

Analisis Hambatan E-Government: Sebuah Kajian Teoritis

An Analysis of Barriers to E-government: A Theoretical Study

Dian Suluh Kusuma Dewi¹, Dwiana Binti Yulianti², Insyira Azhar Yusdiawan^{3*}

^{1,2,3}Government Science, Faculty of Social and Political Science, University of Muhammadiyah Ponorogo, Indonesia

*Email Korespondensi: insyirayusdiawanazhar@umpo.ac.id

Diterima: 01 Juni 2022 Direvisi: 15 Juni 2022 Disetujui: 30 Juni 2022

DOI: [10.35967/njip.v21i1.336](https://doi.org/10.35967/njip.v21i1.336)

Abstract: The existence of the Internet has a tremendous influence on human life in all fields. As a manifestation of improving services to the community, government agencies also use the Internet in providing services which are then known as e-government. E-government is designed as an internet-based service method that is able to provide fast, practical, and efficient services while providing transparency to the public. This article describes the implementation of e-government in government agencies with the aim of analyzing the obstacles found in the implementation of e-government. This article is library research where data collection is done by reviewing and exploring references in the form of articles, journals, books, magazines or other literature related to the topic under study. Data analysis was performed using Nvivo 12 plus. The results of this study indicate that there are three main obstacles in implementing e-government, namely: 1) understanding organizational culture; 2) linking political organization to the barriers of e-government, and 3) technological infrastructure barriers. Knowing these obstacles is expected to be an evaluation material for the government to better prepare for the implementation of e-government.

Keywords: *Analysis, Barriers, E-Government*

Abstrak: Keberadaan internet memberikan pengaruh yang luar biasa bagi kehidupan manusia di segala bidang. Sebagai perwujudan peningkatan pelayanan kepada masyarakat, instansi pemerintah juga menggunakan internet dalam memberikan pelayanan yang kemudian dikenal dengan istilah e-government. E-government didesain sebagai metode pelayanan berbasis internet yang mampu memberikan pelayanan cepat, praktis, dan efisien sekaligus memberikan transparansi kepada masyarakat. Artikel ini menggambarkan penerapan e-government pada instansi pemerintah dengan tujuan menganalisis hambatan-hambatan yang ditemukan dalam penerapan e-government. Artikel ini merupakan *study kepustakaan (Library Research)* di mana pengumpulan data dilakukan dengan mereviu dan menggali referensi baik berupa artikel, jurnal, buku, majalah ataupun literature lain yang berhubungan dengan tema yang dikaji. Analisis data dilakukan dengan menggunakan Nvivo 12 plus. Hasil penelitian ini menunjukkan bahwa ada tiga hambatan utama dalam penerapan e-government yaitu: 1) *understanding culture organization*; 2) *linking political organization to the barriers of e-government*, dan 3) *hambatan infrastruktur teknologi*. Dengan mengetahui hambatan tersebut diharapkan bisa menjadi bahan evaluasi bagi pemerintah untuk lebih mempersiapkan diri dalam penerapan e-government.

Kata kunci: *Analisis, Hambatan, E-Government*

Introduction

The development of internet technology provides wider opportunities for political, bureaucratic, and community relations. The community can be directly involved starting from the planning, implementation, and monitoring processes. As an effort to provide a more efficient government system, the government utilizes internet-based information technology (Mujali et al., 2018). E-government (e-gov) is the process of utilizing information technology that is applied to the government system, both at the central and local government levels to optimize effective,

transparent, and effective public service processes (Musfikar, 2018). The implementation of e-gov is important because it can improve the quality of government, by increasing new services, increasing citizen participation and increasing the global information infrastructure (Arief et al., 2021). Therefore, the application of e-government is able to realize transparent government services, the process can be tracked, so as to create accountable, effective, and efficient public services and can avoid elements of irregularities (Sosiawan, 2008).

In the application of e-gov, the information system in the form of a computer is not only a supporting tool in providing services to the community but also functions as a servant itself. The concept of e-gov offers the public the choice to interact with humans (government employees) or with computers (via government agency sites on the Internet). Therefore, with the implementation of e-gov, it is hoped that it will minimize practices that are detrimental to society and the country that originate from weak ethics and poor work culture (Cahyadi, 2003).

E-government, where the concept of transactions is carried out through a network of information systems, of course requires prerequisites for the successful implementation of the program. These prerequisites include skills in using information technology and the availability of facilities and facilities that support technology and information. E-Government provides a great opportunity to turn public administration into a tool for sustainable development. Governments use electronics and the Internet to serve, disseminate information, and allow more open dialogue between citizens and government (Dias, 2020a). In another concept, e-government is described as the government's reaction to citizens, sector public and private sector through communication technology to provide services efficiently and effectively and communicate with all parties interactively (Sanchez et al., 2003a). The stages of e-government have special challenges, and more obstacles will arise with progress in the advanced stages of e-government. However, while developed countries compete to provide more advanced services, developing countries can still not take advantage of e-government optimally (Savoldelli et al., 2014).

