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E-GOVERNMENT DEVELOPMENT TO IMPROVE THE QUALITY OF PUBLIC SERVICES PROVIDED BY THE TASIKMALAYA CITY HEALTH OFFICE

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Abstract

This study was motivated by the fact that the development of e-government at the Tasikmalaya City Health Office has not been implemented optimally. This is reflected in the insufficient availability of competent human resources, inadequate technological infrastructure, and ineffective dissemination of e-government services to the public. This study employed a qualitative descriptive research method involving six informants. Data were collected through interviews, observations, and documentation. The data were analyzed using data reduction, data display, and conclusion drawing techniques. The findings indicate that, based on the analysis of e-government implementation at the Tasikmalaya City Health Office using Richardus Eko Indrajit's theory through the dimensions of Support, Capacity, and Value, the implementation of e-government has been carried out; however, it has not yet reached an optimal level.

Keywords: E-government development, service quality, Health Office.

A. INTRODUCTION

The rapid advancement of Information and Communication Technology (ICT) in the digital era has brought significant changes to various aspects of life, including public administration. Governments are required to adapt to technological developments in order to provide public services that are effective, efficient, transparent, and accountable. One of the strategies adopted to address this challenge is the implementation of electronic government (e-government), which refers to the use of information technology by government institutions to improve the quality of public services, strengthen public administrative systems, and enhance public participation in governance.

The concept of e-government has become an integral part of bureaucratic reform in Indonesia. Through Presidential Instruction No. 3 of 2003 concerning the National Policy and Strategy for E-Government Development, the Indonesian government emphasized that the implementation of e-government aims to improve the efficiency, effectiveness, transparency, and accountability of public administration. This policy reflects the government's commitment

to utilizing information technology to bring public services closer to citizens while strengthening the principles of good governance.

The implementation of e-government in Indonesia has continued to develop over time. Various ministries, government agencies, and local governments have introduced digital applications and services, including online registration systems, public service portals, web-based licensing services, and online public complaint systems. These developments indicate a shift in the public service paradigm from conventional manual procedures to digital systems that are faster, more cost-effective, and more accessible to the public. Nevertheless, the success of e-government implementation depends not only on the availability of technological infrastructure but also on the readiness of human resources, regulatory frameworks, inter-agency coordination, and an organizational culture that supports digital transformation.

In general, the implementation of e-government in Indonesia continues to face several challenges, including the digital divide between regions, the limited availability of human resources with technological competencies, and the relatively low level of digital literacy among the public. According to the United Nations E-Government Development Index (EGDI) 2022, Indonesia ranked 77th out of 193 countries. Although this ranking reflects an improvement compared to previous years, a considerable gap remains between the central government and local governments in terms of e-government implementation, particularly at the municipal and district levels.

The Government of Tasikmalaya City is one of the local governments that has consistently sought to implement e-government across various public service sectors. Digital transformation within the Tasikmalaya City Government has been driven by the need to provide services that are faster, easier, more accurate, and more accessible to the wider community. Several digital service applications have been developed, including population administration information systems, online licensing services, and electronic health services. However, the success of e-government implementation is determined not merely by the availability of these applications but also by their effectiveness in improving the quality of public services.

As the government agency responsible for delivering public health services, the Tasikmalaya City Health Office has developed various digital-based innovations. Several health services have been integrated into electronic systems, including health recording and reporting systems, online queue management, immunization data management, and applications for monitoring community health programs. The implementation of e-government in the health sector is expected to address several issues, such as long waiting times, inaccurate data management, and limited public access to health service information.

As a government institution that directly provides public services, the Tasikmalaya City Health Office carries out various activities related to public service delivery, as presented in the following table.

Table 1. Public Services of the Tasikmalaya City Health Office (2023–2025)

Years	Type of Service	Aount
2023	1. Receive service applicants visiting the Public Service Mall (MPP) in person.	95

	2. Handling complaints from visitors in person at the Public Service Mall (MPP) and via the Health Office hotline.	82
	3. Accepting service applicants via the Sipentas Application (Online Licensing System)	100
	4. Receive service applicants via the OSS (Online Single Submission) system for Risk-Based Business Licensing.	4
	5. Forwarding the applicant's submission received via the Risk-Based Business Licensing OSS (Online Single Submission) system to the relevant division.	58
	6. Accepting service applicants for SPP-IRT (Home Industry Food Production Certificate) in accordance with KBLI codes.	9
	7. 7. Receiving visitors collecting SPP-IRT (Home Industry Food Production Certificate) training certificates.	150
	8. 8. Compile data and prepare SPP-IRT (Home Industry Food Production Certificate) training certificates to ensure easy retrieval.	87
	9. 9. Process requests for the revocation of SIP/SIPA and submit the documents to the Health Office's Health Resources and Services Division (Bidang SDK).	6
	10. 10. Notify the Pharmacy Section regarding an applicant for the revocation of the Pharmacist Assistant Practice License (SIPA) who requires the signature of the Witness for Pharmaceutical Preparations.	7
	11. Additional Health Office Task: Preparing Accountability Documents (SPJ)	15
2024	12. Receive service applicants visiting the Public Service Mall (MPP) in person.	121
	13. Handling complaints from visitors at the Public Service Mall (MPP) and via the Health Office hotline.	112
	14. Accepting service applicants via the Sipentas Application (Online Licensing System)	98
	15. Receiving service applicants via the OSS (Online Single Submission) system for Risk-Based Business Licensing.	5
	16. Forwarding applicant submissions received via the Risk-Based Business Licensing OSS (Online Single Submission) system to the relevant division.	27
	17. Accept service applicants for SPP-IRT (Home Industry Food Production Certificate) in accordance with KBLI codes.	9
	18. Receiving visitors collecting SPP-IRT (Home Industry Food Production Certificate) training certificates.	112
	19. Compiling data and preparing SPP-IRT (Home Industry Food Production Certificate) training certificates to ensure easy retrieval.	81

