital Government Research: Governance in the Data Age (pp. 1-6).

Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. Journal of Computer Information Systems, 54(1), 11–22.

Orazgaliyeva, S., Satpayeva, Z., Tazhiyeva, S., & Nurseiytova, G. (2023). E-GOVERNMENT AS A TOOL TO IMPROVE THE EFFICIENCY OF PuBLIC ADMINISTRATION: THE CASE OF KAzAKHSTAN. Management, 21(2), 578-591.

Peña-López, I. (2010, December). Policy-making for digital development: the role of the government. In Proceedings of the 4th ACM/IEEE International Conference on Information and Communication Technologies and Development (pp. 1-10).

Punch, K. F. (2013). Introduction to social research: Quantitative and qualitative approaches. sage.

Rozhkova, D., Rozhkova, N., & Blinova, U. (2021, February). Development of the e-Government in the Context of the 2020 Pandemics. In International Conference on Advances in Digital Science (pp. 465-476). Cham: Springer International Publishing.

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.

Shkarlet, S., Oliychenko, I., Dubyna, M., Ditkovska, M., & Zhovtok, V. (2020). Comparative analysis of best practices in e-Government implementation and use of this experience by developing countries. Administratie si Management Public, (34), 118-136.

Tharenou, P., Donohue, R., & Cooper, B. (2007). Management research methods. Cambridge University Press.

Tsybulnyk, N. Y., Zadoia, I. I., Kurbatova, I. S., & Mekh, Y. V. (2020). E-government within Public Administration.

Zed, M. (2004). Metode peneletian kepustakaan. Yayasan Obor Indonesia.

Zhao, F., Wallis, J., & Singh, M. (2015). E-government development and the digital economy: a reciprocal relationship. Internet Research, 25(5), 734-766.

Zou, Q., Mao, Z., Yan, R., Liu, S., & Duan, Z. (2023). Vision and reality of e-government for governance improvement: Evidence from global cross-country panel data. Technological Forecasting and Social Change, 194, 122667.