The implementation of e-government helps the government reduce costs and time. However, there are still many obstacles and limitations due to the relatively long bureaucratic and approval chain (Meijer, 2015; Sabani et al., 2019). Although in reality e-government is not an easy concept to apply, but e-government encourages government so that e-government is designed and implemented by developed countries. Its implementation is carried out in proportion to the social and cultural systems of these countries. Evaluating programs that are in accordance with socio-cultural dynamics is very important. Some developing countries still use traditional systems and are not as efficient as systems in developed countries.

Local governments in Indonesia, the phenomenon of electronic application in local governments is more to increase public satisfaction and service innovation in e-KTP services (Aldiansyah & Winarsih, 2022; Harakan et al., 2019; Mulyanto, 2019; Sudirman & Saidin, 2022). The use of ICT is also applied to community complaint service applications using the concept of implementing smart cities in Bantul Regency (Tri & Farikhah, 2019).

The key to the successful implementation of e-gov is prioritizing the concept of transactions carried out through technology and information. However, in reality, the implementation of e-government in developing at different speeds (Melin & Wihlborg, 2018a). This is due to many factors beyond the control of the government agencies that run this program. The success and failure of e-government are related to technological, human and organizational factors (Dash & Pani, 2016). For the sake of the sustainability of a healthy e-gov, the government must have a mapping related to what the future projections will look like (Mujali Al-rawahna et al., 2018). If in the future there is a large gap, then the thing that needs to be done is to reduce the gap. Thinking about the future orientation of the government can be done when designing the e-government, where the government can anticipate the various challenges and possibilities that will be faced in the future, as well as by identifying the objectives of the e-government that will be created. Meanwhile, environmental conditions that change from time to

time also have different demands from the government as a stakeholder, which makes e-government a must to be developed in accordance with existing conditions (Melin & Wihlborg, 2018b).

Furthermore, the government needs to be able to consider the development that supports the sustainability of e-government. IT development as a means and human resources with the aim of improving service quality both internally and externally, community satisfaction, process management, culture, and technology (Puspitasari & Kurniawan, 2021a). Thus, it is hoped that e-government can run effectively, efficiently and sustainably and thus optimize and prepare for various possibilities that may occur in the future. In managing e-government, the government cannot only think about aspects related to the success of e-government alone but also related to its sustainability, which is because the two are interconnected with each other (Puspitasari & Kurniawan, 2021b). In the implementation of e-gov, several obstacles were found that hinder the implementation of e-gov so that online services to the public have not been realized optimally. Therefore, it is necessary to examine more deeply the obstacles found in the implementation of e-gov as an effort to evaluate the implementation of e-gov.

Methods

This research is library research using references as a reference for collecting, analyzing and evaluating research (Wahyudin & Rahayu, 2020). The literature relevant to the theme and sub-theme of the research was selected as a review of previous research. Literature was analyzed as a data source and analyzed using Nvivo 12 plus (Ozkan, 2004; Setiawan et al., 2022). Literature research was chosen because it is permanent, easy to find and can be accounted for. The purpose of using the literature study is to provide information to the reader regarding current related research, which includes summaries, evaluations of previous research and a review carried out by the author from various sources that have been analyzed and collected via the Internet (Hariyanti & Wirapraja, 2018).

Results and Discussion

The sustainability process of E-Government can be seen from the evaluation results, especially the obstacles that have been faced so far, such as from various aspects such as culture, organizational politics, and technology infrastructure. The search for obstacles in implementing e-government in the articles that have been analyzed using Nvivo 12 plus produces several indicators of obstacles, namely organizational culture, organizational politics, and technological and infrastructure barriers.

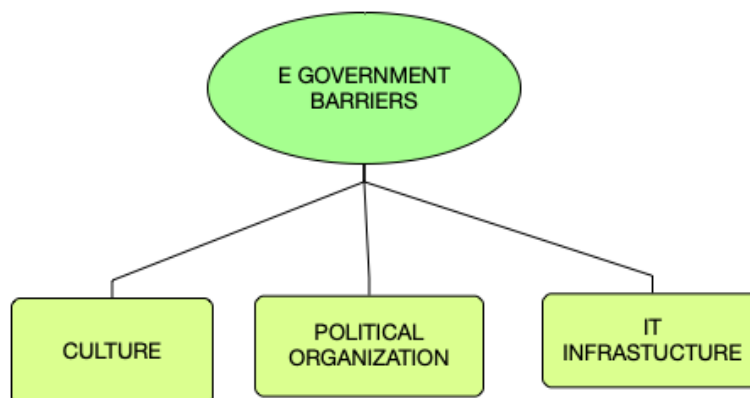


Figure 1. Concept map analysis by Nvivo 12 Plus (2022)

The discussion of e-government barriers in this article, referring to several review articles that have been carried out, can be seen in table 1.