	20. Serve applicants for the revocation of SIP/SIPA and submit the files to the Health Office's Health Resources and Services Division (Bidang SDK).	24
	21. Notify the Pharmacy Section regarding an applicant for the revocation of the Pharmacist Assistant Practice License (SIPA) who requires the signature of the Witness for Pharmaceutical Preparations.	3
	22. Additional Health Office Task: Preparing Accountability Documents (SPJ)	15
2025	23. Receive service applicants visiting the Public Service Mall (MPP) in person.	103
	24. Handling complaints from visitors in person at the Public Service Mall (MPP) and via the Health Office hotline.	112
	25. Accepting service applicants via the Sipentas Application (Online Licensing System)	131
	26. Receive service applicants via the Risk-Based Business Licensing OSS (Online Single Submission) system.	4
	27. Forwarding the applicant's submission received via the Risk-Based Business Licensing OSS (Online Single Submission) system to the relevant division.	45
	28. Accept service applicants for SPP-IRT (Home Industry Food Production Certificate) in accordance with KBLI codes.	10
	29. Receiving visitors collecting SPP-IRT (Home Industry Food Production) training certificates.	124
	30. Compile data and prepare SPP-IRT (Home Industry Food Production Certificate) training certificates to ensure easy retrieval.	124
	31. Process applications for the revocation of SIP/SIPA and submit the files to the Health Office's Health Resources and Services Division (Bidang SDK).	7
	32. Notify the Pharmacy Section regarding an applicant for the revocation of the Pharmacist Assistant Practice License (SIPA) who requires the signature of the Witness for Pharmaceutical Preparations.	3
	33. Additional Task for the Health Office: Preparing Accountability Documents (SPJ)	12

Source: Performance Reports of the Tasikmalaya City Health Office, 2022–2024.

Based on the public service data provided by the Tasikmalaya City Health Office during the 2023–2025 period, the implementation of public services demonstrates dynamic progress characterized by continuous improvement, adaptation, and responsiveness to community needs and prevailing government policies. Overall, the service delivery pattern indicates a positive trend, particularly in the digitalization of public services, although face-to-face services remain the preferred option for a significant proportion of the community.

Face-to-face services delivered through the Public Service Mall (Mal Pelayanan Publik/MPP) experienced a substantial increase from 2023 to 2024, indicating that public trust in direct service delivery remains high. Although the number of users declined slightly in 2025, the MPP continued to be the primary service center with the highest number of visitors. A similar trend was observed in complaint-handling services received through the MPP and hotline, where the number of complaints increased in 2024 and remained stable in 2025. This stability suggests that the public has become increasingly accustomed to utilizing official complaint channels to report concerns or seek clarification regarding health services.

The trend in digital services is even more encouraging. This is evident in the increasing utilization of the Sipentas application. Although the number of applications submitted through Sipentas declined slightly in 2024, it increased sharply in 2025. This substantial growth indicates that the public has become more adaptable to online service systems and that the digital transformation strategy implemented by the Health Office has been progressing effectively. In contrast, the Online Single Submission (OSS) service consistently recorded relatively low usage throughout the three-year period, suggesting that risk-based business licensing services are primarily utilized by a limited segment of the population. Nevertheless, the submission of OSS documents to the relevant divisions fluctuated, declining in 2024 before increasing again in 2025, reflecting changes in administrative requirements for business licensing.

Services related to the Home Industry Food Production Certificate (SPP-IRT) exhibited relatively stable performance. The number of applicants remained nearly unchanged between 2023 and 2024 before increasing slightly in 2025. An interesting pattern was observed in the collection of food safety training certificates, which reached a high level in 2023, declined in 2024, and increased again in 2025. A similar trend occurred in the compilation and issuance of certificates, which rose significantly in 2025, indicating renewed public demand for home industry food certification and a corresponding increase in administrative activities.

Meanwhile, services involving the revocation of professional practice licenses (SIP/SIPA) increased substantially in 2024 before declining again in 2025. This sharp increase may be associated with changes in regulatory policies or mandatory license renewal requirements for healthcare professionals. Applications requiring witness signatures for pharmaceutical documents showed a declining and consistently low trend during the last two years, suggesting relatively limited demand for this service. In addition, the preparation of financial accountability documents (SPJ) remained stable in 2023 and 2024 before decreasing slightly in 2025, which may indicate improved administrative efficiency or changes in task allocation within the organization.

Overall, public service performance during the past three years reflects improvements in service quality, particularly through the adoption of digital services, while maintaining stable demand for face-to-face and other administrative services. Although fluctuations occurred in several service categories, the general pattern demonstrates a more mature public service system, increasing public capability in utilizing multiple service channels, and improved coordination among organizational units in managing health-related licensing and administrative services.

Despite these positive developments, the implementation of e-government at the Tasikmalaya City Health Office has not yet been fully optimized. This is evidenced by several issues identified during the implementation process, as described below:

- Limited support for successful e-government implementation. This is evidenced by the insufficient number of employees with the competencies required to operate, manage, and develop digital services. For example, several organizational units have only one or two staff members responsible for managing health information systems and providing IT support. As a result, data updates, system maintenance, and monitoring of digital applications cannot be carried out optimally. This condition has led to delays in updating digital service data, slow responses to technical problems, and an increased risk of data entry errors due to the excessive workload placed on the limited number of qualified personnel.
- Low organizational capacity in managing e-government. The limited availability of hardware, software, reliable internet connectivity, and data storage servers remains a significant obstacle to the effective delivery of digital public services. Inadequate technological infrastructure frequently causes system disruptions, slow response times, and poor integration among digital platforms, thereby reducing the overall effectiveness and efficiency of e-government services.
- Insufficient public dissemination of e-government services. This is reflected in the fact that many residents visiting community health centers (*Puskesmas*) reported being unaware of the availability of online registration facilities. Consequently, they continued to register manually, resulting in long queues and longer waiting times. These findings indicate that information regarding digital health services has not been disseminated effectively through accessible communication channels, such as official social media platforms, informational brochures distributed at community health centers, or direct outreach programs conducted by community health volunteers.

