Digital transformation through electronic-based government system performance as public relations strategy

Dedeh Fardiah[1], Ferry Darmawan[2], Rini Rinawati[3], Viky Edya Martina Supaat[4], Edwan Hadnansyah[5]

[1,2,3,4,5]Faculty of Communication Science, Universitas Islam Bandung, Bandung, Indonesia

ABSTRACT

Background: West Java Province is advancing towards digital governance with the West Java Digital Service. In 2023, it received the Indonesian Regional Government Appreciation Award for Integrated Digital Transformation from B-Universe. The revamped jabarprov.go.id portal provides an integrated one-stop public service platform, enhancing public access to information and services. Integration across regional, district, and city agencies has simplified portal management. The government's approach to digital transformation includes adopting an electronic-based government system (SPBE) as part of its public communication strategy. This study explores the effectiveness of digital transformation via SPBE for communication advancement by the West Java Regional Government. It assesses its impact on public accessibility and service efficiency. **Methods:** This study uses a case study method and Focus Group Discussions with E-government managers in 28 cities/regencies in West Java. **Results:** The study reveals that public communication encompasses services for society, businesses, government, and ASN. Interaction processes involve infrastructure development, information provision, two-way interaction, and managing feedback. Information transactions include a complaint platform, guidelines, complaint submission, verification, handling, confirmation, resolution, and evaluation. Collaborations span government, society, the private sector, NGOs, academia, and international partners. Public communication optimation improves satisfaction, efficiency, transparency, accountability, and participation. **Conclusion:** Digital transformation through SPBE enhances efficiency, transparency, and public involvement, with government public relations crucial for supporting and optimizing SPBE performance. **Implication:** The research implies that the government should enhance information models for broader accessibility, which covers those with physical or digital limitations, and facilitate two-way interactions through digital platforms, AI, and Chatbots. Besides, education and socialization regarding SPBE services are fundamental.

Keywords: Digital transformation; e-government; public communication; government public relations; SPBE

Correspondence: Dr. Ferry Darmawan, M.Ds, Universitas Islam Bandung, Jl. Tamansari No. 24 Bandung 40116. *Email:* ferry@unisba.ac.id

INTRODUCTION

Today's Public service challenges are increasingly difficult and complex. In the government context, breakthrough and innovative policies are required to overcome problems and to improve the best public services provided to society. In improving public services, the role of e-government is fundamental, and government organizations must keep improving their understanding of e-government implementation. In the digital era, activities in any sector are made easier by the presence of technology. Digital transformation in the government context refers to the use of digital technology to transform public services for society (Curtis, 2019; Marius R. Busemeyer (ed.) et al., 2022). Decisions and policies, especially those regarding digitalization, must be clear and firm to facilitate people's welfare.

Digital transformation integrates all service areas to produce changes that satisfy service users. The United Nations, through the "E-Government Survey 2020," has released the level of adoption of e-government systems by countries. In the report, Indonesia ranked 88th out of 193 countries implementing an electronic-based government system (SPBE). Apart from that, Indonesia's digital transformation based on INSEAD's 2022 Global Talent Competitiveness Index is still ranked 72nd, below Singapore (2), Malaysia (32), the Philippines (62), and Thailand (67). Indonesia's digital skills are also rated very low, at 5.70 out of 100 (Luky, 2022).

The strategic policy of the Indonesian government in the digital transformation of public service bureaucracy at the regional level faces problems related to human resources, infrastructure, and work culture. This shows that digitalization in providing services still needs to be further improved. Implementing an SPBE has become a concern for all countries. Indonesia still needs to catch up with other ASEAN countries regarding the coverage and quality of digital government services, digital infrastructure, and human resource skills in operating e-government services.

The acceleration of public services by the government is facilitated through the Bureaucratic Reform Program stipulated in Presidential Regulation 81 of 2010 concerning Grand Design for Bureaucratic Reform 2010–2025. The government issued a policy, Presidential Regulation of the Republic of Indonesia Number 95 of 2018, which stated that all government agencies must use an SPBE as an e-government integration. In particular, change of SPBE in the area of management where the implementation of systems, processes, and work procedures that are transparent, effective, efficient, and measurable are supported by the implementation of SPBE followed by

Monitoring and Evaluation in Regulation of the Minister for Empowerment of Bureaucratic Reform Apparatus Number 59 of 2020. SPBE evaluation measures progress achievements and improves the quality of SPBE implementation in central and regional government agencies.

Public services are a series of activities to fulfill service needs following statutory regulations for every citizen and resident for goods, services, or administrative services as defined in Law No. 25 of 2009 concerning Public Services. The government must respond to society's expectations and global challenges triggered by change and progress, especially in technology. The world has changed, and activities are carried out using digital technology. Society is becoming more thoughtful and well-informed, so it tends to have more demand for available public services.

Public information is an important factor in public services. It is a continuous process of providing services to society and making decisions for the government, as stated in the following quote:

> "A characteristic of information management in government is that it can be thought of in lifecycle terms, a concept long used by archivists. The stages of the government's information holdings begin with its collection and production and include use, storage, retrieval, dissemination, protection, disposal, and longer-term retention. Information collected for one purpose can be reused for other purposes, and information storage in electronic databases opens up significant possibilities and related issues for sharing information and creating new information and knowledge. Such information can be retained as individual data elements, as data combinations to support decision-making, and, with the application of judgment, as accumulated knowledge and wisdom" (Brown, 2005).

E-Government is a technique that utilizes technology. The ability to provide government services and information online is quickly becoming standard for governments in rich and developing countries. The benefits of e-government include improved services, access to information, and opennes and transparency form of government, also the capacity to be involved in several government activities. The implementation of e-government able to empower local citizens by providing opportunities to learn new skills, obtain new information, and get involved in local government activities (Al-Rzoky et al., 2019; Cegarra-Navarro et al., 2012; Enaifoghe & Ndebele, 2023; Jun et al., 2014; Karpagavalli & Mohanasoundari, 2017; Kavathkar et al., 2023). Governance based on information technology development and innovation requires human resources competent in implementing SPBE, a government administration that utilizes information and communication technology to provide services to users (Wulandari et al., 2021).

