



Implementation of E-Government in Public Governance Services in Sidoarjo Regency

Nur Isnaini Mulyadiana¹

¹ Public Financial Accounting Study Program, Faculty of Economic and Business Universitas Terbuka, Indonesia

*corresponding author e-mail : 043487586@ecampus.ut.ac.id¹

Article Info

Keywords:

E-government;
Public service;
Information technology;
Sidoarjo Regency;
Digital application

DOI: 10.33830/jipa.v2i1.12772

Abstract

This study aims to describe the implementation of E-government in public services in Sidoarjo Regency. The background of this research is the importance of utilizing information technology to improve the effectiveness, efficiency, and transparency of government services to the public. This research uses a descriptive qualitative method with a literature review approach as the primary data source. Data were obtained through the analysis of documents, official government reports, scientific journals, and relevant websites. The results show that Sidoarjo Regency has developed various digital applications such as SIPRAJA for regional tax services, PDS-Pajak Daerah Sidoarjo, M-Bonk for road damage complaints, and SIPADES for village asset management. The implementation of E-government also includes population information systems (SIK), public complaint services (Lapor!), and personnel management systems (SIMPEG). The impact of E-government implementation includes improved accessibility and transparency of public services as well as increased efficiency of government officials. However, challenges remain, such as the lack of integration between systems and the need to improve digital literacy among the public. With supporting regional policies, the implementation of E-government in Sidoarjo reflects a strong commitment from the local government to realize good and modern governance.

1. Introduction

The rapid development of information and communication technology in the current digital era has brought fundamental changes in various aspects of people's lives, including in the implementation of government and public services. (Scott, 2020) *Electronic Government* or better known as *E-government* has become a new paradigm in modern governance that integrates digital technology to improve the efficiency, transparency, and accountability of public services. In Indonesia, the implementation of (Kusumaningsih, 2025) *E-government* has become a strategic priority of the government as part of its efforts to reform bureaucracy and modernize public administration. Sidoarjo Regency as one of the regions with a high level of economic and demographic growth in East Java, faces a big challenge in providing quality public services to its increasingly heterogeneous people and has high expectations for the quality of government services. (Andayani et al., 2024)

Sidoarjo Regency with an area of 634.89 km² and a population of around 2.3 million people is one of the most populous districts in East Java that has experienced rapid growth in the

industrial, trade, and service sectors. The strategic position of Sidoarjo Regency, which is directly adjacent to the city of Surabaya as the capital of East Java Province, makes it a buffer area that experiences very high development dynamics. The phenomenon of urbanization and industrialization that has occurred in Sidoarjo Regency has resulted in an increase in the community's need for fast, easy, and quality public services. The complexity of the problems faced in the implementation of public services is increasing along with the increasing public demands for transparency, accountability, and effectiveness of local government performance. This condition requires the Sidoarjo Regency Government to innovate and transform its public service system through the use of information and communication technology.

The implementation of *E-government* in Sidoarjo Regency has started since the early 2010s with the development of various information systems and digital applications that aim to facilitate public access to public services. The Sidoarjo Regency Government has launched various digital platforms such as the official website of the local government, personnel management information system, regional financial information system, and various online public service applications. One of the innovations that is quite prominent is the development of (Alhadi, 2022) the "*Sidoarjo Smart Service*" application which integrates various types of public services in one digital platform, ranging from the management of population documents, business licensing, to health services. This phenomenon of digitization of public services shows the commitment of local governments in responding to technological developments and the community's need for more efficient and accessible services. (Sakir et al., 2024)

The implementation of *E-government* in public governance services in Sidoarjo Regency has shown various significant positive impacts, especially in terms of increasing the efficiency and effectiveness of services. Through the online service system, people no longer need to queue long at government offices to take care of various administrative needs, because most processes can be done digitally from home or work. Data from the Sidoarjo Regency Communication and Information Office shows that since the implementation of the online service system, the processing time for population documents such as ID cards, family cards, and birth certificates has decreased from an average of 7-14 days to 1-3 working days. In addition, the level of public satisfaction with public services has also increased significantly, with the community satisfaction index (IKM) score reaching 85.6% in 2023, an increase from 72.3% in 2019 before the comprehensive implementation of the digital system. (Sakir et al., 2024)

Digital transformation in public services in Sidoarjo Regency has also contributed to increasing transparency and accountability in government administration. Through a transparency portal that can be accessed by the public, various important information such as regional budgets, development programs, and local government performance can be accessed in real-time by the public. An integrated regional financial information system has allowed monitoring and evaluation of the use of the public budget more accurately and transparently. This phenomenon has increased public participation in government performance supervision and encouraged the creation of better good governance. Data from the East Java Ombudsman shows that the number of public complaints related to maladministration in Sidoarjo Regency has decreased by 35% since the implementation of the (Isniaty & Putra, 2024) (Naufalian et al., 2024) *E-government* system, which indicates an improvement in the quality of services and governance.