Table 1. Barriers of E-Government and Categories (2022)

Barriers	Categories	Paper resources
Culture	National culture, red tape, culture on e-government, social structure, education, language, religion, culture society, digital divide, legal, economy, digital divide, bureaucratic culture, hierarchies in an organization	(Al-Hujran et al., 2015; Alshehri & Drew, 2010; Arief et al., 2021; Glyptis et al., 2020; Harrison et al., 2012a; Khadaroo et al., 2013; Meijer, 2015; Mujali Al-rawahna et al., 2018; Nurdin et al., 2011; Saleh et al., 2021)
Political organization	Political environments, political leadership, budget cuts, political constructs, political philosophy, political administration (financial constraints), political pressure, political commitment, political judgment, political character, political impact, political process, political leadership in decision making, and political support.	(Alshehri & Drew, 2010; Harrison et al., 2012b; Khadaroo et al., 2013; Meijer, 2015; Mujali Al-rawahna et al., 2018; Nurdin et al., 2011; Sabani et al., 2019; Saleh et al., 2021; Sanchez et al., 2003b; Savoldelli et al., 2014)
IT Infrastructure	Compatible infrastructure, network infrastructure, infrastructure facilities, Infrastructure Privacy Security, communication infrastructure, Internet broadband infrastructure, robust infrastructure organization, telecommunication infrastructure, information infrastructure, and decentralized infrastructure.	(Al-Hujran et al., 2015; Alshehri & Drew, 2010; Arief et al., 2021; Glyptis et al., 2020; Khadaroo et al., 2013; Lnes et al., 2017; Mujali Al-rawahna et al., 2018; Nurdin et al., 2011; Saleh et al., 2021; Zuiderwijk et al., 2012)

Source: Researchers Analysis Results 2022

Barriers to e-Government

The factors and obstacles that are often faced by developing countries in implementing e-gov are very diverse. In Sri Lanka, for example, Deng (2012) conducted an evaluation of e-gov that had already been implemented. Using a confirmatory factor analysis approach and structural equation modelling, Deng (2012) demonstrates that important factors for determining public value include the provision of high-quality information and services, user-orientation of those services, the effectiveness and responsiveness of public organizations, and the contribution of those organizations to environmental sustainability. One example is the Sri Lankan government (Karunasena & Deng, 2012). In addition, the quality of information, electronic service delivery, user orientation of e-government services, the efficiency of government organizations and government responsiveness are things that must be improved.

Furthermore, an evaluation of the implementation of e-gov in developing countries was carried out in Jordan. Barriers that occurred in Jordan were analyzed using PLS-structural equation modelling (SEM) at manager-level officials in the field of technology and information. From the analysis carried out, the obstacles to implementing e-gov in Jordan that were found were the quality of service that was still far from expectations, the lack of readiness of technology infrastructure, and weak planning and socialization that triggered public dissatisfaction in accepting e-government (Mujali Al-rawahna et al., 2018).

In Indonesia, the development of e-government is quite rapid. The shift in people's needs during the COVID-19 pandemic is one of the determinants of the increase in the number of technology and internet users. Community service through the website to shopping done online (Ariansyah et al., 2021). Barriers to e-government apply the concept of e-government as a country with the least e-government capacity by creating a website that aims to distribute information and services to certain segments of society. Then it expands to cover a wider segment of society (starting small and thinking big). The introduction of a step-by-step e-government development approach is expected to enable the government to allocate investment more accurately so as not to harm other sectors that require more urgent attention (Cahyadi, 2003). In particular, Ariansyah (2021) observes that the obstacles for e-commerce users are the availability of technology infrastructure at the village level and digital skills in the community. In addition, other obstacles to implementing e-gov are technology problems, lack of security and privacy, lack of resources, digital divide, legal barriers and lack of IT infrastructure (Rana et al., 2013a).