E-governance is the use of information

and communications by the public sector, communications to improve the delivery of information and services, encourage citizen participation in decision-making processes and make government more accountable, transparent and effective. E-Government aims to involve, enable, and empower citizens of companies, governments, and other institutions. People through E-Government benefit from electronic services that are affordable, comfortable, instant, efficient, transparent, and fair the entire time; businesses benefit from shorter time in registration of new business establishments, get assistance in running an e-commerce business, superior compliance with regulatory standards for running a business, convenience and more transparency when doing business with the government via e-tender, and prevent corruption during financial clearing from government compensation by using e-banking. Government institutions benefit from up-to-date information to make sound policy decisions and regulatory controls; fast handling of data provided for better decision making; efficient management; the spread of stronger regulatory norms; better outcomes in regulatory mechanisms such as taxation; higher performance in social sectors such as health, education, and social welfare; and develop a positive impression of dynamics of modern government before the public (Bokhari & Myeong, 2022; Noprisson, 2019).

Previous studies regarding digital transformation related to service communication have been done before, such as Pangandaheng et al., 2022; Senyo et al. (2021) who conducted a literature review in the business and government sectors. They illustrated that in the context of government, digital transformation requires the commitment and leadership of all stakeholders. The common strategy is the creation of public values in digital transformation (economic, administrative, societal, and democratic) and the need to develop knowledge about managing digital transformation projects in a government context. Another study shows that the development of digital government requires support from structural, cultural, and technical transformation of bureaucratic system. An important strategy is to ensure the use of digital technology, including policies, at all ranks and levels of the bureaucracy. It is necessary to design a framework and governance for digitalization .

Regarding the effective use of digital transformation, a study showed that the transformation of the electronic-based government system of the Ministry of Energy and Mineral Resources experienced an increase according to the expected target of "very good" level. The optimization of integrated information technology and strategic initiatives improves the national SPBE and international

E-Government (Putra & Dhanuarta, 2021). Similar research also illustrates that support from the government and society in human and financial resources is necessary. The benefits or value of implementing E-Government within the local government of Badung Regency can already be experienced by society (Kadek et al., 2022).

Public services through an electronic-based government system in Malang City are successful through a network service model optimization. An electronic-based government system has proven to provide convenience for the public. Changes in delivering public services from the original "Old Public Administration" system to "New Public Service." It implements an electronic-based government system with a vertical and horizontal integration process so that the transformation of public services through electronic-based government has provided a lot of benefits, input, and conveniences for today's society (Putra & Dhanuarta, 2021).

Other research in Malang City shows that the city faces organizational challenges and social problems such as lack of leadership, resistance to change, digital divide, digital literacy, and social inclusion needs. Technological challenges occur in terms of cybersecurity, updates, and system scalability. This research also found that Malang City Government needs a user-oriented e-government approach to ensure data security and privacy. Areas that need improvement include complaint management, digital training, and cyber security, with complaint management as the most effective solution. The implication of this research is the importance of communication and understanding between government bodies and the public (Windah et al., 2023).

In general, the factors that drive the success of the digitalization process of public services are professionalism with public service innovation, human resource capabilities, and work experience (Alvarenga et al., 2020a). However, the inhibiting factors of an organizational and cultural perspective are leadership, coordination between divisions, operational support, resistance to change, and complicated bureaucracy (Sisilianingsih et al., 2024).

Digital transformation in regional government in Indonesia, based on a research study on digital transformation of regional government in the era of society 5.0: case study in West Java Province, shows that digital transformation is still relatively behind to other countries, especially in Southeast Asia. This is due to several inhibiting factors: implementation needs standardization, inadequate human resources, uneven infrastructure, lack of societal involvement, and lack of government commitment (Setyasih, 2022). Similarly, other

regions show a similar situation where SPBE development shows a relatively low level of maturity on top of high gap between the Central and Local Governments (Arief & Abbas, 2021; Dwitawati, 2021; Made Sukarsa et al., 2020; Oktarina & Sukmawati, 2022; Payong & Soares, 2023; Rachmawati et al., 2022; Sulistiyanto et al., 2023).

Research in India suggested that e-government is a multidimensional construct with customer orientation, channel orientation, and technology orientation as antecedents. Based on customer orientation and relationship marketing theory, this research proposes that citizen orientation is the most significant factor influencing success in implementing e-government projects, followed by channel and technology orientation (Malodia et al., 2021).

Previous studies generally discussed the role of digital transformation, the importance of digital transformation, effectiveness, factors inhibiting and supporting digital transformation, and stakeholder involvement in digital transformation. None of them implying investigation on the relationship between public communication and digital transformation by the government. At the same time, it is prominent to bridge the government's internal and external communication. On public communication area, the government has regulated that all regional governments has

information management duties based on legal basis as stated in Law No. 23 of 2014 concerning Regional Government. Article 345, paragraph (1) which reads, "Regional governments are obliged to develop public service management by referring to principles of public service." In addition paragraph (2) mentions, "Public service management as referred to in paragraph (1) includes: a. Consultation services b. Counseling to society c. Internal supervision d. Information management e. Management of public complaints f. Implementation of services g. Other public services, article 347, reads, "Regional governments are obliged to announce public service information as intended in article 345 paragraph (2) letter c to the public through media and places that the wider society can access" (Law No. 23 of 2014, n.d.). Government Public Relations (GPR) plays a vital role in supporting and optimizing the performance of SPBE. In this digital era, PR functions as not only a messenger but also a facilitator of change and innovation in public communication through SPBE.

Consequently, this research examined the public communication strategy by Regional Apparatus Organizations (OPD) through SPBE. Specifically, it discussed the forms of information, interaction processes, transaction processes, collaboration, performance optimization, and public communication

and the role of government public relations in strengthening public communication. It aimed to provide input for local governments to evaluate policies related to public service communication and to improve Electronic-Based Government Systems.

RESEARCH METHOD

This research focusing on public communication by institutions within the West Java Regional Government in the context of digital transformation. The target is the public communications manager in the West Java Regional Apparatus Organization (OPD).

A qualitative study is used to discover insights that cannot be achieved with statistical procedures or other quantification methods (focusing on measurement). Based on the problems and research objectives, this research used a qualitative method with a case study model (Fardiah et al., 2023).It is a case study with a single issue, which is the public communication strategy to achieve digital transformation within the Regional Government Institution of West Java Province. It examined the public communication strategy by the Regional Apparatus Organization (OPD) for digital transformation through an Electronic-Based Government System in West Java. This research is expected to provide a detailed and

in-depth description of how GPR supports the digital transformation of public communication through SPBE and provide practical recommendations that other governments can implement.