Nevertheless, the implementation of *E-government* in Sidoarjo Regency still faces various challenges and obstacles that are quite significant. One of the main challenges is the digital divide that still occurs in society, especially among the elderly and people with low levels of education who experience difficulties in accessing and using digital services. A survey conducted by the Central Statistics Agency of Sidoarjo Regency shows that around 23% of the population over 50 years old still have difficulties in accessing *E-government* services, while 18% of people in rural areas do not have adequate internet access. This phenomenon of digital divide has the potential to create gaps in access to public services and can cause injustice for certain groups of people. In

addition, data security and privacy issues are also a serious concern, considering the increasing cases of *cybercrime* and data leaks in various government agencies (Parapat et al., 2024)

The human resource aspect is also a critical factor in the successful implementation of *E-government* in Sidoarjo Regency. Although various training and capacity building programs have been carried out for state civil servants, there is still a significant competency gap in the mastery of information technology among local government employees. Data from the Sidoarjo Regency Regional Civil Service Agency shows that only 62% of employees have adequate IT operational skills, while for the managerial level, the percentage drops to 45%. This phenomenon has an impact on the quality of the implementation of (Noor, 2022) *the E-government* system and the effectiveness of the use of technology in public services. Resistance to change also still occurs in some work units, where some employees are still more comfortable with manual systems and are reluctant to adapt to the new digital system. (Septian&Kriswibowo, 2024)

The information and communication technology infrastructure that supports the implementation of *E-government* in Sidoarjo Regency also still needs further development and refinement. Although adequate data centers and communication networks have been built, there are still problems with system stability and limited server capacity, especially during peak hours or when there is a surge in user access. The phenomenon of system downtime that still often occurs is the main complaint of the digital service user community, with an average downtime of 2-3 hours per month which has an impact on public service disruptions. Integration between systems that is not optimal is also an obstacle, where various applications and information systems developed by different work units have not been able to communicate seamlessly, so people still have to access multiple platforms to get comprehensive services. (Wiyanto et al., 2023) (Alhadi, 2022)

In terms of budget and financial sustainability, the implementation of *E-government* in Sidoarjo Regency also faces challenges that are not easy. Although the initial investment for the development of technology systems and infrastructure has been made quite largely, namely around IDR 45 billion in the 2019-2023 period, operational costs and ongoing system maintenance are still a significant burden on the APBD. The phenomenon of dependence on external technology vendors is also a problem, where most *E-government* systems are developed and managed by third parties with costs that continue to increase every year. This condition has the potential to create unsustainability of *the E-government program* if it is not managed properly, especially in the face of regional budget limitations and prioritization of development in other sectors that are also urgent. (Fatina Ardelia et al., 2023)

A number of previous studies have examined the implementation of *E-government* in improving the quality of public services in various regions in Indonesia. Research by shows that Juliarso (2019) *E-government* is able to improve the efficiency of public services in Ciamis Regency through the integration of web-based information systems. Meanwhile, a study from revealed that the use of public service applications in the city of Surabaya has a positive impact on increasing public satisfaction and bureaucratic transparency. Research in Merauke Regency also highlights the role of Rizaldy et al. ,(2024) Enala et al.,(2024) *E-government* in accelerating the process of handling administrative documents. Furthermore, the study emphasizes the importance of human resource training in supporting the successful implementation of digital systems in local governments. The research adds that infrastructure support and commitment of regional leaders are key factors in overcoming barriers to digitization of public services. These findings provide a strong foundation that the implementation Putri &Reviandani, 2023) Cahyarini (2021) *of E-government* can have a significant impact on the effectiveness of public services if supported by adequate technical aspects, human resources, and policies.

Based on the phenomena and conditions described above, the formulation of the problem in this study is: How effective is the implementation of *E-government* in improving the quality of public governance services in Sidoarjo Regency, and what factors are supporting and inhibiting the implementation of *E-government* aforementioned? The formulation of this problem is

important to study considering the complexity of the problems faced in the digital transformation of public services, ranging from technical aspects, human resources, infrastructure, to the socio-economic aspects of the community. This research is expected to provide a comprehensive overview of the existing conditions of *E-government* implementation in Sidoarjo Regency, identify best practices that have been successfully implemented, and formulate strategies and recommendations for optimizing the use of information technology in public services that are more effective, efficient, and sustainable in the future.

Literature Review

E-government

E-government or electronic government is a concept that integrates information and communication technology (ICT) into the process of government administration to improve the quality of public services, transparency, and administrative efficiency. With the implementation of (Alhadi, 2022) *E-government*, various government services that previously required direct face-to-face interaction between the government and the community can be carried out digitally through the internet or other electronic platforms. This allows citizens to access public services such as document creation, tax payments, permit applications, and communication with government officials faster, easier, and without time or location restrictions. In addition, *E-government* also assists the government in managing data and information in an integrated manner so that the decision-making process becomes more effective and accurate (Goyena, 2019).

The implementation of *E-government* has a significant positive impact on the progress of a country, especially in terms of increasing public participation and transparency in the administration of government. Through (Septian&Kriswibowo, 2024) *E-government*, the government can provide various important information openly, so that it is easier for the public to supervise and control the performance of the government. This contributes to reducing the potential for corruption and increasing accountability. In addition, (Sabino, 2019) *E-government* is also able to reduce operational costs and service time which have often been obstacles in the interaction between the government and the community. With a computerized and automated system, the administrative process becomes faster, thus being able to create responsive and professional public services. Overall, (Febriyanah et al., 2024) *E-government* is a very important government modernization effort in the face of the current era of digitalization and globalization.

