

Proceeding Paper

Factors Influencing the Success of Electronic-Based Government Policy Implentation

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Abstract

This study investigates the impact of communication, resources, disposition, and bureaucratic structure on the implementation of electronic-based government system (SPBE) policies in Lampung Utara Regency, Indonesia. A quantitative approach was employed, with a sample size of 234 government officials. Data were analyzed using multiple linear regression. The results show that all four variables have a positive and significant influence on the policy implementation both individually and collectively. The findings highlight the critical role of communication, resource allocation, bureaucratic structure, and policy executor disposition in ensuring successful implementation.

Keywords: Communication, Resources, Disposition, Bureaucratic Structure, SPBE Policy Implementation

1. Introduction

The Indonesian government has embraced e-government innovations since the issuance of Presidential Instruction No. 6/2001, aiming to leverage telecommunication, media, and informatics for good governance and democratic acceleration. The development of the Electronic-Based Government System (SPBE) is further supported by Presidential Regulation No. 95/2018, which mandates the use of information technology to enhance government services. However, challenges persist in the management and development of SPBE at the regional level, including a lack of integrated systems, inadequate bandwidth, and reliance on external copyright holders (Hutauruk, 2018; Ramtohul & Soyjaudah, 2016). These issues underscore the need for effective implementation strategies to achieve the desired outcomes in governance (Bekele & Ago, 2020; Kostiukevych et al., 2020; Mkonyi, 2018). This study focuses on the factors influencing the successful implementation of SPBE policies in Lampung Utara Regency, with reference to George C. Edwards III's model of public policy implementation.

explore the complex dynamics of e-government by addressing the research question: What are the critical factors affecting e-government success in developing countries? Their conceptual framework synthesizes elements from customer orientation, relationship marketing, and technology integration to propose a multi-dimensional approach to e-government (Alshaher, 2021; Apleni & Smuts, 2020; Joshi & Islam, 2018). They utilize a grounded theory method, with 168 in-depth interviews among diverse stakeholders to construct a comprehensive model of e-government. Analysis involves identifying antecedents, moderators, and outcomes, applying qualitative triangulation to validate insights (Malodia et al., 2021; Nookhao & Kiattisin, 2023; Wilson & Mergel, 2022). Their findings emphasize empowered citizenship, hyper-integrated networks, and flexible, evolving system architectures, all mediated by the digital divide, economic factors, and privacy considerations (Noguerra, 2023; Odilla, 2023). This framework offers a robust contribution for implementing policy and enhancing citizen engagement with e-government systems (Goswami, 2018; Grossi et al., 2024; Manoharan et al., 2023; Mesa, 2023).

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(Amari et al., 2020) investigate the success factors in e-government with a focus on understanding implementation within specific stages of maturity, divided into low and high levels. Their research questions address how external environments, organizational characteristics, and user-focused elements interact to influence e-government adoption. The study's theoretical grounding encompasses Lee's maturity model for e-government and success factor theory, with data collected and analyzed through qualitative methods, including expert interviews and factor categorization. Findings highlight that e-government success hinges on external legislative support, technical infrastructure, and citizen trust. Key factors include political commitment, socioeconomic influences, and effective business process management, which collectively underpin successful e-government transitions.

(Kolasa et al., 2020) present a study on critical success factors (CSFs) for e-government, focusing specifically on Poland's public administration sector. Their research questions revolve around identifying and validating essential factors for successful e-government deployment. The authors utilize a Delphi method to refine CSFs through iterative expert feedback, followed by statistical analysis for reliability assessment, including Cronbach's alpha to ensure internal consistency among identified factors. This study's findings categorize success factors into organizational, technological, and citizen-centric groups, underscoring the importance of stakeholder collaboration, adequate financial resources, and citizen training and engagement. Their framework suggests that cohesive policies, combined with supportive infrastructure, are critical to the sustainable development of e-government.

Each study collectively underscores that successful e-government initiatives depend on multi-layered frameworks that address technological integration, stakeholder engagement, and adaptive policy frameworks that accommodate evolving digital and social landscapes (AlMulhim, 2023; Baeuo et al., 2016).

2. Researh Method

This study employed a quantitative research approach to examine the factors influencing the implementation of the Electronic-based Government System policy in North Lampung Regency. The research focused on a population of 600 government officials involved in policy implementation within the region. To ensure a representative sample, a random sampling technique was applied, selecting 234 respondents. This method ensured that the data collected would provide a reliable foundation for robust analysis and meaningful conclusions (Aboudahr et al., 2023; Nuh et al., 2022; Pamungkas et al., 2020).