The United Nations (UN) surveyed 193 UN members, especially in developing countries, which aimed to see the implementation of e-gov for the past two decades. One of the main components in the development of e-government used in the report is the E-Government Development Index (EGDI). Research findings show that there has been a high correlation in EDGI scores in the last decade. In addition, the degree of variation in cluster membership was measured (developing countries). The research findings show that it is important to pay attention to each country's economic indicators and government corruption index in the EDGI and adjust to the development of e-government (Kabbar, 2021a). The shift of e-gov into the reality of the field that government agencies tend to be extended to interactive services and then to transactions. This is evidenced by the increasing use of email in chat rooms (an online means of communication through entered text that can be viewed on a computer screen), online forms, and government websites. Many central and local government agencies are competing to build interactive websites that provide various types of facilities for visitors (Rana et al., 2013b).

In its implementation, e-government imposed by governments in various countries has significant obstacles and challenges. The results of Meijer's (2015) research on the development of e-government in the Netherlands mapped that there are two types of cultural barriers, namely the government and the community as users. From the government's perspective, there are three main problems that become obstacles to implementing e-government, including resistance to change, the fear that innovation will damage the government's solidity, and the innovation is considered to interfere with bureaucratic culture. The existence of forms of innovation through technology is considered to have the potential to damage the balance of the established bureaucratic culture. This deficiency is motivated by the fact that it is not far from the structural obstacles that occur, such as legal constraints, and lack of finance (Meijer, 2015).

Meanwhile, cultural barriers from the community side are lack of interest in technology-based services, little trust and a negative image of the government, no perceived benefits, and resistance to technology. Meijer's analysis (2015) is corroborated by the results of research by Al-Hujran (2015) that the use of e-gov by the public depends on perceived public value. The higher the community needs the benefits of the e-gov, the higher the level of use will be. However, if the community does not feel that they have the benefits of e-gov, then the level of use will be low and even will be abandoned (Al-Hujran et al., 2015).

Barriers to e-government are not only faced with cultural problems but also organizational politics. Saleh (2021) explains that there are at least five obstacles regarding obstacles in organizational culture, namely: (a) lack of organizational planning strategies; (b) lack or absence of coordination between government agencies; (c) the lack of an anti-corruption system and a more transparent and fair system; (d) lack of control over the system; (e) lack of understanding and analysis of needs, lack of security and protection, and weak knowledge of the

Competition for e-government development shows positive results, but given the limited infrastructure and community preparedness, this trend could turn negative. The problem arises from the government's laziness in following e-government readiness indicators (Dias, 2020b; Sabani et al., 2019). The government's readiness to implement e-government measures not only the ability of employees to technology literacy, leadership commitment, or the amount of budget that can be allocated (although all three are very important). But also, the readiness of infrastructure, communication, email, and the level of technical proficiency in the community. Considering that it is an e-government development approach, an approach that can be taken in stages according to the demands of the community (e-government on-demand), where facilities and information available online are provided according to the needs and development of an advanced society (Schwester, 2009).

The various phenomena above regarding obstacles that occur culturally, organizational politics, and technological infrastructure, broadly speaking, can be summarized in the explanation of the main points as follows:

a. Understanding Culture Organization

The outcome of the adoption and implementation of e-government in the setting of government organizations is one measure of the effectiveness of government performance (Nurdin et al., 2011). According to Denison and Mishra's (1989) model, culture has characteristics and values that are connected to productivity. Adaptability, engagement, mission, and consistency are the four categories into which these cultural traits and values are categorized.

Refers to the correlating of organizational people's interests and positive identity, the latter speaks to an organization's capability to grow and change in response to demands and conditions from the outside world. It has to do with both suppleness and solidity. Organizations use the traits of consistency and mission to build stability, which is crucial for establishing effectiveness. While mission motivates workers in government organizations to advance and drive toward a mission, consistency creates standards that encourage uniformity. The degree of organizational flexibility, on the other hand, enables it to adjust to external circumstances, which will result in changes to organizational knowledge and behavior (Denison, 1989). Studies on organizational hurdles, particularly those to e-government caused by internal factors, have identified cultural components.

On the other hand, a comparative analysis was carried out to identify the cultural traits and values related to effectiveness after selecting the dimensions which impacted the execution most of all. It is clear that several researchers made comparisons between flexibility and stability. The culture of the organization maintains purpose and creates stability, consistency and dimensions of vision. More fundamentally, bureaucratic culture such as formality, uniformity, and bureaucratic hierarchy (Al-Hujran et al., 2015). They are preserving traditional ways of interacting with the community. In addition, government officials are concerned that new technologies could undermine government resilience and prominence.

b. Linking political organization to the Barriers e-Government

Barriers to e-gov can be studied and used for evaluation so that it becomes material for improvement in the future. Some of the factors involved in the barriers to e-government come from a number of different backgrounds. Various kinds of barriers to the implementation of e-gov from the aspect of political organization can be systematized into three. The three obstacles in this aspect of political organization.