One relevant theory is the *Technology Acceptance Model* (TAM) introduced by Davis (1989) in . This theory explains that the acceptance and use of technology by individuals is greatly influenced by two main factors, namely (Musa et al., 2024) *perceived usefulness* and *perceived ease of use*. In the context of *E-government*, TAM can be used to understand how public perception of the ease and benefits of using government digital services affects the level of participation and adoption of the technology. If people feel that the *E-government* system makes it easier for them to access public services efficiently, as well as provide real benefits such as time and cost savings, then they are more likely to accept and use these services in a sustainable manner. Thus, TAM becomes a theoretical framework that can explain the extent to which the successful implementation of *E-government* is influenced by users' perception of the digital system provided by the government. This theory can also be used to analyze the results of research simultaneously and continuously, especially in looking at the relationship between the effectiveness of electronic-based public services and the community's response to digital innovations carried out by government agencies.

Public Governance

Public governance is a framework and process used by governments and public institutions in managing resources, making policies, and providing services to the community in an effective, transparent, and accountable manner. Public governance includes decision-making, policy

implementation, and supervisory mechanisms that aim to achieve the goals of community development and welfare. This concept emphasizes the importance of information disclosure, public participation, and responsibility in every government action so that public services run well and in accordance with public expectations. With good governance, the government can ensure that all administrative and policy processes are carried out efficiently, avoid corrupt practices, and maintain public trust in public institutions. (Anshori, 2020) (Abdussamad et al., 2024) (Muanifah et al., 2023)

In addition, public governance also plays a role in creating synergy between various parties, both government, private, and civil society, so that resource management and service delivery can take place collaboratively and sustainably. An effective governance system encourages innovation and continuous improvement in the bureaucracy, so that public services can meet the increasingly complex and dynamic needs of society. Through the application of good governance principles, such as transparency, accountability, participation, and (Febriyantoro et al., 2019) *the rule of law*, the government can improve the quality of public services and support equitable and inclusive development. Thus, public governance is not only about administrative management, but also about building a relationship of trust between the government and the community in order to achieve common goals. (Fabiola et al., 2024)

To strengthen the study of public governance, one of the theories that can be used as a foundation is *Good Governance Theory*. This theory emphasizes that good governance must meet principles such as participation, accountability, transparency, effectiveness, efficiency, responsiveness, and law enforcement. In the framework of public governance, this theory explains that quality public services can only be achieved if the government involves the community in the decision-making process, provides open access to information, and is responsible for the policies taken. By applying the principles of (Wirawan & Tjenreng, 2025) *good governance*, the government can build a system that is not only administrative, but also ethical and oriented towards the public interest. This theory is also relevant for analyzing the results in public governance research, as it provides a benchmark for the extent to which good governance principles have been implemented and have an impact on improving the quality of services to the community. Therefore, *Good Governance Theory* plays an important role as a theoretical foundation that is able to bridge the concept of ideal governance and real practice in public administration.

2. Research Method

This study uses a descriptive qualitative method that aims to describe systematically, factually, and accurately the implementation of E-government in public services in Sidoarjo Regency. The data used in this study is entirely derived from library research, namely through searching various relevant written sources such as books, scientific journals, official government reports, mass media articles, policy documents, and information from the official websites of related government agencies. The data collection technique is carried out by studying and analyzing these documents in depth to obtain a comprehensive understanding of the implementation of E-government. Data analysis is carried out through the stages of collection, reduction, data presentation, and conclusion drawn, by ensuring the validity of data through cross-checking between library sources (triangulation of library sources) to obtain valid and reliable information.

3. Results and Discussions

Implementation of E-government in Sidoarjo Regency

The implementation of E-government in Sidoarjo Regency is one of the strategic steps of the local government in improving the quality of public services through the use of information and communication technology. The main goal of the implementation (Irianto et al., 2022) of E-

government is to create a government that is more efficient, transparent, and responsive to the needs of the community. The Sidoarjo Regency Government is committed to accelerating the digitalization of services, as stated in various regional regulations and work programs oriented towards digital transformation. This is in line with national instructions through Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE). In the local context, local governments translate these policies through various applications and information systems that support the process of government administration and services to the community. (El-Haq, 2022)

One of the leading applications developed by the Sidoarjo Regency Government is SIPRAJA (Sidoarjo Regional Tax Information System). This application is designed to provide convenience to the public, especially taxpayers, in accessing tax services online. With SIPRAJA, people can check, pay, and report regional taxes without having to come directly to the service office. This not only improves the efficiency of public services, but also provides convenience and time flexibility for users. SIPRAJA has made a significant contribution to increasing regional revenue, as it encourages the level of community tax compliance through easy access to information. (El-Haq, 2022)