Some techniques to collect the data are used in this research such as: (1) Interviews: the researchers conducted interviews with communication managers within the West Java Provincial Government, the leading information management sector at the provincial level, and the West Java Provincial Communication and Information Service; (2) Documentation: researchers explored secondary data by searching documents, websites, and applications related to digital transformation; (3) Focus Group Discussion (FGD): The researchers conducted FGDs by gathering SPBE managers in 28 Cities/ Regencies around West Java, Bogor, Sukabumi, Cianjur, Bekasi, Karawang, Purwakarta, Subang, Bandung, Garut, Tasikmalaya, Ciamis, Cirebon, Kuningan, Indramayu, Majalengka, West Bandung, Pangandaran. Consisting of 9 City Governments such as Bandung City Government, Bogor, Sukabumi, Cirebon, Bekasi, Depok, Cimahi, Tasikmalaya, and Banjar. The FGD was held on 28-29 May 2024 in Bandung City, lasting eight hours for two days.

The data analysis technique for case studies and also ethnography consists of a "detailed

description" of the case and setting. If a case displays the chronology of an event, the analysis requires many data sources to determine the evidence at each phase in the case's evolution. Moreover, the researchers should analyze information for "unique" case settings to determine how the event occurred according to the setting (Muda & Monggilo, 2020).

Yin (2018) divides three analysis techniques for case studies: (1) pattern matching, a pattern using matching logic. This logic compares patterns based on empirical data with the predicted ones (or with several alternative predictions); (2) making explanations, which analyzes data by an explanation about the relevant case; and (3) time series analysis, which is widely used for case studies with experimental and quasi-experimental approaches.

In this research, data analysis was made by explanations of data from data collection process through interviews, documentation, and FGD. This research uses explanatory techniques to conduct qualitative data analysis and presented in a detailed and systematic description.

RESULTS AND DISCUSSION

The development of Information and Communication Technology (ICT) provides opportunities for the government as a public servant to develop the state apparatus and bureaucracy through SPBE as stated in Presidential Regulation Number 95 of 2018 concerning SPBE which contains government administration through information and communication technology.

SPBE facilitates efficient and effective government administration with transparency and accountability in government administration, development, and society. The regional Government of West Java Province implements SPBE by the SPBE Governance and Management framework to provide maximum service quality.

Electronic-Based Government System implementation in West Java is regulated in Governor Regulation Number 161 of 2022. Article 11, paragraph 1, which states that the Regional Government of West Java Province Prepares an SPBE Plan Map as a guideline for preparing and implementing integrated SPBE between regional government and Central government. SPBE Plan Map in implementation is considered by assigning the direction of policies, strategies, and initiatives in the National SPBE Architecture and Plan Map, Regional Government SPBE Architecture, Regional Medium Term Development Plan (RPJMD) for 2018-2023, Regional Development Plan (RPD) for 2024-2026 and other strategic planning documents (Map of the West Java Provincial Government's Electronic-Based Government
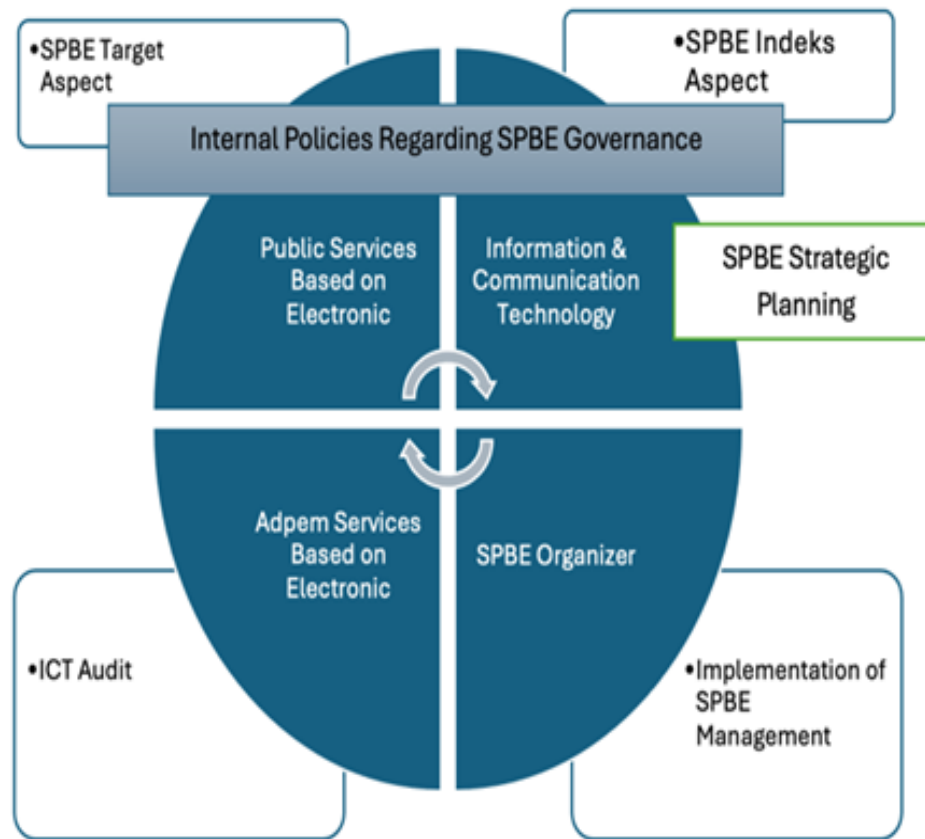
Source: Decree of the Governor of West Java, 2023

Figure 1 Conditions for SPBE implementation in West Java

System Plan for 2023-2028, 2023).

The SPBE Index for the Regional Government of West Java Province experiences fluctuations, resulting from the evaluation study of the implementation and optimization strategy of SPBE policy (Figure 1).

The Ministry of State Apparatus Empowerment and Bureaucratic Reform (PANRB) announced the 2023 SPBE evaluation results. 621 government agencies were evaluated, of which 24 central and regional governments received a satisfactory rating. Based on the review, the SPBE index 2023 was 2.79, with a good predicate.

Based on the results of FGDs, the public communication of City/Regency Government representatives in West Java generally includes the following components:

Public Communication Information through SPBE Services; The ICT revolution provides opportunities for the government to develop innovation of state apparatus development through SPBE or E-Government. This system uses ICT to provide services to government agencies, state civil servants, businesses, society, and other parties. SPBE provides an opportunity to realize open, participatory, innovative, and accountable government

Source: FGD Results, 2023

Figure 2 Public Communication Information through SPBE Services

administration, increase collaboration between government agencies to achieve common goals, improve the quality and achievement of public services to broader society, and reduce the level of authority abuse by collusion, corruption, and nepotism.