B. LITERATURE REVEIW

E-Government Theory

According to the United Nations (2022), e-government refers to the use of information and communication technology (ICT) by governments to improve the effectiveness of public administration, enhance the quality of public services, increase transparency, and encourage greater public participation in governance. This concept extends beyond the digitalization of administrative processes and encompasses the transformation of government governance to become more responsive to the needs of citizens. The implementation of e-government enables public services to be delivered more quickly, efficiently, accurately, and conveniently without limitations of time or location. Furthermore, e-government promotes the principles of good governance by strengthening accountability, information transparency, and bureaucratic effectiveness. Therefore, the successful implementation of e-government depends largely on organizational readiness, technological infrastructure, human resource capacity, and active public participation (United Nations, 2022). E-Government Indicators

- Service effectiveness
- Administrative process efficiency

- Information transparency
- Government accountability
- Public participation
- Utilization of information and communication technology

E-Government Development Theory

According to Indrajit (2006), the success of e-government development is determined by three fundamental dimensions: Support, Capacity, and Value. Support refers to the government's commitment to providing appropriate regulations, policies, and institutional support for the implementation of e-government initiatives. Capacity relates to the organization's ability to provide qualified human resources, adequate financial resources, and technological infrastructure necessary to operate and sustain electronic government systems. Value, meanwhile, represents the benefits generated by e-government for both government institutions and the public as service users. These three dimensions are interrelated and collectively serve as the primary determinants of successful e-government implementation in improving the quality of public service delivery (Indrajit, 2006). E-Government Development Indicators

Support

- Commitment to e-government implementation
- Resource allocation
- Supporting infrastructure and institutional framework
- Dissemination of the e-government concept

Capacity

- Availability of organizational resources
- Availability of technological infrastructure
- Availability of qualified human resources

Value

- Benefits for government institutions
- Benefits for the public

C. RESEARCH METHODOLOGY

This study employed a qualitative descriptive research design. According to Sugiyono (2017), descriptive research is a method that describes, illustrates, and explains the characteristics of the object being studied as it naturally occurs, based on the actual conditions and circumstances during the research process. In this study, the qualitative descriptive approach was used to examine the development of e-government in improving public service delivery by the Tasikmalaya City Government.

The operational definition specifies how the research constructs are measured and applied, thereby enabling other researchers to replicate the measurement process or develop more effective measurement approaches. The variable examined in this study is the development of e-government in improving public service delivery by the Tasikmalaya City Government. The operationalization of this concept refers to the framework proposed by Indrajit (2006), which identifies three key dimensions supporting successful e-government implementation: Support, Capacity, and Value.

The Support dimension consists of four indicators: (1) commitment to e-government implementation, (2) resource allocation, (3) supporting infrastructure and institutional framework, and (4) dissemination of the e-government concept. The Capacity dimension includes three indicators: (1) availability of organizational resources, (2) availability of technological infrastructure, and (3) availability of qualified human resources. Meanwhile, the Value dimension comprises two indicators: (1) benefits for government institutions and (2) benefits for the public as service users.

According to Sugiyono (as cited in Fairus, 2020), research data are classified into primary and secondary data. Primary data are obtained directly from the original sources by the researcher. In this study, primary data were collected through in-depth interviews with six key informants, consisting of the Head of the Information Division of the Tasikmalaya City Health Office, the Head of the Information Service Subdivision, an Information Technology (IT) officer, and members of the public who had utilized the digital health services. Secondary data were obtained from official documents, institutional reports, government regulations, scientific journals, previous studies, and other relevant literature supporting the research objectives.

Secondary data refer to data sources that do not provide information directly to the researcher but are obtained through intermediary sources or existing documents. In this study, the secondary data consisted of government regulations, books, undergraduate theses, scientific journals, institutional reports, and other relevant documents related to the research topic.

Data were collected through three techniques: observation, interviews, and literature review. Observation was conducted through direct field observation involving systematic, logical, objective, and rational recording of phenomena occurring in both natural and controlled settings (Semiawan, 2010; Kristanto, 2018). In addition, semi-structured interviews were conducted to obtain in-depth information through direct communication between the researcher and the informants regarding the research topic (Sugiyono, 2016). To facilitate the interview process, the researcher used several supporting tools, including field notebooks for recording information, audio recorders to capture interview conversations, cameras for documenting field activities, and relevant documents to support the analysis and research findings.

This study also employed a literature review as a technique for collecting secondary data. The literature review involved examining various academic sources, including books, scientific journals, previous research, government regulations, and other references relevant to the research problem. Data collected through observations, interviews, and literature reviews were subsequently analyzed using qualitative data analysis techniques. The analysis involved organizing and interpreting field observations, interview recordings, field notes, and supporting documents to produce a systematic, comprehensive, and in-depth description of the phenomenon under investigation.

The data analysis procedure followed the qualitative analysis framework proposed by Silalahi (as cited in Mila Rismayanti, 2023), which consists of three interrelated stages: data reduction, data display, and conclusion drawing/verification. Data reduction involved selecting, focusing, simplifying, and transforming the raw data collected during the research process to ensure alignment with the research objectives. The reduced data were then organized

and presented systematically to facilitate interpretation and support the drawing of meaningful conclusions. The final stage, verification, involved interpreting the data by identifying recurring patterns, relationships, and meanings, followed by continuous validation throughout the research process to ensure the credibility, consistency, and trustworthiness of the findings.

D. RESULT AND DISCUSSION

This study aims to analyze and describe the development of e-government in improving public service delivery at the Tasikmalaya City Health Office. The findings are presented based on the three dimensions of e-government development proposed by Indrajit (2006), namely Support, Capacity, and Value, in order to assess the extent to which e-government implementation has contributed to improving the quality of public services.

Support

- **Commitment to E-Government Implementation**

Commitment to e-government implementation reflects the shared understanding and commitment among organizational leaders, implementing staff, and service users regarding the importance of developing technology-based public services. It represents the collective willingness of stakeholders to support the adoption and continuous improvement of digital government initiatives.

The interview findings revealed a strong commitment and shared agreement among both internal stakeholders and the community regarding the implementation of e-government as a strategy for improving public service quality. Organizational leaders demonstrated support by encouraging the adoption of digital systems in administrative and service delivery processes, while employees acknowledged the importance of utilizing information technology to improve work efficiency and service effectiveness. Likewise, community members generally expressed positive attitudes toward the development of digital public services, recognizing their potential to simplify access to health services.

The observational findings further confirmed that e-government has become an integral part of daily operations within the Tasikmalaya City Health Office. Various health information systems and digital applications were actively utilized by employees across different divisions to support administrative functions and health service delivery. In addition, coordination among organizational units in managing digital data and services indicated institutional support for e-government implementation. Employees routinely used computers and internet-based systems to perform administrative and service-related tasks, demonstrating a shared understanding of the importance of information technology in enhancing the effectiveness and efficiency of public health services.