In addition to SIPRAJA, the government is also developing the PDS (Sidoarjo Regional Tax) application which is integrated with the Regional Tax Service Agency (BPPD). This application simplifies the tax administration process, starting from registration, data verification, to the issuance of a Tax Determination Letter (SKP). With PDS, transparency in regional tax management increases because all processes are recorded digitally and can be audited in real-time. The existence of this application also reduces the potential for illegal levies because all transactions are carried out systematically through an encrypted and verified system. PDS is a tangible proof of how *E-government* can reduce slow bureaucracy and increase administrative effectiveness. (Nizar & Rakhmawati, 2022)

In addition to SIPRAJA, the government is also developing the PDS (Sidoarjo Regional Tax) application which is integrated with the Regional Tax Service Agency (BPPD). This application simplifies the tax administration process, starting from registration, data verification, to the issuance of a Tax Determination Letter (SKP). With PDS, transparency in regional tax management increases because all processes are recorded digitally and can be audited in real-time. The existence of this application also reduces the potential for illegal levies because all transactions are carried out systematically through an encrypted and verified system. PDS is clear evidence of how (N. H. Putri & Soesiantoro, 2023) *E-government* can reduce slow bureaucracy and increase administrative effectiveness.

On the scale of village government, the Sidoarjo Regency Government also implements *E-government* through the SIPADES (Village Asset Management Information System) application. This application is used by village officials to record and manage all assets owned by the village digitally. SIPADES helps create transparency and accountability in asset management, thereby preventing misuse or loss of asset data. The implementation of SIPADES has encouraged many villages in Sidoarjo to carry out administrative reforms, including in terms of asset reporting to the central and regional governments. With this digitalization, asset management becomes more orderly, efficient, and can be monitored by various parties, including auditors and inspectorates. (Sholicha & Oktariyanda, 2023) (Wiyanto et al., 2023)

In addition to these applications, the implementation of *E-government* in Sidoarjo Regency also includes the use of various information systems such as SIAK (Population Administration Information System) managed by the Population and Civil Registration Office. Through SIAK, people can take care of population documents such as ID cards, Family Cards, and Birth Certificates online. This is very helpful, especially during the COVID-19 pandemic, where people's mobility is limited. The use of SIAK allows the administrative process to be faster and more efficient, as well as reducing the potential for long queues at service offices. With this system,

population data is also integrated nationally so that it makes it easier to validate and report data. (Irianto et al., 2022)

In addition to the public service system, the Sidoarjo Regency Government also implements *E-government* in internal government governance. One of them is the use of SIMPEG (Personnel Management Information System) which allows personnel administration processes such as performance assessments, mutations, and promotions to be carried out digitally. With SIMPEG, the data-driven decision-making process can be done faster because personnel information is already electronically documented. This system also simplifies the process of evaluating the performance of ASN because performance indicators are stored in a database that can be accessed by direct superiors and supervisory agencies. This is a positive step in realizing a professional and accountable bureaucracy. (Bramasta et al., 2022)

However, the implementation of *E-government* in Sidoarjo Regency still faces several challenges. One of the main obstacles is the lack of integration between systems which leads to data duplication and missynchronization of information between agencies. Some applications are still *stand-alone* with no direct connection to a centralized parent database. This makes it difficult to conduct thorough monitoring and evaluation. In addition, there are still technical obstacles such as limited internet networks in some areas, low digital literacy among some village officials, and lack of continuous training for system users. Therefore, efforts to improve digital infrastructure and increase human resource capacity in a sustainable manner are needed so that the implementation of (Fatina Ardelia et al., 2023) *E-government* can run optimally. (Riyadi & Supriyanto, 2023)

From the regulatory aspect, the Sidoarjo Regency Government has also issued several policies to support the implementation of *E-government*. One of them is the Sidoarjo Regent Regulation Number 23 of 2017 concerning Amendments to Regent Regulation Number 80 of 2016 concerning the Implementation of Regional Government Information Systems. This regulation regulates the governance of information systems, the authority of implementing agencies, and operational standards for procedures for using government applications. The presence of this regulation is a legal umbrella for all regional apparatus in developing and implementing information technology in its services. With a clear legal basis, the digital transformation process can be more directed and have a strong foundation in its implementation. (Salsabila & Hadiyan, 2024)

Overall, the implementation of *E-government* in Sidoarjo Regency shows significant progress in realizing transparent, accountable, and technology-based governance. Various applications such as SIPRAJA, PDS, M-Bonk, SIPADES, to SIAK and SIMPEG prove that local governments are committed to providing better public services to the community. Although still faced with a number of challenges, the steps that have been taken show a positive direction towards effective bureaucratic digitalization. In the future, it is hoped that there will be better system integration, regular training for state civil servants, and active involvement of the community in using digital services so that the benefits of *E-government* can be felt to the maximum by all levels of society in Sidoarjo Regency.