SPBE is more than just using applications or information systems in the daily operational work of government activities. Moreover, it covers several domains including information technology (IT), and services. In the domain of government activities, the scope of SPBE includes the SPBE Master Plan, Business Processes, SPBE Budgets and Expenditures, and Electronic Data and Information. In the IT Domain, SPBE includes Integrated Data Centers, Intra-Government Networks, Government Service Connecting Systems,

SPBE Service Applications, and Government Information Security. Meanwhile, SPBE includes Electronic-Based Government Administration Services and Electronic-Based Public Services in the Service Domain (Figure 2).

The public communication information through SPBE services in cities/regencies in West Java covers diverse aspects, as depicted in the chart above. The Government information portal in the form of the official websites of central and regional government that provide information related to policies, programs, services, and latest news. It also has online complaint services in the form of platforms that enable public to submit suggestions or complaints regarding public services. The official government social media used to convey the latest information, to answer questions, and to interact with public in real time. Simultaneously, government mobile applications provide various public services such as paying taxes, creating documents, and health services, SPBE also has management information systems (SIM) that are used to manage internal government data and information that can be accessed by civil servants and officials government. Additionaly, E-Procurement: electronic procurement system is used for goods and services to increase transparency and efficiency in the procurement process. Moreover, there is also E-Planning and E-Budgeting, an electronic-based planning and budgeting systems that enable transparency in preparing budgets and development plans. In addition, government dashboard, a data visualization platform that governments use to monitor performance and make decisions based on real-time data, is also available. Official Email and Newsletter, using email and digital bulletins to send important information to the public and stakeholders are other feature available. Online Discussion Forum is also available as a platform where the public can participate in discussions regarding public issues and government policies. SPBE includes E-Meeting and Video Conference technology to hold meetings virtually, which reduces the need for face-to-face meetings. There is also the introduction of Integrated Service System as a one-stop service center that utilizes technology to provide various public services on one platform. The whole SPBE service implementation facilitates access to information, increases community participation, and improves the quality of public services. Furthermore, SPBE also supports the achievement of good governance by increasing government transparency and accountability.

Public Communication Interaction Process through SPBE Services: The public communication process through the SPBE service in West Java Provincial and City/ Regency governments generally adopts an
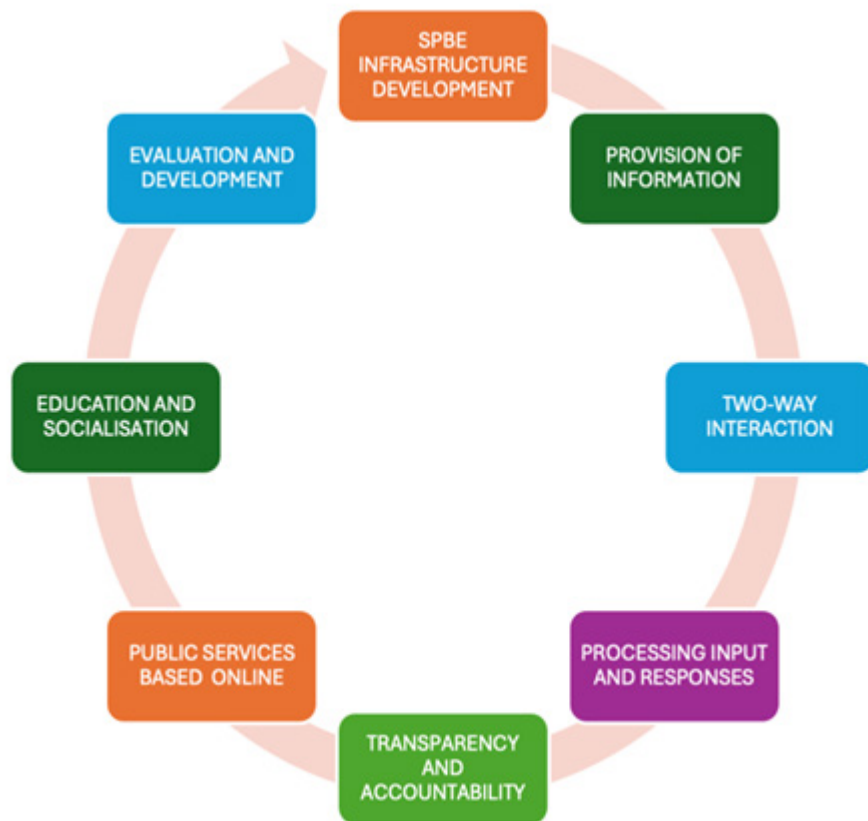
Source: FGD Results, 2023

Figure 3 Public Communication Process through SPBE Services

interaction pattern to facilitate more efficient and transparent communication between government and society with steps in the process in Figure 3.

SPBE Infrastructure Development involves developing digital platforms such as websites, mobile applications, and public service portals that can be accessed by the public. It also involves system integration by integrating different systems in government agencies to carry out a smoother data and information exchange process. The following method provides information regarding public services, policies, and regulations, which is done with transparency through the SPBE platform so that society can easily access and understand it.

The government's interaction process with society is also done in two ways: through communication such as discussion forums, chatbots, email, and social media. In this interaction process, the public can provide input, suggestions, complaints, or questions through the channels provided. Input from society is analyzed by an authorized team to identify problems and opportunities for improvement through an input and response management

Source: FGD Results, 2023

Figure 4 Public Communication Information Transaction Process through SPBE Services

mechanism. The government provides an official response to input received directly from the input provider and generally via the SPBE platform.

The interaction process is transparent and accountable by publishing follow-ups based on public input. Apart from that, the government also periodically reports the performance of SPBE services and responses to public input. Electronic-based public services are provided online for easy public access. To ensure society's participation in using this service, the government also does education and outreach to increase public awareness about SPBE services. It provides training and guidance to ensure they can use SPBE services effectively. The performance of public communications through SPBE services is evaluated periodically to ensure effectiveness and efficiency through monitoring and evaluation activities so that the government continues to develop and improve SPBE services to meet the growing needs of society. With the example, SPBE services can enhance the quality of public communication, strengthen relations between government and society, while increasing public trust in government.

Public Communication Information Transaction Process via SPBE Services: Public communication plays an essential role in increasing society's involvement. The government can listen to any aspirations, input, and society's needs by providing open communication channels. This allows the government to design policies more in line with the actual needs of society, thereby creating a more significant positive impact. One of the public information transaction processes between the government and the public is online public service information complaint transaction facilities, which enable the public to submit complaints, suggestions, or input regarding public services via digital platforms. This process ensures that complaints can be

submitted quickly, processed efficiently, and followed up transparently. The information transaction process in the form of public complaints in provincial and city/district governments in West Java is described in Figure 4.