- *First*, barriers to e-gov can be analyzed based on the innovation model. An important finding in the literature is that the barriers to innovation differ in different stages of the innovation process (Mumford et al., 2002).

- *Second*, obstacles can be seen from both sides, namely the government and society (Metaxiotis & Psarras, 2004). Barriers to the government are more on the character of the organization, the capacity of human resources/technicians, financial capacity and regulatory and legal issues as obstacles (Angelopoulos et al., 2010a). Lack of management and political support is also said to be a barrier to e-government (Eynon & Dutton, 2007). On the other hand, the ability of government leaders to coordinate between government and community organizations can also encourage the emergence of obstacles. Technical barriers such as availability of hardware and software, internet network, ability to maintain security and privacy (Gilbert et al., 2004).
- *Third* is the occurrence of structural and cultural barriers to e-gov. Structural barriers such as funding, technology and skills (Alomari et al., 2014). Another structural obstacle is when staff reject the concept of e-gov because of the fear that human services will be replaced by technology (Cahyadi, 2003).

c. Technological Infrastructure Barriers

The internet and computers are one of the determining factors for the success of e-gov. However, there are still many technological gaps that become obstacles in the government and society. The digital divide refers primarily to the gap between people who have and do not have Internet and computer access (Othman et al., 2020). Demonstrates that important factors for determining public value include the provision of high-quality information and services, user-orientation of those services, the effectiveness and responsiveness of public organizations, and the contribution of those organizations to environmental sustainability. One example is the Sri Lankan government (Gilbert et al., 2004). In addition, other obstacles that include the IT infrastructure are still incomplete and clearly organized. Lack of awareness of e-gov users, lack of security and privacy of users, lack of trust in the e-gov accounts, lack of comprehensive policies, legal and regulatory frameworks, lack of skilled human resources, lack of public-private cooperation/partnership, lack of training and knowledge transformation, lack of e-government transformation and resistance to change, budget and operational costs and lack of a clear strategy. These obstacles will hinder the success of the e-government program even though there are technical obstacles that have been fixed (Sanchez et al., 2003b).

The implementation of e-gov also leaves questions about the security of user privacy data, interoperability issues, IT vendors, integration of big data and Fast/Streaming, compatibility, standardization, features and platform and system architecture, Slow connection speed and unstable connectivity, Servers, installation and maintenance issues (Angelopoulos et al., 2010b; Avotra et al., 2021). Other infrastructure technology barriers that government organizations face include leadership support, resistance to change, a lack of coordination and cooperation, and financial/operational cost constraints. Governance/Government Role, Leadership, Contract Agreements, Business Processes, Policies, System Inheritance, Communication Tools, Trust Legislative structures/statutory regulations (Arief et al., 2021; Petter et al., 2013).

These studies have repeatedly discovered a beneficial connection between the technical setup and the information quality, utilization, and organizational impact. Therefore, it is impossible to foster confidence among all E-Gov players and persuade them to accept it without a solid infrastructure organization. E-government improvements and initiatives to narrow the digital divide must coexist. For this, everyone has to have more access to high-speed broadband connections, which demands a dependable, high-quality infrastructure that affects digital inclusion (Cross & Gauja, 2014; Kabbar, 2021b; Mujali Al-rawahna et al., 2018).

Next, human resources who have no interest in e-gov in developing countries are a problem in obtaining, improving and maintaining technology (Kabbar, 2021b). These barriers must-have solutions between the strategic and political levels where policies, laws and strategies are developed to promote government e-commerce. Organizations face dangerous technological, skill, cultural, and resource challenges (Manda & Backhouse, 2016).

Conclusion

Advances in technological development have become a pattern that occurs massively and is studied by various governments around the world. Demands occur globally and various pressures from leaders of a country encourage government institutions to be more innovative in using technology to make various ideas and policies that are raised based on e-government, both independently and in partnership. The problem is various e-government developments have many challenges and obstacles ranging from culture, organizational politics, and Information Technology (IT) infrastructure. Interestingly, despite experiencing various obstacles, as previously explained, the IT development agenda carried out by governments in various countries continues and even finds concrete solutions to build policies to overcome these three types of obstacles. In the end, the greater the gap between changes in IT-based public services and users, both bureaucratic human resources and people who need services. This has the potential to give two phenomena, people are forced to access technology and access the internet network or people are increasingly reluctant to use it and make people's trust decrease. Of course, this needs to be a common concern so that stakeholders begin to put aside their sectoral egos and think more about how to build policies that prioritize the community side as users.