The Impact of the Implementation of *E-government* in Sidoarjo Regency

The implementation of *E-government* in Sidoarjo Regency has brought significant transformations in governance, especially in terms of transparency, public participation, and improving the quality of human resources.

a. Increased Transparency and Accountability

With the implementation of the *E-government* system, transparency in the government administration process has increased significantly. Integrated digital services allow for automatic and permanent recording of data, so government activities can be audited and

tracked in *real-time* (Wiyanto et al., 2023). The existence of applications such as SIPRAJA and PDS, for example, records transactions electronically and reduces the possibility of abuse of authority, corrupt practices, and illegal levies. This not only creates a cleaner and more orderly system, but also strengthens public trust in the integrity of local government. (Alhadi, 2022)

In addition, the accountability of the performance of government apparatus becomes more measurable because all processes and work results can be monitored transparently. Financial reports, budget usage, and the implementation of public programs can be accessed by the public, both through official government websites and other supporting applications. The public has the space to monitor and evaluate government performance based on publicly available data. This condition creates a government system that is more open to criticism and input, while encouraging a more responsible work culture among the country's civil servants (Goyena, 2019) (Manalu et al., 2024).

b. Increased Community Participation

E-government provides a wider space for community involvement in the development process and public services. Through applications such as M-Bonk and the Lapor! platform, residents can directly report problems they face in the surrounding environment, such as damaged infrastructure, inadequate public services, or other social issues. This participation is not only passive as a recipient of services, but also active as a contributor of information and a participant in the improvement of services. (Wiyanto et al., 2023)

In addition, the digitalization of government creates faster and more responsive two-way communication between the government and the public. The government not only conveys information in one direction, but also accepts the aspirations of the community directly and quickly. Through (Kartika & Iskandar, 2021) this digital platform, public participation becomes more accessible to all groups, including the younger generation who are more familiar with technology. As a result, the spirit of mutual cooperation in the implementation of government has grown in a more modern form, namely digital mutual cooperation, which encourages regional development to be more inclusive and oriented to the needs of the community.

c. Increase the effectiveness of HR Performance

One of the important impacts of the implementation of *E-government* is to increase the effectiveness of the performance of the state civil apparatus through the use of information technology. With a system such as SIMPEG (Personnel Management Information System), employee data management becomes more structured and accurate. The personnel administration process, such as position promotions, mutations, and performance appraisals can be carried out objectively based on digitally recorded data. This not only speeds up bureaucratic processes, but also encourages a more professional and efficient work culture. (Ilham, 2022) (Mariano, 2019)

On the other hand, adaptation to digital systems forces the apparatus to improve their digital competence and literacy. The Sidoarjo Regency Government actively encourages training and capacity development of human resources to be able to operate the digital system optimally. With adequate technological skills, civil servants can provide public services that are more responsive, accurate, and according to the needs of the community. This creates a modern, adaptive government ecosystem that is ready to face the challenges of the digital age in a sustainable manner. (Wiyanto et al., 2023)

Supporting and Inhibiting Factors for the Implementation of *E-government* in Sidoarjo Regency

The implementation of *E-government* in Sidoarjo Regency cannot be separated from various factors that affect its success. The two main factors that are highlighted are the competence of

human resources and the digital literacy gap among the public and government apparatus. These two factors play a dual role, as both a driver and an obstacle in the process of government digitalization.

a. Human Resource Competencies

The high competence of some state civil servants (ASN) within the Sidoarjo Regency Government is one of the keys to the successful implementation of *E-government*. Civil servants who have the ability to operate information technology can manage digital service systems more effectively and efficiently. Regular trainings also encourage the improvement of knowledge and technical skills in the management of applications such as SIMPEG, SIPRAJA, and other digital platforms. With adequate competence, the work process becomes faster, more accurate, and more standardized, so that the quality of public services is improved. (Wiyanto et al., 2023) (Kartika & Iskandar, 2021)

However, not all apparatus have the same level of competence. It is still found that civil servants, especially in rural areas or work units who are not familiar with digital systems, have difficulties in adapting. The lack of equitable and continuous technical training leads to a skills gap in the body of the bureaucracy. As a result, the use of digital systems is not optimal and still requires manual assistance, which ultimately hinders the smooth running of digital public services. This shows that strengthening human resource capacity must continue to be a priority so that the implementation of E-government is not unequal between regions. (Goyena, 2019)

b. Digital Literacy Gap

The rapid development of information technology in the urban area of Sidoarjo is a factor that supports the acceleration of service digitalization. People who are used to using smartphones, social media, and digital applications tend to adapt to *E-government* services more quickly. Digital education through social media, public campaigns, and mentoring also helps increase public understanding of the benefits of digital services. This has an impact on increasing participation and efficiency in the use of public services online. (Sakir et al., 2024). On the other hand, there is still a digital literacy gap in some circles of society, especially in suburban areas or elderly groups who are not used to using technology. The lack of access to digital devices and the internet also exacerbates this condition. As a result, some residents are unable to take full advantage of digital services and still rely on conventional methods. This is a big challenge that must be overcome by local governments by providing inclusive technology facilities and reaching all levels of society, including through digital literacy programs at the village level (Naufalian et al., 2024).