The government generally provides an official complaint portal accessed via a website, mobile application, or another digital platform equipped with security features to protect users' data and maintain the confidentiality of complaints. In this process, the government provides clear guidance on how to submit a complaint, the types of complaints that can be submitted, and procedures for handling them so that many people take advantage of the online complaint system facilitated by the government. A complaint mechanism is usually used by the public to fill out the form available on the portal with the necessary information, such as name, contact, description of the problem, and supporting evidence. In this context, the system assigns a unique reference number to each complaint, which can be used to track the status of the complaint.

Complaints from the public are processed through verification, and whether this information is valid or not is to be recorded in a database and officially accepted for further processing. The next step is organizing types of complaints to be synchronized with the government unit or agency responsible for handling the problem for further processing. The next step is organizing types of complaints to be synchronized with the government unit or agency responsible for handling the problem for further processing. Complaint data is analyzed to identify patterns, trends, and areas that require improvement and then take necessary steps to resolve them. The government updates information regarding the progress of complaints by using tracking methods and regularly updating information so that the public knows what stage of the complaint process has reached via email, SMS, WhatsApp, or application notifications.

The following process is the follow-up stage of handling, which involves conveying the settlement results. At this stage, complainants can provide feedback on how their complaint was handled and whether they were satisfied with the outcome. The response from the complainant can later be used as evaluation material so that the government can improve the complaint-handling system and procedures to increase effectiveness and efficiency. With an excellent online-based public service information complaint transaction mechanism, the government can improve the quality of public services, strengthen relationships with society, and encourage public participation in government processes (Alvarenga et al., 2020b; Gil-Garcia et al., 2018; Lele & Goswami, 2017;

Source: FGD Results, 2023

Figure 5 Public Communication Collaboration Model through SPBE Services

Omar et al., 2017).

Collaborative Form of Public Communication through SPBE Services: This form of public communication collaboration through local government SPBE services at the provincial and city/district levels involves parties working together to improve the effectiveness of communication and public services. Collaboration includes cooperation between government, society, the private sector, non-governmental organizations (NGOs), and even international collaboration. Figure 5 shows some models of collaboration.

The government and society collaborate by providing a digital platform that allows the public to participate in public consultations, surveys, and discussion forums regarding public policies and services. Complaints and aspirations service accommodates the public to be followed up by the government. This collaboration is done through the principle of information transparency, the availability of open access to public data and information through the SPBE portal so that the public can monitor government performance and provide constructive input.

Collaboration between government agencies is done by integrating the systems of their government agencies, which allows for a more efficient exchange of data and information. For example, the integration of population data between the Department of

Home Affairs and the Department of Education. In addition, government institutions work together to formulate and implement policies that require cross-sector collaboration, such as environmental or health policies. An integrated emergency response team consisting of various government agencies is sometimes created to handle natural disasters or other emergencies.

Collaboration with the private sector is through a partnership process where the government collaborates with private companies in digital infrastructure development projects, such as internet networks in remote areas. In developing technology, the government partners up with technology companies to develop and implement the latest technological solutions in public services, such as e-government and smart cities. Another form of collaboration to help with the government's limited budget is through a Corporate Social Responsibility (CSR) program, which allows private companies to participate in CSR programs to support the government in education, health, and the environment.

Collaboration with Non-Governmental Organizations (NGOs) initiated by working together on community empowerment projects, such as skills training, health, and education programs, join implementing campaigns to increase public awareness about important issues, such as health, environment, and human rights, as well as assisting in monitoring and evaluating government programs to ensure transparency and accountability. Another collaboration is with academics and research institutions, such as universities and research institutions, conducting studies for fact-based policymaking. Academics can also provide consultation and advice to the government in formulating more effective and efficient policies and programs.

The collaboration that is significant in this digital era is international collaboration, local governments working together with other countries and international organizations in diverse projects, such as environmental management, global health, and infrastructure development, international cooperation in the form of technology and knowledge transfer to increase domestic technological capacity as well as government sharing information and best practices with other countries to increase the effectiveness of public services and policies. With public communication collaboration through SPBE services, the government can improve the quality of public services, strengthen public trust, and achieve more inclusive and sustainable development goals.

Optimizing public communication performance through SPBE services: Optimizing public communication performance through SPBE services involves several strategies and

Source: FGD Results, 2023

Figure 6 Optimizing Public Communication Performance through SPBE Services

actions to increase the efficiency, effectiveness, and quality of communication between the government and the public. Figure 6 shows the approach taken by local governments to achieve optimization.

Effective and efficient public services are essential in the current digital era. SPBE or e-government offers opportunities to improve public communication performance. SPBE utilizes ICT to provide society with transparent, responsive, and accountable services. Optimizing public communication performance through SPBE services is important for a more efficient, transparent, and responsive government. With the right strategy in developing technology, integrating services, using data, developing

human resources, and maintaining security and privacy, the government can improve the quality of public services and earned the trust of its public.

Effective implementation of SPBE can significantly increase public satisfaction with government services. By providing services that are easily accessible, transparent, efficient, and safe and involving the public in feedback and consultation processes, government can build trust and improve the quality of public services. Continuous education, training, and innovation in services and technology are also the keys to achieving this goal successfully. Effective and efficient public services are important in the current digital era. SPBE or

e-government offers opportunities to improve public communication performance. SPBE utilizes ICT to provide society with transparent, responsive, and accountable services.

Increasing satisfaction can also be achieved by providing complete, clear, and easily accessible information regarding public services, procedures, requirements, and costs required and displaying a transparency dashboard that shows the status and progress of public service applications, automating the service process to reduce completion time and minimize errors man. In addition, an online feedback system eases the public to voice criticism, suggestions, and assessments of services. In increasing user personalization, services offered can be tailored to individual needs and preferences, and notifications and reminders regarding service status, deadlines, and other important information are also added via email or mobile applications. Another important part is a security and privacy system with strong cyber security to protect people's data.

Operational efficiency through SPBE is a strategic step to improve government performance and the quality of public services. By utilizing technology, optimizing processes, and increasing human resource capacity, the government can provide better services to the public at lower costs and faster. Successful

implementation requires commitment, coordination, and ongoing evaluation to ensure that efficiency goals are achieved. This is done by automating and replacing physical documents with digital documents to make storing, searching, and sending information easier.