Acknowledgment

We would like to thank those who have provided support for us so that we can complete presenting this article. We also extend our infinite gratitude to the Institute for Research and Community Service, University of Muhammadiyah Ponorogo, which has provided grants through internal research programs.

Bibliography

- Aldiansyah, M. F., & Winarsih, A. S. (2022). Inovasi Pelayanan KTP Elektronik Melalui Aplikasi Temanggung Gadem pada Masa Pandemi COVID-19. *Nakhoda: Jurnal Ilmu Pemerintahan*, 21(1), 14–30. <https://doi.org/10.35967/njip.v21i1.272>
- Al-Hujran, O., Al-Debei, M. M., Chatfield, A., & Migdadi, M. (2015). The imperative of influencing citizen attitude toward e-government adoption and use. *Computers in Human Behavior*, 53, 189–203. <https://doi.org/10.1016/j.chb.2015.06.025>
- Alomari, M. K., Sandhu, K., & Woods, P. (2014). Exploring citizen perceptions of barriers to e-government adoption in a developing country. *Transforming Government: People, Process and Policy*, 8(1), 131–150. <https://doi.org/10.1108/TG-05-2013-0013>
- Alshehri, M. A., & Drew, S. (2010). Implementation of e-Government: Advantages and Challenges. *International Conference E-Activity and Leading Technologies 2010*, 79–86.
- Angelopoulos, S., Kitsios, F., Kofakis, P., & Papadopoulos, T. (2010a). Emerging barriers in e-government implementation. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 6228 LNCS, 216–225. https://doi.org/10.1007/978-3-642-14799-9_19
- Angelopoulos, S., Kitsios, F., Kofakis, P., & Papadopoulos, T. (2010b). Emerging barriers in e-government implementation. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 6228 LNCS, 216–225. https://doi.org/10.1007/978-3-642-14799-9_19

- Ariansyah, K., Sirait, E. R. E., Nugroho, B. A., & Suryanegara, M. (2021). Drivers of and barriers to e-commerce adoption in Indonesia: Individuals' perspectives and the implications. *Telecommunications Policy*, 45(8), 102219. <https://doi.org/10.1016/j.telpol.2021.102219>
- Arief, A., Ayub Wahab, I. H., & Muhammad, M. (2021). Barriers and Challenges of e-Government Services: A Systematic Literature Review and Meta-Analyses. *IOP Conference Series: Materials Science and Engineering*, 1125(1), 012027. <https://doi.org/10.1088/1757-899x/1125/1/012027>
- Avotra, A. A. R. N., Chengang, Y., Sandra Marcelline, T. R., Asad, A., & Yingfei, Y. (2021). Examining the Impact of E-Government on Corporate Social Responsibility Performance: The Mediating Effect of Mandatory Corporate Social Responsibility Policy, Corruption, and Information and Communication Technologies Development During the COVID era. *Frontiers in Psychology*, 12(October), 1–14. <https://doi.org/10.3389/fpsyg.2021.737100>
- Cahyadi, A. (2003). E-Government: Konsep Dan Permasalahan. *Journal The WINNERS*, 1–12.
- Cross, W., & Gauja, A. (2014). *Australian Journal of Political Science Designing candidate selection methods : Exploring diversity in Australian political parties. February 2015*, 37–41. <https://doi.org/10.1080/10361146.2013.873769>
- Dash, S., & Pani, S. K. (2016). E-Governance Paradigm Using Cloud Infrastructure: Benefits and Challenges. *Procedia Computer Science*, 85(Cms), 843–855. <https://doi.org/10.1016/j.procs.2016.05.274>
- Denison, D. R. (1989). Organizational Culture and Effectiveness. *Encyclopedia of Management Theory*, 168–173. <https://doi.org/10.4135/9781452276090.n190>
- Dias, G. P. (2020a). Determinants of e-government implementation at the local level: an empirical model. *Online Information Review*, 44(7), 1307–1326. <https://doi.org/10.1108/OIR-04-2020-0148>
- Eynon, R., & Dutton, W. H. (2007). Barriers to networked governments: Evidence from Europe. *Prometheus (United Kingdom)*, 25(3), 225–242. <https://doi.org/10.1080/08109020701531361>
- Gilbert, D., Balestrini, P., & Littleboy, D. (2004). Barriers and benefits in the adoption of e-government. *International Journal of Public Sector Management*, 17(4), 286–301. <https://doi.org/10.1108/09513550410539794>
- Glyptis, L., Christofi, M., Vrontis, D., Giudice, M. del, Dimitriou, S., & Michael, P. (2020). E-Government implementation challenges in small countries: The project manager's perspective. *Technological Forecasting and Social Change*, 152(December 2019). <https://doi.org/10.1016/j.techfore.2019.119880>
- Harakan, A., Luhur Prianto, A., & Khaerah, N. (2019). Strategi Pemerintah Daerah Dalam Pengembangan Pelayanan Berbasis E-Government Di Kabupaten Muna. *NAKHODA: JURNAL ILMU PEMERINTAHAN*, 18(2), 64–78. <https://doi.org/10.35967/jipn>
- Hariyanti, N. T., & Wirapraja, A. (2018). Pengaruh Influencer Marketing Sebagai Strategi Pemasaran Digital Era Moderen (Sebuah Studi Literatur). *Jurnal Eksekutif*, 15(1), 133–146.
- Harrison, T. M., Guerrero, S., Burke, G. B., Cook, M., Cresswell, A., Helbig, N., Hrdinova, J., & Pardo, T. (2012a). Open government and e-government: Democratic challenges from a public value perspective. *Information Polity*, 17(2), 83–97. <https://doi.org/10.3233/IP-2012-0269>
- Kabbar, E. F. (2021a). A comparative analysis of the e-government development index (EGDI). *14th International Conference on ICT, Society, and Human Beings, ICT 2021, 18th International Conference on Web Based Communities and Social Media, WBC 2021 and 13th International Conference on e-Health, EH 2021 - Held at the 15th Multi-Conference on Comp*, 23–29. https://doi.org/10.33965/ict2021_2021061003