Discussion

The results of the research on the implementation of *E-government* in Sidoarjo Regency show a strong connection with the theory of *Good Governance*, which emphasizes the principles of transparency, accountability, public participation, and bureaucratic efficiency. This theory explains that the use of information technology in governance can strengthen the supervisory system, increase community involvement, and accelerate public services. This is reflected in various applications such as SIPRAJA, PDS, SIPADES, and SIMPEG, which clearly support the implementation of these principles through digital recording, online services, and information disclosure to the public. (Parapat et al., 2024)

In addition, Rogers' innovation diffusion theory approach is also relevant to explain how E-government technology is accepted and adopted by local governments and communities. The process of adopting technologies such as SIAK and M-Bonk describes the stages of innovation ranging from introduction, implementation, to evaluation of success influenced by infrastructure readiness, user competence, and regulatory support. The obstacles faced such as the integration of the system that has not been optimal and the low digital literacy of some apparatus show that the

success of technology diffusion requires a sustainable adaptation strategy. Thus, the results of the discussion are in line with the theoretical framework that underlies the importance of synergy between technology, human resources, and policies in building an effective digital governance system. (Parapat et al., 2024) (Haris, 2023)

4. Conclusions

Based on the results of the literature review that has been carried out, it can be concluded that the implementation of E-government in Sidoarjo Regency shows significant progress in improving the quality of public services. Various digital applications such as SIPRAJA, PDS-Pajak Daerah Sidoarjo, M-Bonk, and SIPADES have been implemented to support efficiency, transparency, and accessibility of services to the community. This implementation reflects the commitment of local governments in utilizing information technology to realize better governance. Although there are still a number of challenges such as system integration and data synchronization, in general E-government in Sidoarjo has had a positive impact on the effectiveness of public services and is expected to continue to develop sustainably. The implications of this study show that the use of information technology through E-government contributes significantly to improving the quality of governance and public services at the regional level. Therefore, local governments need to continue to strengthen digital infrastructure, increase technological literacy for apparatus, and encourage public participation in the use of digital services. For further research, it is suggested to focus on evaluating the level of public satisfaction with E-government services as well as an in-depth analysis of factors inhibiting system integration in order to provide more specific and applicable policy recommendations.

References

- Abdussamad, J., Sakir, M., &Dunggio, S. (2024). Tata Kelola Pemerintahan Yang Baik Dalam Pelayanan Publik Di Kantor Lurah Wongkaditi Timur Kecamatan Kota Utara. *Publik: JurnalManajemenSumber Daya Manusia, Administrasi Dan Pelayanan Publik*, 11(1). <https://doi.org/10.37606/Publik.V11i1.1132>
- Adha, L. A. (2020). Digitalisasi Industri Dan PengaruhnyaTerhadapKetenagakerjaan Dan HubunganKerja Di Indonesia. *Journal Kompilasi Hukum*, 5(2), 267–298. <https://doi.org/10.29303/Jkh.V5i2.49>.
- Alhadi, B. I. (2022). SistemInformasiManajemen (Sim) Sebagai Sarana Pencapaian EGovernment. *Jurnal Stie Semarang*, 14(2).
- Andayani, W., Dahlia, D., Eka Putrianti, OktavimaWisdaningrum, Panji Putranto, & Yesika Yanuarisa. (2024). Penguatan Good Governance: PengalamanPenerapan Electronic Government Pemerintah Daerah Di Indonesia. *JurnalAktiva : Riset Akuntansi DanKeuangan*, 6(2), 116–131. <https://doi.org/10.52005/Aktiva.V6i2.240>
- Anshori, M. F. (2020). Orientasi Indonesia Dalam PertentanganPrinsip Tata Kelola Internet Antarnegara. *Researchgate.Net*, November 2019.
- Bramasta, A., Farhandi, A. Y., &Amrozi, Y. (2022). AnalisisPenerimaan Masyarakat Pada Website Pelayanan Via Online Dukcapil (Plavon) KabupatenSidoarjo. *JurnalIlmiah Rekayasa Dan Manajemen Sistem Informasi*, 8(1). <https://doi.org/10.24014/Rmsi.V8i1.15739>.
- Cahyarini, F. D. (2021). Implementasi Digital Leadership Dalam PengembanganKompetensi Digital Pada Pelayanan Publik. *Jurnal Studi Komunikasi Dan Media*, 25(1), 47. <https://doi.org/10.31445/Jskm.2021.3780>.
- El-Haq, I. M. (2022). PenerapanTeknologiInformasi Dalam Birokrasi Publik Di Kantor Desa Kebonagung. *Praja Observer: JurnalPenelitianAdministrasi Publik*, 2(04).