Transparency and accountability are two important principles in good governance. Implementing an SPBE can significantly improve these two principles through information and communication technology. This is done by providing public information by giving a unique portal for transparency that offers easy access to public information, such as financial reports, budgets, audit results, and procurement of goods/services, and provides real-time information about the performance of various government departments and programs. Publication of government data must also be open, where non-sensitive government data is published openly in a format that is easy to access and use by the public and third parties, allowing the public to download, analyze, and visualize government data. The government also provides access to policy documents, regulations, and decisions taken by the government online and even involves the public in the decision-making process through online public consultations, discussion forums, and surveys.

Accountability is achieved through an

e-audit system to facilitate a more efficient and transparent internal and external audit process and an electronic financial reporting system to ensure the accuracy and transparency of government financial reports. Meanwhile, in terms of online complaint handling, which allows the public to report complaints and problems related to public services directly, there is also a clear and transparent mechanism for following up on complaints and providing feedback to the public.

Previous research affirms that the electronic governance model helps quickly dispose of citizen complaints. One-sided communication is a characteristic of traditional government. Unilateral communication will lead to corruption, time-consuming official rules, and procedures, delays in decision-making, bribery, undue favors to close people, no accountability, more emphasis on documents and archives, changing laws and regulations to assist, etc. E-governance has helped the government to overcome these problems. Citizens' trust in public institutions is restored. Access to information and delivery of public services changes when e-governance begins to be implemented. Mechanisms for public service delivery should not be created according to government requirements but designed according to the needs of citizens. Adopting e-governance also changes the perspective of

a global society. This perspective is seen when a country rises in rankings in major reports or indices prepared by the UN, IMF, WB, UNDP, UNESCO, etc. For an e-governance plan to succeed, it needs a supportive atmosphere conducive to shaping and delivering desired results. The result of administrative reform is only visible when existing deficiencies are eliminated. Continuous evaluation of user feedback can help in achieving success (Singh, 2023).

Digital transformation of public communication through SPBE is important in improving efficiency, transparency, and public participation in public services. In this digital era, the role of GPR is not only as a messenger but also as a facilitator of change and innovation in public communication through SPBE. GPR plays an important role in providing healthy and positive information to the public amidst the polemics over the development of communication technology. Therefore, GPR must provide information that pays attention to pluralism and cultural sensitivity in the community (Satira & Hidriani, 2021). The role of government PR (GPR) is very important in order for information to be well received by the public, and creating reciprocity from the community, which can also reach the government. In its role, PR in government must possessed a good communication skills in order

to provide information to individuals or groups and receiving information as well as aspirations during the process, which will then become a reference for the government in making policies that are needed by the community (Kadarisman, 2021). GPR is a distinctive management function that maintains a common path between the government and its public, consisting of activity in communicating, understanding, accepting, and cooperating . In West Java, GPR utilizes the SPBE platform to integrate various communication channels to make it faster and in real-time by utilizing social media, government portals, and mobile applications that allow the government to interact directly with the community. The research studies conducted contain the principle of community interaction and GPR (Afrilia et al., 2023; Dunan, 2020; Meganck et al., 2020; Zagidullin et al., 2021). In improving the accessibility of public information, GPR also provides public information easily accessible to the public anytime and anywhere.

The West Java government's GPR also uses the principle of more personalized services in public communication; through integrated West Java Big data, the government tailors messages and services based on the specific needs of various community groups, increasing the relevance and effectiveness of communication. Therefore, GPR uses multiple platforms to increase public

participation in government processes with features such as e-participation, the public can provide input, following consultations, and even the public, can participate in decision-making digitally. This is relevant to research conducted in America about community involvement in decision making (Liu & Horsley, 2007). In crises, GPR also utilizes SPBE to provide fast and accurate information to provide real-time updates and manage crisis communications more effectively, minimizing misinformation and public concerns. This mechanism ultimately helps build public trust and increase government accountability in managing public policies and services through optimizing technology to develop innovations in public communication. In line with research, Good Governance and Public Relations are important for building trust and positive relationships between government and society. Good Governance involves a set of practices and principles that ensure that decision-making is transparent, accountable, and responsive to citizens' needs. An effective Public Relations strategy can help governments communicate their policies and actions to the public clearly and compellingly. This can help build trust and understanding, essential for good governance (Anggraini & Maulida, 2023; Aribisala et al., 2023; BHOI, 2023).

In implementing SPBE, GPR utilizes chatbots for information services, live streaming

for government events, and interactive applications for two-way communication with the public. Based on the results of previous research, there are two communication strategies that GPR can use in the era of the Industrial Revolution 4.0, content automation and digital storytelling and supporting experts in the fields of public relations, data analysis, and data learning. The ability of public relations can support the implementation of communication strategies (Dunan & Mudjiyanto, 2020). Social media and official websites can be maximized as a source of information when a crisis occurs, in addition to press release activities, media gatherings, public hearings, and press conferences. Turning crises into opportunities and providing added value to positive imaging is something that public relations must do. Therefore, all communication channels must be organized and managed properly. Crisis communication strategies must consider the diversity of communication platforms (Takariani et al., 2020).

CONCLUSION

This research focuses on aspects of public communication through SPBE, which shows that public communication information is in the form of services for society, business entities, government services, and civil servants. The interaction processes are infrastructure development, information provision, two-way interaction, input and response management, transparency and accountability, online-based public services, education, outreach, and evaluation and development. The information transaction process consists of providing a complaint platform, guidelines for using the platform, submitting public complaints, verifying and receiving public complaints, handling complaints, confirming and communicating, resolving complaints, and evaluating and improving the system. Collaboration includes government and society, government institutions, the private sector, non-governmental organizations (NGOs), academics, research institutions, and international collaboration. Optimizing public communication performance increases public satisfaction, operational efficiency, transparency, and accountability, and it involves good public participation.

The research implies that the government must consistently improve and diversify information forms in order for information to reach all groups massively, covering those with physical or digital limitations. The government should also strengthen the two-way interaction process with society through digital platforms to build more responsive and participatory communication, develop chatbots and AI to handle various requests and questions

more effectively, and conduct educational campaigns on using SPBE services and their benefits for society. Furthermore, optimization of information transaction processes and continuous collaboration in building a platform are vital.

This research focuses on the context of public communication in government organizations in cities/districts. Therefore, more in-depth research in each region is required.