- Kabbar, E. F. (2021b). A comparative analysis of the e-government development index (EGDI). *14th International Conference on ICT, Society, and Human Beings, ICT 2021, 18th International Conference on Web Based Communities and Social Media, WBC 2021 and 13th International Conference on e-Health, EH 2021 - Held at the 15th Multi-Conference on Comp*, 23–29. https://doi.org/10.33965/ict2021_2021061003
- Karunasena, K., & Deng, H. (2012). Critical factors for evaluating the public value of e-government in Sri Lanka. *Government Information Quarterly*, 29(1), 76–84. <https://doi.org/10.1016/j.giq.2011.04.005>
- Khadaroo, I., Wong, M. S., & Abdullah, A. (2013). Barriers in local e-government partnership: Evidence from Malaysia. *Electronic Government*, 10(1), 19–33. <https://doi.org/10.1504/EG.2013.051274>
- Lnes, S., Ubacht, J., & Janssen, M. (2017). Blockchain in government: Benefits and implications of distributed ledger technology for information sharing. *Government Information Quarterly*, 34(3), 355–364. <https://doi.org/10.1016/j.giq.2017.09.007>
- Manda, M. I., & Backhouse, J. (2016). An analysis of the barriers to e-government integration, interoperability and information sharing in developing countries: a systematic review of literature. *Proceedings of ACIST, 5–6 July 2016, Accra, Ghana, September*, 43–54.
- Meijer, A. (2015). E-governance innovation: Barriers and strategies. *Government Information Quarterly*, 32(2), 198–206. <https://doi.org/10.1016/j.giq.2015.01.001>
- Melin, U., & Wihlborg, E. (2018a). Balanced and integrated e-government implementation – exploring the crossroad of public policy-making and information systems project management processes. *Transforming Government: People, Process and Policy*, 12(2), 191–208. <https://doi.org/10.1108/TG-12-2017-0080>
- Metaxiotis, K., & Psarras, J. (2004). E-government: new concept, big challenge, success stories. *Electronic Government*, 1(2), 141–151. <https://doi.org/10.1504/EG.2004.005174>
- Mujali Al-rawahna, A. S., Chen, S.-C., & Hung, C.-W. (2018). The Barriers of E-Government Success: An Empirical Study from Jordan. *International Journal of Managing Public Sector Information and Communication Technologies*, 9(2), 01–18. <https://doi.org/10.5121/ijmpict.2018.9201>
- Mulyanto, D. H. (2019). The Quality In Electronic Services Jogja City Government: In Case E-Ktp. *NAKHODA; JURNAL ILMU PEMERINTAHAN*, 18(2), 104–116. <https://doi.org/10.35967/jipn>
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *Leadership Quarterly*, 13(6), 705–750. [https://doi.org/10.1016/S1048-9843\(02\)00158-3](https://doi.org/10.1016/S1048-9843(02)00158-3)
- Musfikar, R. (2018). Kendala Dalam Implementasi E-Government Pada Pemerintah Kabupaten Pidie. *Cyberspace: Jurnal Pendidikan Teknologi Informasi*, 2(1), 48. <https://doi.org/10.22373/cs.v2i1.2746>
- Nurdin, N., Stockdale, R., & Scheepers, H. (2011). Understanding organizational barriers influencing local electronic government adoption and implementation: The electronic government implementation framework. *Journal of Theoretical and Applied Electronic Commerce Research*, 6(3), 13–27. <https://doi.org/10.4067/S0718-18762011000300003>
- Othman, M. H., Razali, R., & Nasrudin, M. F. (2020). Key Factors for E-Government towards Sustainable Development Goals. *International Journal of Advanced Science and Technology*, 29(6s), 2864–2876.
- Ozkan, B. C. (2004). *Using NVivo to Analyze Qualitative Classroom Data on Constructivist Learning Environments Using NVivo to Analyze Qualitative Classroom Data on Constructivist*. 9(4), 589–603.