Data were gathered through structured questionnaires specifically designed to assess key factors influencing Electronic-based Government System policy implementation (Haerofiatna & Chaidir, 2023; Krishnan et al., 2017; Manoharan et al., 2023). These instruments captured insights into the identified variables and their potential impact on policy outcomes (Nookhao & Kiattisin, 2023; Purnomo, 2020). The collected data were analyzed using SPSS 23, employing multiple linear regression as the primary analytical method. This approach enabled a detailed examination of the relationships between the independent and dependent variables. Both partial tests (t-tests) and simultaneous tests (F-tests) were conducted to provide a comprehensive and nuanced understanding of these relationships (Defrizal et al., 2015; Sehrawat & Singh, 2019).

The independent variables in this study included communication, resources, disposition, and bureaucratic structure, all hypothesized to play a critical role in the effective implementation of the Electronic-based Government System policy (Aligarh et al., 2023; Ashaye & Irani, 2019). The dependent variable was defined as the level of Electronic-based Government System policy implementation, assessed through the perceptions and experiences of the respondents (Riany, 2021; Sihotang et al., 2023). By integrating



rigorous data collection methods with advanced statistical analysis, this research offered

valuable insights into the organizational and structural factors that drive or hinder the successful implementation of Electronic-based Government System policies in North Lampung Regency (Sofyani et al., 2020).

3. Result

The results of the partial regression analysis (t-test) revealed that all independent variables—communication, resources, disposition, and bureaucratic structure—had a significant and positive influence on the implementation of the Electronic-Based Government System (SPBE) policy in Lampung Utara Regency. The simultaneous test (F-test) further validated the collective impact of these variables, demonstrating a strong correlation between them and policy implementation. These findings align with prior studies emphasizing the multidimensional nature of e-government success, where various factors interact to influence outcomes (Alshaher, 2021; Joshi & Islam, 2018; Kostiukevych et al., 2020).

- 1. Communication: Effective communication is critical for policy implementation, as it ensures the clear transmission of information among stakeholders. This finding resonates with studies highlighting the role of communication in overcoming fragmented systems and fostering understanding, ultimately enhancing the execution of policies (Noguerra, 2023; Odilla, 2023). Clear and consistent communication mitigates misunderstandings and promotes stakeholder alignment, a key driver of e-government success.
- **2. Resources:** The availability of adequate financial, human, and technological resources was found to be vital for successful policy implementation. This supports the conclusions of (Kolasa et al., 2020), who stress the significance of resource availability, including infrastructure, to enable seamless e-government operations. Without sufficient resources, even well-formulated policies risk failure, as operational needs cannot be met effectively.
- **3. Disposition:** The commitment and attitude of policy implementers play a pivotal role in achieving policy objectives. A positive disposition facilitates proactive problem-solving and adherence to policy goals, echoing (Bekele & Ago, 2020) findings on the importance of empowered and motivated implementers in driving e-government success. Disposition reflects the internal readiness and willingness of individuals, which must align with the broader goals of the SPBE framework.
- **4. Bureaucratic Structure:** A well-organized bureaucratic structure, characterized by clear roles and responsibilities, was identified as a crucial factor for smooth policy execution. This aligns with the framework proposed by (Kolasa et al., 2020), which emphasizes the importance of cohesive and adaptive structures to manage complex systems. Such structures reduce inefficiencies and promote accountability, ensuring that policy implementation progresses effectively.

Overall, the findings underscore the need for an integrated approach where these factors work collectively to achieve successful SPBE implementation. This integrated framework is consistent with studies advocating for multi-layered strategies that incorporate technological, organizational, and stakeholder considerations (AlMulhim, 2023; Wilson & Mergel, 2022). By addressing these critical factors, policymakers can overcome challenges such as fragmented systems and limited resources, ensuring sustainable development and enhanced governance through e-government initiatives.

4. Discussion

The partial regression analysis results reveal that communication, resources, disposition, and bureaucratic structure significantly and positively influence the implementation of the Electronic-Based Government System (SPBE) policy in Lampung Utara Regency. These findings highlight the interconnected nature of these variables, supported by prior studies on e-government success. Effective communication fosters alignment and reduces



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misunderstandings among stakeholders, while sufficient financial, human, and technological resources enable seamless operations. The commitment and proactive attitude of implementers (disposition) ensure adherence to policy objectives, and a well-structured bureaucracy enhances accountability and efficiency. Together, these factors underscore the importance of a multidimensional and integrated approach for SPBE success, emphasizing that sustainable e-government requires addressing organizational, technological, and stakeholder considerations holistically.