REFERENCES

Afrilia, A. M., Rhizky, D. P., Putri, W. E., & Ratnasari, E. (2023). The digital competence of government public relations officer in Magelang City. *PRofesi Humas Jurnal Ilmiah Ilmu Hubungan Masyarakat*, *7*(2), 215. https://doi.org/10.24198/prh.v7i2.43146

Al-Rzoky, H. M. M., Al Mahdi, S. K. A. R., & Al-Samariy, P. H. H. (2019). E-governance applications and usage patterns in developing countries. *Periodicals of Engineering and Natural Sciences*, *7*(3), 1308–1317. https://doi.org/10.21533/PEN.V7I3.719

Alvarenga, A., Matos, F., Godina, R., & Matias, J. C. O. (2020a). Digital transformation and knowledge management in the public sector. *Sustainability*, *12*(14), 5824. https://doi.org/10.3390/SU12145824

Alvarenga, A., Matos, F., Godina, R., & Matias, J. C. O. (2020b). Digital transformation and knowledge management in the public sector. *Sustainability (Switzerland)*, *12*(14). https://doi.org/10.3390/su12145824

Anggraini, S., & Maulida, D. (2023). Optimalisasi peran humas pemerintah kabupaten nagan raya era digitalisasi sebagai upaya mewujudkan transparansi informasi publik (optimizing the public relations role of the nagan raya district government in the digitalization era as an effort to realize transparency of public information). *Jurnal Studi Multidisiplin Ilmu*, *1*(2), 51–58. https://doi.org/10.35912/jasmi.v1i2.2251

Aribisala, T. M., Samson, A., & Chinenye, N. P. (2023). Impact of digital public relations on good governance, accountability, and national integration in Nigeria. *Path of Science*, *9*(8), 5009–5019. https://doi.org/10.22178/pos.95-35

Arief, A., & Abbas, M. Y. (2021). Kajian literatur (systematic literature review): kendala penerapan sistem pemerintahan berbasis elektronik (SPBE). *Jurnal Ilmiah Teknik* Elektro, 8(1).

BHOI, P. (2023). Importance of public relations

in good governance. *Science and Culture, 89.*https://doi.org/10.36094/sc.v89.2023

Bokhari, S. A. A., & Myeong, S. (2022). Artificial intelligence-based technological-oriented knowledge management, innovation, and e-service delivery in smart cities: Moderating role of e-governance. *Applied Sciences, 12*(17), 8732. https://doi.org/10.3390/APP12178732

Brown, D. (2005). Electronic government and public administration. *International Review of Administrative Sciences*, *71*(2), 241–254. https://doi.org/10.1177/0020852305053883

Cegarra-Navarro, J. G., Pachón, J. R. C., & Cegarra, J. L. M. (2012). E-government and citizen's engagement with local affairs through e-websites: The case of Spanish municipalities. *International Journal of Information Management*, *32*(5), 469–478. https://doi.org/10.1016/j.ijinfomgt.2012.02.008

Curtis, S. (2019). Digital transformation—the silver bullet to public service improvement? *Public Money and Management*, *39*(5), 322–324. https://doi.org/10.1080/0954096 2.2019.1611233

Dunan, A. (2020). Government Communications in Digital Era: Public Relation and Democracy. *Journal Pekommas*, *5*(1), 71. https://doi.org/10.30818/jpkm.2020.2050108

Dunan, A., & Mudjiyanto, B. (2020). The Republic of Indonesia government public relations communication strategy in the era of the industrial revolution 4.0 . *Journal of Southeast Asian Studies*, *25*(1), 58–78. https://doi.org/10.22452/jati.vol25no1.4

Dwitawati, I. (2021). Implementasi gap analisis dari sistem pemerintahan berbasis elektronik (spbe) Pada Kabupaten Bener Meriah. *JINTECH: Journal of Information Technology*, *3*(1), 179–202. https://journal.ar-raniry.ac.id/index.php/jintech

Enaifoghe, A., & Ndebele, N. C. (2023). Examining the barriers to the adoption and integration of information communication technologies as e-Government in Africa. *International Journal of Research in Business and Social Science*, *12*(7), 383–393. https://doi.org/10.20525/IJRBS.V12I7.2723

Fardiah, D., Darmawan, F., Rinawati, R., Supaat, V.E.M., & Abdullah, S.I. (2023). JCC sebagai komunikasi digital terpadu informasi kebencanaan di Jawa Barat. *Jurnal Komunikasi*, *18*(1), 52–73. https://doi.org/10.20885/KOMUNIKASI.VOL18.ISS1.ART4

Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2018). Digital government and public management research: finding the crossroads. *Public Management Review*, 20(5), 633–646). https://doi.org/10.1080/14719037.2017.1327181

Jun, K. N., Wang, F., & Wang, D. (2014). E-government use and perceived government transparency and service capacity. *Public Performance & Management Review*, *38*(1), 125–151. https://doi.org/10.2753/PMR1530-9576380106

Kadarisman, A. (2021). Government public relations dalam pengembangan pariwisata masa pandemi COVID-19 di Geopark Ciletuh. *PRofesi Humas*, *5*(2), 270–290.

Kadek, O., Dwi Wismayanti, W., & Purnamaningsih, E. (2022). Transformasi pelayanan publik melalui e-government di masa era new normal pada pemerintah daerah Badung. *Media Bina Ilmiah*, *16*(10), 7507–7518. https://doi.org/10.33578/MBI.

V16I10.1

Karpagavalli, V., & Mohanasoundari, R. (2017). E-Governance in local authority a pilot study with reference to Tirupur City, Tamil Nadu. *International Journal in Computer Simulation*, *2*(1), 8–15. https://doi.org/10.17010/IJCS/2017/V2/I1/110140

Kavathkar, D. M., Tayade, M. S., Pawar, S., Patil, S. M., & Gate, K. S. (2023). Ease of governance. *Indian Scientific Journal Of Research In Engineering And Management*, *07*(04). https://doi.org/10.55041/IJSREM18783

Lele, U., & Goswami, S. (2017). The fourth industrial revolution, agricultural and rural innovation, and implications for public policy and investments: A case of India. *Agricultural Economics (United Kingdom)*, *48*, 87–100. https://doi.org/10.1111/agec.12388

Liu, B. F., & Horsley, J. S. (2007). The government communication decision wheel: toward a public relations model for the public sector. *Journal of Public Relations Research*, *19*(4), 377–393. https://doi.org/10.1080/10627260701402473

Luky. (2022, December 23). *Riset ungkap tantangan transformasi digital di pemerintah*. Fortune Indonesia. https://www.fortuneidn.com/tech/luky/riset-ini-ungkap-tantangan-transformasi-digital-di-sektor-pemerintah?page=all

Made, S, I., Paramartha, B.A., Cahyawan, A.K.A., Suar, W.K., Yasa, G.A.S., Wulanyani, M.S., & Wayan, W.N. (2020). Managed by ministry of research, technology, and higher education. *Accredited by National Journal Accreditation*, *4*(2), 243–253.