- Petter, S., Delone, W., & McLean, E. R. (2013). Information systems success: The quest for the independent variables. *Journal of Management Information Systems*, 29(4), 7–62. <https://doi.org/10.2753/MIS0742-1222290401>
- Puspitasari, D. A., & Kurniawan, T. (2021a). Mitigasi Kegagalan Guna Mewujudkan Keberlanjutan E-Government. *Gorontalo Journal of Government and Political Studies*, 4(1), 104. <https://doi.org/10.32662/gjgops.v4i1.1256>
- Rana, N. P., Dwivedi, Y. K., & Williams, M. D. (2013a). Analysing challenges, barriers and CSF of egov adoption. *Transforming Government: People, Process and Policy*, 7(2), 177–198. <https://doi.org/10.1108/17506161311325350>
- Sabani, A., Deng, H., & Thai, V. (2019). Evaluating the development of E-government in Indonesia. *ACM International Conference Proceeding Series*, 254–258. <https://doi.org/10.1145/3305160.3305191>
- Saleh, S., Nakshabandi, O. A., Zeebaree, M., Ismael, G. Y., & Aqel, M. (2021). Organizational barriers which are facing electronic government implementation: The electronic government implementation framework. *Estudios de Economia Aplicada*, 39(7). <https://doi.org/10.25115/eea.v39i7.5231>
- Sanchez, a., Koh, C., Kappelman, L., & Prybutok, V. (2003a). The relationship between IT for communication and e-government barriers. *AMCIS 2003 Proceedings*, 835–844.
- Savoldelli, A., Codagnone, C., & Misuraca, G. (2014). Understanding the e-government paradox: Learning from literature and practice on barriers to adoption. *Government Information Quarterly*, 31(SUPPL.1), S63–S71. <https://doi.org/10.1016/j.giq.2014.01.008>
- Schwester, R. (2009). Examining the Barriers to e-Government Adoption. *Electronic Journal of E-Government*, 7(1), 113–122.
- Setiawan, R. E. B., Nurmandi, A., Muallidin, I., Kurniawan, D., & Salahudin. (2022). Technology for Governance: Comparison of Disaster Information Mitigation of COVID-19 in Jakarta and West Java. In *Lecture Notes in Networks and Systems* (Vol. 319, Issue September 2021). Springer International Publishing. https://doi.org/10.1007/978-3-030-85540-6_17
- Sosiawan, E. A. (2008). Tantangan Dan Hambatan Dalam Implementasi E-Government Di Indonesia. *Seminar Nasional Informatika, 2008(semnasIF)*, 99–108.
- Sudirman, F. A., & Saidin, S. (2022). Pemerintahan Berbasis Elektronik (E-Government) dan Pembangunan Berkelanjutan: Reviu Literatur Sistematis. *Nakhoda: Jurnal Ilmu Pemerintahan*, 21(1), 44–58. <https://doi.org/10.35967/njip.v21i1.269>
- Tri, M., & Farikhah, R. (2019). Implementation Of Smart Governance Concept Policy In Bantul Regency. *NAKHODA: JURNAL ILMU PEMERINTAHAN*, 18(2), 129–137. <https://doi.org/10.35967/jipn>
- Wahyudin, Y., & Rahayu, D. N. (2020). Analisis Metode Pengembangan Sistem Informasi Berbasis Website: A Literatur Review. *Jurnal Interkom: Jurnal Publikasi Ilmiah Bidang Teknologi Informasi Dan Komunikasi*, 15(3), 26–40. <https://doi.org/10.35969/interkom.v15i3.74>
- Zuiderwijk, A., Janssen, M., Choenni, S., Meijer, R., & Alibaks, R. S. (2012). Socio-technical Impediments of Open Data. *Electronic Journal of E-Government*, 10(2), 156–172. <https://doi.org/10.1641/b570402?ref=search-gateway:885882d1830675b0f27af0760faeaf8>