Document analysis also provided evidence of the organization's commitment to e-government implementation. The supporting documents included: (1) a decree establishing the Health Information System or Information Technology Management Team within the Tasikmalaya City Health Office; (2) the agency's Strategic Plan, which incorporates digital service development programs; (3) Standard Operating Procedures (SOPs) governing the use of health information systems and digital applications; (4) minutes of coordination meetings discussing the development and implementation of health information systems; (5) cooperation

agreements and system integration documents with community health centers (*Puskesmas*) and other relevant institutions; (6) photographs documenting coordination meetings, socialization activities, and training programs related to e-government implementation; and (7) screenshots and documentation of the official website and digital applications used to provide public services and disseminate health information to the community.

The observational findings and document analysis indicate that the Tasikmalaya City Health Office has demonstrated substantial organizational support for the implementation of e-government. The routine use of health information systems by employees, the existence of institutional regulations and Standard Operating Procedures (SOPs), and the availability of planning and coordination documents provide evidence that e-government has been formally adopted as one of the organization's strategic approaches to improving the quality of public health services. These findings corroborate the interview results, which revealed strong leadership commitment and effective interdepartmental coordination in supporting digital transformation within the Health Office. Therefore, the indicator of commitment to e-government implementation can be considered well established, as supported by consistent evidence from interviews, observations, and documentation.

Overall, the findings from interviews, observations, and document analysis demonstrate that the implementation of e-government at the Tasikmalaya City Health Office has received considerable support and commitment from organizational leaders and all relevant divisions. This commitment is reflected in the shared understanding of the importance of information technology for improving health service quality, the involvement of multiple stakeholders in developing health information systems, and the coordination undertaken prior to the implementation of new digital applications. Furthermore, observations confirmed that health information systems have become an integral part of daily operational activities and are supported by institutional policies, including the Decree establishing the Health Information System Management Team, Standard Operating Procedures for application use, and strategic planning documents for digital service development.

These findings are consistent with the e-government framework proposed by Indrajit (2006), which identifies Support as the primary dimension determining the success of e-government implementation. According to Indrajit, support is manifested through organizational commitment, consensus, and political will among leaders and stakeholders to develop technology-based public services. Without strong institutional support, organizational commitment, and stakeholder involvement, e-government initiatives are unlikely to achieve their intended outcomes because organizational transformation requires the cooperation and participation of all relevant parties.

- **Resource Allocation**

Resource allocation is one of the essential indicators within the Support dimension that determines the success of e-government implementation. According to Indrajit (2006), organizational support is demonstrated not only through policies and institutional commitment but also through the provision of adequate resources, including qualified human resources, financial support, information technology infrastructure, and technical assistance required to ensure the effective operation of electronic public service systems.

The interview findings indicate that the Tasikmalaya City Health Office has allocated various resources to support e-government implementation. Nevertheless, respondents emphasized the need for further improvement in human resource capacity and the development of additional organizational resources. These findings were reinforced by field observations, which revealed the availability of information technology facilities, including computers, internet networks, servers, and digital health service applications used for data management and public service delivery. The researcher also observed the presence of dedicated personnel responsible for managing health information systems and providing technical assistance to system users when operational problems occurred. However, these available resources have not yet been fully utilized to their maximum potential.

Document analysis further confirmed organizational support through the availability of planning and budgeting documents for information technology programs, organizational structures of the information system management team, documentation of employee training programs related to digital health applications, and inventories of technological equipment used to support electronic public services. These documents demonstrate that the Tasikmalaya City Health Office has made significant efforts to provide financial resources, technological facilities, and institutional support, although improvements in human resource capacity remain necessary.

Based on the findings from interviews, observations, and documentation, it can be concluded that resource allocation at the Tasikmalaya City Health Office generally supports the implementation of e-government. Budget availability, the establishment of an information system management team, employee training programs, and the provision of information technology infrastructure demonstrate organizational commitment to developing electronic public services. Nevertheless, strengthening the competencies of human resources—particularly in information technology skills and adaptation to newly developed digital features—remains essential to ensure more effective and sustainable implementation.

These findings are consistent with Indrajit's (2006) Support framework, which emphasizes that successful e-government implementation depends on adequate organizational resources, including financial support, qualified human resources, and technological infrastructure. The findings suggest that while the Tasikmalaya City Health Office has fulfilled many of these requirements, continuous investment in human resource development is necessary to optimize the utilization of information technology and accommodate the ongoing evolution of e-government systems.

- **Supporting Infrastructure and Institutional Framework**

Supporting infrastructure and institutional arrangements constitute another key indicator within the Support dimension of e-government development. The interview findings revealed that, although the Tasikmalaya City Health Office possesses a variety of technological facilities that facilitate public service delivery, its technological infrastructure has not yet fully supported optimal e-government implementation. Respondents reported recurring problems related to network instability, limited system capacity, and reduced application performance during peak usage periods. Consequently, improvements in hardware, network infrastructure, and system capacity are required to ensure more reliable electronic public services.

Field observations showed that each organizational unit was equipped with computers connected to internet networks to facilitate electronic data management and health service delivery. The researcher also observed the use of various digital health applications supporting patient registration, reporting systems, and health data management. Furthermore, dedicated server rooms and data communication networks functioned as the central infrastructure for managing health information systems.

Document analysis supported these observations through evidence such as inventories of information technology equipment, documentation of digital health applications, organizational structures of the information system management team, and institutional policies governing the use of information technology. These documents indicate that the organization has invested in both technological infrastructure and institutional arrangements required to sustain e-government implementation.

The findings are consistent with Indrajit (2006), who argues that successful e-government implementation depends on the availability of adequate information technology infrastructure, including communication networks, hardware, software, and information security systems capable of supporting electronic public service delivery. Well-developed infrastructure contributes significantly to the effectiveness, efficiency, and quality of public services. Similarly, Nugroho (2010) emphasizes that information technology infrastructure serves as the fundamental foundation of e-government because it enables information exchange, data integration, and digital public service delivery. Without adequate infrastructure, the objectives of e-government cannot be achieved effectively.