- Enala, S. H., Syahrudin, S., & Haris, U. (2024). Efektivitas Hak-Hak Warga Negara Dalam Sistem Administrasi Publik: Studi Kasus Pada Pelayanan Publik Di Kabupaten Merauke. *Papsel Journal Of Humanities And Policy*, 1(3), 235–246. <https://doi.org/10.63185/Pjhp.V1i3.57>.
- Fabiola, A. F., Derry Wanta, & Noviantoro, R. (2024). Pengaruh Pengungkapan Lingkungan, Sosial Dan Tata Kelola (Lst) Terhadap Kinerja Keuangan (Studi Empiris Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Periode 2018-2021). *Journal Of Management And Innovation Entrepreneurship (Jmie)*, 1(2). <https://doi.org/10.59407/Jmie.V1i2.425>.
- Fatina Ardelia, Wulan Sulistia Anjany, Aldira Lindawati, & Abdul Rahman. (2023). Penerapan E-Government Melalui Siadek Di Subbagian Bina Mental Spiritual Sekretariat Daerah Kota Tangerang Selatan. *Journal Of Research And Development On Public Policy*, 2(1). <https://doi.org/10.58684/Jarvic.V2i1.32>.
- Febriyanah, F., Yulyana, E., & Atthahara, H. (2024). Studi Komparasi: Penerapan E-Government Di Kota Bandung Dan Yogyakarta. *Jurnal Ilmiah Muqoddimah : Jurnal Ilmu Sosial, Politik, Dan Humaniora*, 8(1). <https://doi.org/10.31604/Jim.V8i1.2024.200-209>.
- Febriyantoro, M. T., Harris, I., Sundiman, D., Pradana, M. R., & Lestari, E. (2019). Pelatihan Kewirausahaan Dan Peningkatan Kualitas Manajemen Dan Tata Kelola Keuangan Bagi Pelaku Ukm Di Lingkungan Pkk Tiban Global Batam. *Jurnal Abdimas Bsi: Jurnal Pengabdian Kepada Masyarakat*, 2(2), 271–279. <https://doi.org/10.31294/Jabdimas.V2i2.5981>.
- Goyena, R. (2019). Penerapan E-Government Dalam Pelayanan Publik Di Kabupaten Sidoarjo. *Journal Of Chemical Information And Modeling*, 53(9).
- Haris, A. (2023). Kualitas Pelayanan Aparatur Pemerintahan Melalui Penerapan E-Government Dinas Kependudukan Dan Catatan Sipil Di Kabupaten Manggrai Timur. *Indonesian Journal Of Intellectual Publication*, 3(3). <https://doi.org/10.51577/Ijipublication.V3i3.412>.
- Ilham, B. A. (2022). Sistem Informasi Manajemen (Sim) Sebagai Sarana Pencapaian E-Government. *Jurnal Stie Semarang*, 14(2).
- Irianto, H., Ananda Kurniawan, B., & Mulyono, A. (2022). Optimalisasi Pelayanan Untuk Mewujudkan Good Governance Di Mal Pelayanan Publik Mini Kecamatan Sukodono Kabupaten Sidoarjo. *Jurnal Administrasi Publik Dan Ilmu Komunikasi*, 9(1). <https://doi.org/10.55499/Intelektual.V9i1.67>.
- Isnatiy, F., & Putra, A. (2024). Analisis Pengaruh Perilaku Pengguna Terhadap Keberlanjutan Penerapan Aplikasi Sistem Informasi Kearsipan Dinamis Terintegrasi Pada Pemerintah Kota Palembang. *Indonesian Journal Of Computer Science*, 12(6). <https://doi.org/10.33022/Ijcs.V12i6.3580>.
- Juliarso, A. (2019). Analisis Implementasi E-Government Dalam Meningkatkan Kinerja Pelayanan Publik Pada Pemerintah Daerah Kabupaten Ciamis. *Kebijakan : Jurnal Ilmu Administrasi*, 10(1), 10–15. <https://doi.org/10.23969/Kebijakan.V10i1.1417>.
- Kartika, A., & Iskandar, D. (2021). Meneropong Penerapan E-Government Di Kabupaten Sidoarjo. *Jurnal Ilmu Sosial Dan Ilmu Politik Interdisiplin*, 08(2).
- Kusumaningsih, R. (2025). Penguatan Kapasitas Pttun Dalam Menjalankan Fungsi Pemerintahan Melalui Electronic Government (E-Government) Sebagai Perwujudan Asas-Asas Umum Pemerintahan Yang Baik. *Jurnal Ilmu Sosial Dan Humaniora*, 3(3), 385–398. <https://doi.org/10.57248/Jishum.V3i3.550>.
- Manalu, M., Rahayu, D., & Rahayu, N. (2024). E-Government Sebagai Basis Program Smart City Di Kota Bengkulu. *Jurnal Stia Bengkulu : Committee To Administration For Education Quality*, 10(1). <https://doi.org/10.56135/Jsbs.V10i1.157>.