5. Conclusion

The study concludes that communication, resources, disposition, and bureaucratic structure all play significant roles in the successful implementation of SPBE policies in Lampung Utara. Policymakers should focus on improving these factors to enhance the overall performance and success of electronic-based governance. Ensuring sufficient resources, clear communication, and a well-organized bureaucratic structure are crucial st eps in optimizing the implementation of SPBE policies across regional governments.

6. References

- Aboudahr, S., Olowoselu, A., & Ganesan, S. (2023). Qualitative Analysis of Teachers Perception on Head Teacher Leadership and Administrative Roles in Schools. *International Journal of Academic Research in Business and Social Sciences*, *13*(3), 439–451. https://doi.org/10.6007/ijarbss/v13-i3/16481
- Aligarh, F., Sutopo, B., & Widarjo, W. (2023). The antecedents of cloud computing adoption and its consequences for MSMEs' performance: A model based on the Technology-Organization-Environment (TOE) framework. *Cogent Business and Management*, 10(2), 1–16. https://doi.org/10.1080/23311975.2023.2220190
- AlMulhim, A. F. (2023). The impact of administrative management and information technology on e-government success: The mediating role of knowledge management practices. *Cogent Business and Management*, 10(1), 1–19. https://doi.org/10.1080/23311975.2023.2202030
- Alshaher, A. (2021). IT capabilities as a fundamental of electronic government system success in developing countries from users perspectives. *Transforming Government: People, Process and Policy, 15*(1), 129–149. https://doi.org/10.1108/TG-05-2020-0080
- Apleni, A., & Smuts, H. (2020). An e-Government Implementation Framework: A Developing Country Case Study. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 12067 LNCS, 15–27. https://doi.org/10.1007/978-3-030-45002-1_2
- Ashaye, O. R., & Irani, Z. (2019). The role of stakeholders in the effective use of egovernment resources in public services. *International Journal of Information Management*, 49, 253–270. https://doi.org/10.1016/j.ijinfomgt.2019.05.016
- Baeuo, M. M., Rahim, N. Z. A., & Alaraibi, A. (2016). Technology Aspects of E-Government Readiness in Developing Countries: A Review of the Literature. *Computer and Information Science*, *9*(4), 1–12. https://doi.org/10.5539/cis.v9n4p1
- Bekele, W. B., & Ago, F. Y. (2020). Good Governance Practices and Challenges in Local Government of Ethiopia: The Case of Bonga Town Administration. Research in Educational Policy and Management, 2(2), 97–128. https://doi.org/10.46303/repam.2020.6
- Defrizal, D., Sucherly, Y. W., & Nidar, S. R. (2015). The Determinant Factors of Sectoral Stock Return in Bullish and Bearish Condition at Indonesia Capital Market. *International Journal of Scientific & Technology Research*, *4*(7), 209–214.



- Goswami, A. (2018). Human Resource Management and Its Importance for Today's Organizations. *Journal of Advances and Scholarly Researches in Allied Education*, 15(3), 128–135. www.ignited.in
- Grossi, D., Hahn, U., Mäs, M., Nitsche, A., Behrens, J., Boehmer, N., Brill, M., Endriss, U., Grandi, U., Haret, A., Heitzig, J., Janssens, N., Jonker, C. M., Keijzer, M. A., Kistner, A., Lackner, M., Lieben, A., Mikhaylovskaya, A., Murukannaiah, P. K., ... Van De Putte, F. (2024). Enabling the Digital Democratic Revival: A Research Program for Digital Democracy. *ArXivLabs*, 1–24. http://arxiv.org/abs/2401.16863
- Haerofiatna, H., & Chaidir, J. (2023). Electronic-based Governance System Risk Management in Serang District. *International Journal of Business and Management Review*, 11(5), 57–66. https://doi.org/10.37745/ijbmr.2013/vol11n55766
- Hutauruk, J. H. V. (2018). The Implementation of E-Government in the Context of Good Governance on Judicial Sectors in Indonesia. 1st International Conference on Indonesian Legal Studies (ICILS 2018), 260–263. https://putusan.mahkamahagung.go.id/
- Joshi, P. R., & Islam, S. (2018). E-government maturity model for sustainable E-government services from the perspective of developing countries. *Sustainability (Switzerland)*, 10(6), 1–28. https://doi.org/10.3390/su10061882
- Kolasa, I., Papaj, T., & Ziemba, E. (2020). Information systemsprojects' success in government units: The issue of information systems integration. *Procedia Computer Science*, *176*, 2274–2286. https://doi.org/10.1016/j.procs.2020.09.286
- Kostiukevych, R., Melnyk, L., Krulický, T., Kostiukevych, A., & Melnyk, L. (2020). A value-oriented approach to assessing regional economic development projects. *Journal of International Studies*, *13*(4), 155–170. https://doi.org/10.14254/2071-8330.2020/13-4/11
- Krishnan, S., Teo, T. S. H., & Lymm, J. (2017). Determinants of electronic participation and electronic government maturity: Insights from cross-country data. *International Journal of Information Management*, 37(4), 297–312. https://doi.org/10.1016/j.ijinfomgt.2017.03.002
- Malodia, S., Dhir, A., Mishra, M., & Bhatti, Z. A. (2021). Future of e-Government: An integrated conceptual framework. *Technological Forecasting and Social Change*, 173, 1–17. https://doi.org/10.1016/j.techfore.2021.121102
- Manoharan, A. P., Melitski, J., & Holzer, M. (2023). Digital Governance: An Assessment of Performance and Best Practices. *Public Organization Review*, *23*(1), 265–283. https://doi.org/10.1007/s11115-021-00584-8
- Mesa, D. (2023). Digital divide, e-government and trust in public service: The key role of education. *Frontiers in Sociology*, *8*, 1–12. https://www.worldvaluessurvey.org/wvs.jsp
- Mkonyi, F. J. (2018). Community Evaluation of Protected Areas Governance and Management Effectiveness: A Case Study of Manyara Region, Tanzania. *International Journal of Natural Resource Ecology and Management*, *3*(5), 75–88. https://doi.org/10.11648/j.ijnrem.20180305.11
- Noguerra, C. P. (2023). Ethical and Legal Challenges in Information System Development and Implementation. *International Journal of Advanced Research in Science, Communication and Technology*, *3*(1), 852–858. https://doi.org/10.48175/ijarsct-12383
- Nookhao, S., & Kiattisin, S. (2023). Achieving a successful e-government: Determinants of