Based on interviews, observations, documentation, and theoretical analysis, it can be concluded that the supporting infrastructure and institutional framework for e-government implementation at the Tasikmalaya City Health Office are generally adequate. However, technical challenges related to network stability and application accessibility during periods of high demand remain, indicating the need for continuous infrastructure improvement to achieve more effective and efficient e-government implementation.

- **Dissemination of the E-Government Concept**

Effective dissemination of the e-government concept is essential for increasing user acceptance and encouraging greater public participation in utilizing digital government services. Dissemination activities also help reduce barriers arising from limited public understanding of information technology and electronic service systems. Through continuous dissemination, government employees become better prepared to operate digital systems, while members of the public are better informed about accessing and utilizing electronic public services.

In practice, dissemination activities may include training programs, technical guidance, seminars, public awareness campaigns, publications through print and electronic media, as well as information distributed via official websites and social media platforms. These activities are intended to foster a common understanding of e-government while encouraging the optimal utilization of digital public services.

However, observational findings revealed that many citizens continued to visit healthcare facilities to complete manual registration because they were unaware of the availability of

online registration services. In addition, promotional media such as banners, posters, brochures, and information boards concerning digital services were limited and not strategically displayed in locations easily visible to service users. Most information regarding e-government services was available only through the official website and social media platforms of the Health Office. Nevertheless, not all citizens regularly access these digital communication channels, limiting the reach of information dissemination.

Document analysis showed that the Health Office had conducted several dissemination activities, as evidenced by documentation of training sessions, technical guidance, coordination meetings, and publications through its website and official social media accounts. However, these activities primarily targeted employees and system administrators rather than the general public.

These findings are consistent with Indrajit (2006), who emphasizes that dissemination constitutes a critical component of the Support dimension in e-government implementation. Dissemination should be conducted continuously and should involve all stakeholders to foster understanding and readiness to utilize electronic public services. Without broad and intensive dissemination, the utilization of e-government services is likely to remain limited. This argument is further supported by Kusumadewi (2009), who states that the successful implementation of information systems depends largely on users' understanding of the technology. Insufficient information and public education may result in low utilization of digital systems, even when adequate technological infrastructure is already available.

Based on the findings from interviews, observations, documentation, and theoretical analysis, it can be concluded that the dissemination of the e-government concept at the Tasikmalaya City Health Office has not yet been fully effective. Although dissemination efforts have been conducted through employee training, official websites, social media platforms, and technical assistance provided by staff, many citizens remain unaware of and do not utilize the available digital services. Therefore, the Health Office should expand the intensity and coverage of dissemination activities by employing communication channels that are more accessible to the broader community and by conducting continuous face-to-face outreach programs to maximize the effectiveness of e-government implementation.

Capacity

Capacity is one of the key dimensions of e-government implementation proposed by Richardus Eko Indrajit. This dimension refers to an organization's ability to provide and manage the resources necessary to support the effective and sustainable implementation of e-government. These resources encompass human resource capabilities, financial capacity, and technological capability required to operate electronic government systems.

According to Indrajit (2006), the success of e-government implementation is determined not only by leadership commitment and government support but also by the organization's capacity to utilize available resources effectively. Organizations with strong institutional capacity are better positioned to develop, manage, and maintain information systems, thereby ensuring the optimal delivery of electronic public services.

Human resource capacity is a critical factor because personnel involved in e-government implementation must possess adequate knowledge and competencies in information

technology. In addition, sufficient financial resources are required to support the procurement, development, and maintenance of information technology systems and infrastructure. Technological capacity, meanwhile, reflects the organization's ability to provide the hardware, software, communication networks, and security systems necessary to support the operation of electronic public services.

In this study, the Capacity dimension was analyzed to assess the extent to which the Tasikmalaya City Health Office possesses adequate human resources, financial resources, and technological capabilities to support e-government implementation. The analysis was based on data obtained through interviews, field observations, and document analysis concerning the organization's capacity to deliver electronic health services. To gain a comprehensive understanding of the organization's capacity, interviews were conducted with several key informants, and the findings are presented below.

- **Availability of Resources**

The availability of resources is one of the principal indicators within the Capacity dimension that determines the success of e-government implementation. According to Richardus Eko Indrajit, an organization's capacity to implement e-government is largely influenced by its ability to provide the resources required to support the operation of electronic government systems. These resources include not only financial support but also various organizational resources that enable the system to operate effectively, efficiently, and sustainably.

Based on the overall interview findings, it can be concluded that the availability of resources supporting e-government implementation at the Tasikmalaya City Health Office is generally adequate. This is evidenced by the allocation of financial resources for the development, maintenance, and enhancement of health information systems, the availability of operational equipment, and supporting facilities that facilitate the delivery of electronic public services.

The interview findings were further supported by field observations conducted at the Tasikmalaya City Health Office. The observations revealed that e-government implementation is supported by a variety of technological facilities, including computers, internet connectivity, digital health service applications, and other supporting equipment used in data management and public service delivery. The researcher also observed that employees routinely utilized these facilities in performing their daily responsibilities, enabling public services to be delivered more quickly and efficiently than under the previous manual system.

In addition to the observational findings, the document analysis also demonstrated adequate organizational support in terms of resource availability. The documents reviewed included budget planning documents, reports on the development of health information systems, inventories of information technology equipment, and records of digital health service application utilization. These documents indicate that the Tasikmalaya City Health Office has consistently allocated resources to support the implementation of e-government and to improve the quality of digital health services.

These findings are consistent with the framework proposed by Indrajit (2006), who argues that the Capacity dimension of e-government implementation is closely associated with an

organization's ability to provide the resources required to operate electronic government systems. These resources include financial support, physical infrastructure, technological facilities, and other operational requirements that enable electronic systems to function effectively and sustainably. According to Indrajit, the absence of adequate resources significantly hinders the successful achievement of e-government objectives.

This perspective is further supported by Ndraha (2011)**,** who emphasizes that resource availability is one of the primary determinants of successful public service delivery. Resources constitute the fundamental capital required to implement programs, provide supporting facilities, and sustain organizational operations. Consequently, organizations with more adequate resources are better equipped to achieve their institutional goals and deliver higher-quality public services.