- Mariano, S. (2019). Penerapan E-Government Dalam Pelayanan Publik Di Kabupaten Sidoarjo. *Journal Of Chemical Information And Modeling*, 53(9).
- Muanifah, S., Holiawati, H., & Suropto. (2023). Peran Tata Kelola Perusahaan Yang Baik Dalam Memoderasi Tekanan Pemangku Kepentingan Yang Komprehensif Terhadap Kualitas Laporan Keberlanjutan. *Akurasi : Jurnal Studi Akuntansi Dan Keuangan*, 6(2), 461–480. <https://doi.org/10.29303/Akurasi.V6i2.420>.
- Muhammad Nizar, & Antin Rakhmawati. (2022). Tantangan Dan Strategi Pemasaran Produk Halal Di Indonesia. *Malia (Terakreditasi)*, 13(1). <https://doi.org/10.35891/ML.V13i1.2872>.
- Musa, H. G., Fatmawati, I., Nuryakin, N., & Suyanto, M. (2024). Marketing Research Trends Using Technology Acceptance Model (Tam): A Comprehensive Review Of Researches (2002–2022). *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2329375>.
- Naufalian, H., Khoiroh, F., Riyantono, D. P., Arsyida, D. F., & Untari, S. (2024). Penerapan E-Government Dalam Upaya Peningkatan Pelayanan Publik Melalui Website “Sadesa” Di Desa Gedang Kulut, Kecamatan Cerme, Kabupaten Gresik. *Jurnal Integrasi Dan Harmoni Inovatif Ilmu-Ilmu Sosial*, 3(12). <https://doi.org/10.17977/Um063v3i12p1331-1337>.
- Noor, M. (2022). The Effect Of E-Service Quality On User Satisfaction And Loyalty In Accessing E-Government Information. *International Journal Of Data And Network Science*, 6(3). <https://doi.org/10.5267/J.Ijdns.2022.2.002>.
- Parapat, N., Siregar, Y., Saputra, R. H., & Ruqaiyah, I. (2024). Efektivitas Penerapan E-Government Dalam Meningkatkan Kualitas Pelayanan Administrasi Kependudukan Di Dinas Kependudukan Dan Pencatatan Sipil Kota Padangsidempuan. *Jurnal Ilmiah Muqoddimah : Jurnal Ilmu Sosial, Politik, Dan Humaniora*, 8(1). <https://doi.org/10.31604/Jim.V8i1.2024.385-388>.
- Putri, B., & Reviandani, O. (2023). Penerapan E-Government Melalui Pelaksanaan Program Ktp Digital Di Kelurahan Dr. Soetomo Kota Surabaya. *The Indonesian Journal Of Public Administration (Ijpa)*, 9(1). <https://doi.org/10.52447/Ijpa.V9i1.6829>.
- Putri, N. H., & Soesiantoro, A. (2023). Pemanfaatan Website Plafon Dukcapil Dalam Rangka Percepatan Kepemilikan Dokumen Administrasi Kependudukan Di Kabupaten Sidoarjo. *Prosiding Pengabdian Kepada Masyarakat Public Internship Symposium*.
- Riyadi, S., & Supriyanto, S. (2023). Elemen Sukses Penerapan E-Government Dalam Pelayanan Administrasi Kependudukan (Studi Di Kecamatan Cerme). *Jisp (Jurnal Inovasi Sektor Publik)*, 2(3). <https://doi.org/10.38156/Jisp.V2i3.159>.
- Rizaldy, R. F., Wijaya, K. A. S., & Purnamaningsih, P. E. (2024). Optimalisasi Reformasi Birokrasi Terhadap Kinerja Pelayanan Kelurahan Airlangga Kecamatan Gubeng Kota Surabaya. *Ethics And Law Journal: Business And Notary*, 2(1). <https://doi.org/10.61292/Eljbn.134>.
- Sabino, Mariano. (2019). Penerapan E-Government Dalam Pelayanan Publik Di Kabupaten Sidoarjo. *Journal Of Chemical Information And Modeling*, 53(9).
- Sakir, A. R., Almahdali, H., & Amaliah, Y. (2024). Implementation Of E-Government In Public Services: A Case Study On The Department Of Population And Civil Registration Of Bone District. *Publicus : Jurnal Administrasi Publik*, 2(1). <https://doi.org/10.30598/Publicusvol2iss1p181-193>.
- Salsabila, F. L., & Hadiyan, E. (2024). Penerapan Elektronik Pendapatan Asli Daerah (E-Pad) Dalam Meninjau Penerimaan Pajak Daerah Pada Upt Bpkd Wilayah Cihaurbeuti. *Budgeting: Jurnal Akuntansi Syariah*, 4(2). <https://doi.org/10.32923/Bdg.V4i2.3817>.
- Septian, E., & Kriswibowo, A. (2024). Faktor Sukses E-Government Dalam Pelayanan Perizinan Melalui Surabaya Single Window (Ssw) Alfa Di Kota Surabaya. *Ganaya : Jurnal Ilmu Sosial Dan Humaniora*, 7(2), 177–193.

- <https://doi.org/10.37329/Ganaya.V7i2.3252>.
- Sholicha, I. K., & Oktariyanda, T. A. (2023). Inovasi Pelayanan Publik Melalui Aplikasi Pelayanan Via Online (PlavonDukcapil) Oleh Dinas Kependudukan Dan Pencatatan Sipil Kabupaten Sidoarjo. *Publika*. <https://doi.org/10.26740/Publika.V11n3.P2293-2302>.
- Wirawan, D. G., & Tjenreng, M. B. Z. (2025). Penerapan Good Governance Dalam Reformasi Birokrasi Untuk Peningkatan Layanan Publik Di Indonesia. *Jurnal Pkm Manajemen Bisnis*, 5(1), 179–193. <https://doi.org/10.37481/Pkmb.V5i1.1241>.
- Wiyanto, S. D. S., Amelita, T., & Irwansyah. (2023). Website Pemerintah Sebagai Penerapan E-Government. *Mediakom : Jurnal Ilmu Komunikasi*, 7(1). <https://doi.org/10.35760/Mkm.2023.V7i1.8212>.