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9(8),

1–21.

- behavioral intention from Thai citizens' perspective. *Heliyon*, https://doi.org/10.1016/j.heliyon.2023.e18944
- Nuh, M., Winoto, S., & Pratama, M. R. (2022). The dynamic of challenges of managing functional civil servant in Malang Regency Indonesia. *Journal of Governance*, 7(4), 822–831. https://doi.org/10.31506/jog.v7i4.16202
- Odilla, F. (2023). Bots against corruption: Exploring the benefits and limitations of Al-based anti-corruption technology. *Crime, Law and Social Change, 80*(4), 353–396. https://doi.org/10.1007/s10611-023-10091-0
- Pamungkas, L. D., Kismartini, K., & Sunu Astuti, R. (2020). The Analysis of Organizational Capacity Factors in Government Division of Regional Secretariat as A Determinant of Government Performance at Batang Regency. *Iapa Proceedings Conference*, 80–100. https://doi.org/10.30589/proceedings.2020.399
- Purnomo, A. (2020). The Role of Teachers in Instilling Student Discipline in 2013 Curriculum Based Learning. *Tekno-Pedagogi: Jurnal Teknologi Pendidikan*, 10(2). https://doi.org/10.22437/teknopedagogi/v10i2.32746
- Ramtohul, A., & Soyjaudah, K. M. S. (2016). Information security governance for e-services in southern African developing countries e-Government projects. *Journal of Science & Technology Policy Management*, 7(1), 26–42. https://doi.org/10.1108/JSTPM-04-2014-0014
- Riany, K. G. (2021). Influence of Electronic Administration on Public Service Delivery among State Agencies in Kenya. *European Journal of Business and Management Research*, 6(2), 39–43. https://doi.org/10.24018/ejbmr.2021.6.2.712
- Sehrawat, J., & Singh, M. (2019). Forensic odontological sex determination of Ajnala skeletal remains based on the statistical equations generated from the odontometrics of known teeth. *Forensic Science International: Reports*, 1, 1–11. https://doi.org/10.1016/j.fsir.2019.100044
- Sihotang, D. M., Andriqa, M. R., Alfahmi, F. N., Wahyudi, A. S., Besila, M. A. H., Yulianang, M. A., Diana, E., & Hidayanto, A. N. (2023). The moderating role of trust in government adoption e-service during Covid-19 pandemic: health belief model perspective. *International Journal of Information Technology (Singapore)*, *15*(3), 1545–1553. https://doi.org/10.1007/s41870-023-01203-z
- Sofyani, H., Riyadh, H. A., & Fahlevi, H. (2020). Improving service quality, accountability and transparency of local government: The intervening role of information technology governance. *Cogent Business and Management*, 7(1), 2–20. https://doi.org/10.1080/23311975.2020.1735690
- Wilson, C., & Mergel, I. (2022). Overcoming barriers to digital government: mapping the strategies of digital champions. *Government Information Quarterly*, 39(2), 1–13. https://doi.org/10.1016/j.qig.2022.101681