Based on the findings from interviews, field observations, document analysis, and the supporting theoretical framework, it can be concluded that the availability of resources at the Tasikmalaya City Health Office has provided substantial support for the implementation of e-government. This support is reflected in the allocation of financial resources, the provision of information technology facilities, and the effective utilization of organizational resources to facilitate electronic health service delivery. Nevertheless, continuous investment in organizational resources remains necessary to respond to rapid technological advancements and the increasing demand for high-quality public services, thereby ensuring that e-government implementation becomes more effective, efficient, and sustainable.

- **Availability of Technological Infrastructure**

In the context of this study, the indicator of technological infrastructure availability was analyzed to assess the extent to which the Tasikmalaya City Health Office possesses the information technology facilities and infrastructure necessary to support e-government implementation. The analysis was based on data obtained through interviews, field observations, and document analysis concerning the availability of technological equipment, communication networks, digital health service applications, and other supporting facilities utilized in the delivery of electronic health services. To obtain a comprehensive understanding of the existing technological infrastructure, interviews were conducted with several key informants, and the findings are presented below.

The interview findings indicate that the technological infrastructure available at the Tasikmalaya City Health Office has generated tangible benefits for both employees and the public. The existing infrastructure effectively supports service delivery, data management, and coordination among organizational units, thereby enhancing operational efficiency and effectiveness. Nevertheless, respondents emphasized that further improvements in the capacity and quality of technological infrastructure are still required to ensure the sustainability and optimal performance of e-government services.

The observational findings further revealed that most employees routinely utilize information technology facilities in carrying out their daily responsibilities. Service delivery processes that were previously conducted manually have largely been transformed into electronic systems, resulting in faster, more accurate, and more efficient public services. However, the researcher also observed occasional network disruptions and slower system response times during periods of high user demand, which may adversely affect the continuity and quality of service delivery.

Document analysis corroborated these findings. The documents reviewed included inventories of information technology equipment, network and server management records, documentation of digital health application usage, technology maintenance reports, and institutional policies governing the management of health information systems. These documents demonstrate that the Tasikmalaya City Health Office has continuously invested in the development and maintenance of its technological infrastructure to support e-government implementation. Furthermore, documentation of digital health service utilization indicates that the available systems have been actively employed in the delivery of public health services.

The findings are consistent with the framework proposed by **Richardus Eko Indrajit (2006)**, who argues that the success of e-government implementation is highly dependent on the organization's technological infrastructure capacity. Adequate technological infrastructure—including hardware, software, communication networks, and information security systems—constitutes the fundamental foundation that enables electronic public services to operate effectively and sustainably. Without sufficient technological infrastructure, e-government initiatives are likely to encounter significant implementation challenges.

This perspective is reinforced by **Nugroho (2010)**, who explains that information technology infrastructure is a strategic component of e-government because it serves as the primary medium for data management, information dissemination, and the delivery of electronic public services. Well-developed infrastructure enhances organizational efficiency, accelerates service processes, and improves the quality of services delivered to the public.

Furthermore, **Heeks (2006)** emphasizes that **technology readiness** is one of the key determinants of successful digital transformation within the public sector. The availability of adequate technological facilities, combined with continuous system maintenance, enhances the reliability of electronic services and minimizes the risk of operational disruptions that could negatively affect public service delivery.

Based on the findings from interviews, field observations, document analysis, and the supporting theoretical framework, it can be concluded that the technological infrastructure available at the Tasikmalaya City Health Office has generally provided adequate support for the implementation of e-government. The existing infrastructure effectively facilitates service delivery, data management, reporting activities, and coordination among organizational units. Nevertheless, continuous improvements remain necessary, particularly in maintaining network stability, increasing server capacity, and optimizing application performance, to ensure that e-government implementation becomes more effective, sustainable, and capable of meeting the evolving demands of public healthcare services.

- **Availability of human resources**

In the implementation of e-government, human resources (HR) are expected to possess the knowledge, skills, and competencies required to utilize information technology effectively. Personnel involved in e-government initiatives must be capable of operating digital applications, managing electronic data, understanding system operating procedures, and adapting to the continuous advancement of information technology. Therefore, strengthening human resource capacity through education, training, and technical guidance is an essential requirement for ensuring the successful implementation of e-government.

Based on the interview findings regarding the availability of human resources, it can be concluded that the Tasikmalaya City Health Office possesses an adequate workforce to support the implementation of e-government. This is evidenced by the establishment of a dedicated team responsible for managing and developing health information systems, as well as employees' ability to operate the various digital applications and information systems used in healthcare service delivery.

Furthermore, the Health Office regularly organizes training programs and technical guidance to enhance employees' competencies in the use of information technology. Nevertheless, respondents acknowledged that continuous human resource development remains necessary, as rapid technological advancements require employees to continually update their knowledge and technical skills. Consequently, although the current availability of human resources has generally supported the implementation of e-government, ongoing competency development is essential to ensure its long-term effectiveness and sustainability.

The interview findings were further supported by field observations conducted at the Tasikmalaya City Health Office. The observations revealed that most employees routinely utilized digital health applications and health information systems in performing their daily duties, including service delivery, data management, reporting, and administrative activities. Employees were generally capable of operating computer equipment and the digital applications used in healthcare services. However, the researcher also observed that some employees still required technical assistance when system updates were introduced or when newly developed application features were implemented.

In addition, the observations indicated that the number of employees with specialized expertise in information technology remained limited relative to the increasing demands of managing and maintaining the organization's expanding digital systems. As a result, several system management and maintenance responsibilities continued to be concentrated among a small number of technically skilled personnel.

The document analysis further supported these findings. The reviewed documents included lists of employees involved in managing health information systems, the organizational structure of the information technology management team, documentation of training programs and technical guidance activities, participant attendance records, certificates of competency development programs, and reports on human resource capacity-building initiatives. These documents demonstrate that the Tasikmalaya City Health Office has undertaken various efforts to strengthen employee competencies in support of e-government implementation.

Nevertheless, the documentation also indicates that training programs have not yet reached all employees equally, and there remains a need to improve competencies, particularly in information technology and digital system management. This finding suggests that continuous human resource development is still required to ensure that all employees possess the competencies necessary to meet the demands of e-government implementation.