Malodia, S., Dhir, A., Mishra, M., & Bhatti, Z. A. (2021). Future of e-government: An integrated conceptual framework. *Technological Forecasting and Social Change*, *173*, 121102. https://doi.org/10.1016/J.TECHFORE.2021.121102

Marius R. Busemeyer (ed.), Achim Kemmerling (ed.), Kees Van Kersbergen (ed.), & Paul Marx (ed.). (2022). Digitalization and the welfare state. In *Digitalization and the Welfare State*. Oxford University Press. https://doi.org/10.1093/OSO/9780192848369.001.0001

Meganck, S., Smith, J., & Guidry, J. P. D. (2020). The skills required for entry-level public relations: An analysis of skills required in 1,000 PR job ads. *Public Relations Review*, *46*(5). https://doi.org/10.1016/j.pubrev.2020.101973

Muda, Z., & Monggilo, Z. (2020). Analisis konten kualitatif hoaks dan literasi digital dalam @komikfunday. *Interaksi: Jurnal Ilmu Komunikasi*, *9*(1), 1–18. https://doi.org/10.14710/INTERAKSI.9.1.1-18

Noprisson, H. (2019). Challenges and benefits of knowledge management practices in electronic government. *International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), 5*(4), 2456–3307. https://doi.org/10.32628/CSEIT195448

Oktarina, D., & Sukmawati, N. (2022). Implementation of an electronic-based government system (spbe) at the Muaro Jambi regency communication and information service. *Sustainability: Theory, Practice and Policy*, *2*(2), 133–143.

Omar, A., Weerakkody, V., & Sivarajah, U. (2017). Digitally enabled service transformation in UK public sector: A case analysis of universal credit. *International Journal of Information Management*, *37*(4), 350–356. https://doi.org/10.1016/j.ijinfomgt.2017.04.001

Pangandaheng, F., Maramis, J. B., Saerang, D. P. E., Dotulong, L. O. H., & Soepeno, D. (2022). Transformasi digital: Sebuah tinjauan literatur pada sektor bisnis dan pemerintah. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *10*(2). https://doi.org/10.35794/EMBA.V10I2.41388

Payong, Y., & Soares, A. (2023). Evaluasi domain layanan sistem pemerintahan berbasis elektronik (spbe) pemerintah kecamatan se-Kota Kupang. *Jurnal Teknologi Informasi*, *12*(2), 112–118.

Peta Rencana Sistem Pemerintahan Berbasis Elektronik Pemerintah Daerah Provinsi Jawa Barat Tahun 2023-2028, Sekretariat Daerah Pemerintsh Provinsi Jawa Barat 1 (2023).

Putra, B. K., & Dhanuarta, C. B. (2021). Transformation of public services through electronic-based government system in Malang City. *International Journal of Education, Information Technology, and Others*, *4*(3), 452–459. https://doi.org/10.5281/ZENODO.5205295

Rachmawati, R., Anjani, D. F., Rohmah, A. A., Nurwidiani, T., & Almasari, H. (2022). Electronically-based governance system for public services: implementation in the Special Region of Yogyakarta, Indonesia. *Human Geographies*, *16*(1), 71–86. https://doi.org/10.5719/hgeo.2022.161.5

Satira, A. U., & Hidriani, R. (2021). Peran penting public relations di era digital. *International Journal*, *1*(1), 179–202.

Senyo, P. K., Effah, J., & Osabutey, E. L. C. (2021). Digital platformisation as public sector transformation strategy: A case of Ghana's paperless port. *Technological Forecasting and Social Change*, *162*. https://doi.org/10.1016/j.techfore.2020.120387

Setyasih, E. T. (2022). Transformasi digital pemerintah daerah di era society 5.0: studi kasus di Provinsi Jawa Barat. *PAPATUNG: Jurnal Ilmu Administrasi Publik, Pemerintahan Dan Politik*, *5*(3), 59–66. https://doi.org/10.54783/JAPP.V5I3.657

Singh, A. (2023). Developing an e-governance model for citizen centric administration. *Vidya - A Journal Of Gujarat University*, *2*(1), 22–30. https://doi.org/10.47413/VIDYA.V2I1.130

Sisilianingsih, S., Purwandari, B., Eitiveni, I., Purwaningsih, M., & Korespondensi, P. (2024). Analisis faktor transformasi digital pelayanan publik pemerintah di era pandemi. *Jurnal Teknologi Informasi Dan Ilmu Komputer*, *10*(4), 883–892. https://doi.org/10.25126/JTIIK.2023107059

Sulistiyanto, B., Sutejo, I., Mulyo Widodo, A., Firmanysah, G., & Tjahyono, B. (2023). Risk management domain application plan electronic based governance system (spbe) case study: tangerang government communications and informatics service. *Jurnal Indonesia Sosial Sains*, *4*(09). http://jiss.publikasiindonesia.id/

Takariani, C. S. D., Praditya, D., & Pusoitasari, L. (2020). *Media, komunikasi, teknologi informasi dan komunikasi* (Vol. 1).

UU No. 23 Tahun 2014. (n.d.). Retrieved June 28, 2024, from https://peraturan.bpk.go.id/Details/38685/uu-no-23-tahun-2014

Windah, A., Oktiani, H., Nurhaida, I., Putra, P., Purnamayanti, A., & Maryani, E. (2023). Sambat online program's pursuit of citizen-centric information services empowerment. *International Journal of Qualitative Research*, *3*(2), 153–161. https://doi.org/10.47540/IJQR.V3I2.1152

Wulandari, D., Gumilang, S. F. S., & Mulyana, R. (2021). Perancangan enterprise architecture

layanan spbe (e-government) di lingkungan Pemkab Sukabumi. *JURTEKSI (Jurnal Teknologi Dan Sistem Informasi)*, *8*(1), 19–26. https://doi.org/10.33330/jurteksi. v8i1.1204

Yin, R. K. (2018). *Case study research and applications (design and methods)* (sixth edition). Sage Publication.

Zagidullin, M., Aziz, N., & Kozhakhmet, S. (2021). Government policies and attitudes to social media use among users in Turkey: The role of awareness of policies, political involvement, online trust, and party identification. *Technology in Society*, *67*. https://doi.org/10.1016/j. techsoc.2021.101708