The findings of this study are consistent with the perspective of Richardus Eko Indrajit (2006), who argues that the success of e-government implementation is strongly influenced by an organization's human resource capacity. According to Indrajit, even the most advanced technological systems cannot deliver optimal benefits without personnel who possess the competencies required to manage and effectively utilize those technologies.

This argument is further supported by Sedarmayanti (2018), who emphasizes that human resources constitute a strategic organizational asset because they serve as the primary implementers of organizational programs and policies. Employees' competencies, technical skills, and professional capabilities ultimately determine an organization's ability to achieve its objectives, including the successful adoption of information technology in public service delivery.

Based on the findings from interviews, field observations, document analysis, and the supporting theoretical framework, it can be concluded that the availability of human resources at the Tasikmalaya City Health Office has generally provided adequate support for the implementation of e-government. This is reflected in the presence of employees capable of operating health information systems, the establishment of a dedicated information technology management team, and the regular implementation of training and technical guidance programs. Nevertheless, further efforts are required to strengthen employee competencies and ensure a more equitable distribution of technological expertise, particularly in the field of information technology, so that e-government implementation can become more effective, efficient, and sustainable.

Value

Value is the third dimension in the e-government implementation framework proposed by Richardus Eko Indrajit. This dimension refers to the benefits gained by government

institutions, organizations, and the public through the implementation of e-government. The success of e-government is measured not only by the availability of technology, infrastructure, or organizational support, but also by the extent to which these technological innovations generate added value and tangible benefits for service users.

- **Benefits for the Organization**

Organizational benefits constitute one of the key indicators within the Value dimension and are used to assess the extent to which e-government implementation contributes to improving organizational performance. According to Indrajit (2006, p. 58), e-government should create added value for government institutions by enhancing work effectiveness, improving resource efficiency, facilitating data management, and supporting higher-quality decision-making. The greater the benefits perceived by the organization, the higher the value generated through e-government implementation.

Within the context of the Tasikmalaya City Health Office, organizational benefits can be observed through the changes that have occurred following the adoption of electronic service systems, particularly in health data management, interdepartmental coordination, report preparation, and the overall effectiveness of public service delivery. To examine these benefits, interviews were conducted with several key informants, and the findings are presented below.

The interview results indicate that the implementation of e-government has generated substantial benefits for the Tasikmalaya City Health Office. These benefits include improved work effectiveness and efficiency, easier data management and storage, faster reporting processes, enhanced coordination among organizational units, and stronger support for organizational planning and decision-making. In addition, the use of electronic systems has reduced reliance on paper-based documentation and accelerated access to the information required for operational activities.

Accordingly, the implementation of e-government has not only improved the delivery of public services but has also created significant added value for the organization by enhancing institutional performance, improving information management, and increasing operational efficiency.

The interview findings were reinforced by field observations conducted at the Tasikmalaya City Health Office. The observations revealed that most administrative activities and health data management processes are now performed through electronic information systems. Data entry, storage, report generation, and information sharing among organizational units are conducted using integrated digital applications and health information systems. These findings demonstrate a significant transition from conventional manual procedures to a more integrated digital management system.

Furthermore, the researcher observed that health reports can now be prepared much more rapidly than under the previous manual system because the required data are stored electronically and can be accessed instantly by authorized personnel. The utilization of electronic systems has also improved coordination between the Health Office, community health centers (Puskesmas), and other healthcare facilities. Consequently, the implementation of organizational functions has become more effective and efficient.

Document analysis further supported these findings. The reviewed documents included reports on the utilization of health information systems, electronic health reporting documents, health data summaries stored within digital systems, documentation of digital health service applications, and policy documents concerning the digitalization of healthcare services. These documents demonstrate that health information systems have been actively utilized to support organizational operations and the management of public health services.

In addition, activity reports indicate a substantial reduction in the use of paper-based documents for administrative and reporting purposes. Data and reports that were previously submitted manually can now be transmitted electronically, resulting in faster and more efficient work processes. This finding demonstrates that the implementation of e-government has provided tangible organizational benefits by improving the effectiveness of administrative and operational activities.

The findings of this study are consistent with the perspective of Richardus Eko Indrajit (2006, p. 58), who argues that the Value dimension of e-government implementation refers to the benefits experienced by both organizations and society through the application of information technology. According to Indrajit, e-government can be regarded as successful when it generates added value by improving work effectiveness, operational efficiency, information management, and the overall quality of public services.

This perspective is further supported by Indrajit (2002, p. 36), who explains that one of the primary objectives of e-government is to enhance the efficiency of government administrative processes through the utilization of information technology. Electronic systems enable organizations to simplify bureaucratic procedures, accelerate information flows, and increase the productivity of public officials.

Similarly, Heeks (2006, p. 12) states that effective e-government implementation generates substantial organizational benefits, including improved data management, faster operational processes, more efficient resource utilization, and enhanced organizational capacity to produce accurate information for decision-making. Therefore, the organizational value generated through e-government represents one of the principal indicators for evaluating its overall success.

Based on the findings from interviews, field observations, document analysis, and the supporting theoretical framework, it can be concluded that the implementation of e-government at the Tasikmalaya City Health Office has generated considerable organizational benefits. These benefits are reflected in increased work effectiveness and efficiency, improved health data management, faster reporting processes, stronger coordination among organizational units, and the availability of more timely and accurate information to support decision-making. Consequently, the implementation of e-government has made a positive contribution to enhancing the organizational performance of the Tasikmalaya City Health Office in delivering public health services.

- **Benefits for the Community**

Benefits for the community constitute one of the indicators within the Value dimension used to assess the extent to which e-government implementation provides direct advantages to citizens as public service users. According to Indrajit (2006, p. 58), the success of e-

government should not be measured solely by an organization's ability to manage information technology but also by the benefits experienced by the public, including easier access to public services, faster service delivery, improved access to information, greater transparency, and enhanced public service quality.

The interview findings indicate that the implementation of e-government has generated substantial benefits for the community as users of healthcare services. These benefits include easier access to health information, faster service delivery, improved accessibility to healthcare services, and greater time efficiency in obtaining public health services. In addition, the adoption of electronic systems has enabled citizens to receive healthcare services in a manner that is more convenient, timely, and accurate.

Accordingly, the implementation of e-government at the Tasikmalaya City Health Office has created positive value for the community, particularly by improving access to healthcare services and enhancing the quality of services received by the public.

The interview findings were reinforced by field observations conducted at the Tasikmalaya City Health Office and several healthcare facilities. The observations revealed that community members have actively utilized various electronic health services, including digital health information systems, online health information services, and integrated patient data management systems. The utilization of these systems has accelerated service delivery because patient information can be retrieved quickly by healthcare personnel without the need to manually search for paper-based records.

Furthermore, the researcher observed that healthcare administrative procedures have become more efficient compared with the previous conventional system. The time required for citizens to obtain healthcare services has been significantly reduced because most administrative processes are now supported by electronic systems. Nevertheless, occasional technical constraints were observed, including slower system performance during periods of high user demand and internet network disruptions, which may affect the continuity and efficiency of service delivery.

The observations also showed that the public can access a wide range of health-related information through the official website, social media platforms, and other digital communication channels managed by the Tasikmalaya City Health Office. The availability of these digital information platforms enables citizens to obtain healthcare information without the need to visit government offices or healthcare facilities in person.

The document analysis further supported these findings. The reviewed documents included records of digital health service application usage, documentation of electronic healthcare services, screenshots of the official website and social media platforms of the Tasikmalaya City Health Office, reports on digital healthcare service delivery, and policy documents concerning the implementation of electronic systems in healthcare services. These documents demonstrate that information technology has been widely adopted to improve the quality of healthcare services provided to the public.

In addition, service reports indicate a continuous increase in the utilization of electronic health services by community members, accompanied by a decline in the use of manual administrative procedures. These findings suggest that the implementation of e-government

has generated tangible benefits by improving both the accessibility and quality of public healthcare services.

The findings of this study are consistent with the perspective of Richardus Eko Indrajit (2006), who argues that the Value dimension of e-government is closely associated with the benefits experienced by stakeholders, particularly citizens as public service users. According to Indrajit, e-government implementation can be regarded as successful when it improves service accessibility, enhances the quality of public services, and increases time and cost efficiency for the community.

This perspective is supported by Ndraha (2011), who states that high-quality public services are those that provide convenience, speed, accuracy, and certainty for citizens. The utilization of information technology in public administration represents one of the principal strategies for delivering services that are more effective and responsive to public needs.

Similarly, Nugroho (2014) argues that the application of information technology in the public sector aims to improve service quality, broaden public access to information, and establish service delivery processes that are more transparent, efficient, and responsive. Consequently, the benefits experienced by citizens represent one of the most important indicators for evaluating the success of e-government implementation.

Based on the findings from interviews, field observations, document analysis, and the supporting theoretical framework, it can be concluded that the implementation of e-government at the Tasikmalaya City Health Office has generated considerable benefits for the community. These benefits are reflected in easier access to health information, faster service delivery, improved accessibility to healthcare services, and greater time efficiency in obtaining healthcare services. However, several technical challenges remain, including network disruptions and temporary system slowdowns during peak usage periods. Addressing these issues is essential to maximize the benefits experienced by citizens. Overall, the implementation of e-government has made a positive contribution to improving the quality of public healthcare services and enhancing community satisfaction as service users.

E. CONSLUSION

Based on the findings of this study on the implementation of e-government at the Tasikmalaya City Health Office, analyzed using Richardus Eko Indrajit's framework encompassing the dimensions of Support, Capacity, and Value, it can be concluded that the implementation of e-government has been established but has not yet reached its optimal level.

Regarding the Support dimension, the Tasikmalaya City Health Office has demonstrated organizational commitment to e-government implementation through the allocation of financial resources, the establishment of an information systems management team, the provision of technological infrastructure, and the implementation of various socialization and outreach activities. Nevertheless, public awareness initiatives remain insufficient, as many citizens are still unfamiliar with the availability of electronic healthcare services and the procedures for accessing them. These findings indicate that while institutional support has been adequately established, efforts to disseminate information to the wider community require further improvement.

In terms of the Capacity dimension, the Tasikmalaya City Health Office possesses adequate resources to support e-government implementation, including financial resources, technological infrastructure, and human resources. Budget allocations have supported the operation and development of health information systems, while technological infrastructure—such as servers, internet networks, computer equipment, and digital healthcare applications—has been effectively utilized in service delivery. Furthermore, employees have participated in training programs and technical guidance to enhance their competencies. However, several challenges remain, including network disruptions, limited system capacity, and the need for continuous human resource development to keep pace with rapid technological advancements.

With respect to the Value dimension, the implementation of e-government has generated substantial benefits for both the organization and the community. From an organizational perspective, electronic systems have enhanced work effectiveness and operational efficiency, accelerated data management and reporting processes, improved coordination among organizational units, and strengthened evidence-based decision-making. From the public perspective, e-government has facilitated easier access to health information, expedited service delivery, and improved accessibility to healthcare services. Nevertheless, these benefits have not yet been fully experienced by all citizens due to technical constraints and varying levels of public understanding regarding the available digital healthcare services.

Overall, the implementation of e-government at the Tasikmalaya City Health Office has made a positive contribution to improving the quality of public healthcare services. However, achieving a more effective and sustainable implementation requires stronger public outreach, continuous enhancement of information technology infrastructure, and ongoing human resource capacity development to ensure that electronic healthcare services become more effective, efficient, and capable of delivering broader benefits to the community.

Based on these findings, several recommendations are proposed. First, the Tasikmalaya City Health Office should intensify and sustain public awareness campaigns regarding electronic healthcare services through multiple communication channels, including social media, the official website, brochures, banners, health education programs, and collaboration with community health centers (*Puskesmas*) and community health volunteers to ensure broader dissemination of digital service information. Second, community members are encouraged to make greater use of the available electronic healthcare services while improving their digital literacy to enable independent and effective utilization of these services. Finally, future researchers are encouraged to expand this line of inquiry by applying alternative e-government implementation frameworks, examining different governmental institutions, or incorporating additional variables such as citizen satisfaction, public service quality, digital transformation, and e-government maturity levels. Such studies would provide a more comprehensive understanding of digital governance and contribute more substantially to both academic scholarship and the practical development of digital public administration.

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