

ANALYSIS OF E-GOVERNMENT FACILITIES IN DELIVERING PUBLIC SERVICES IN TAPIN REGENCY

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Abstract

E-Government in Tapin Regency serves to deliver public services to both internal and external stakeholders. This study analyzes the e-government facilities that support public service delivery in Tapin Regency. The research begins with a review of public service and e-government concepts, followed by an examination of e-government facilities using the E-Government Maturity Level framework developed by Wirtz and Piehler. The analysis focuses on the e-government website, online public services, and applications in Tapin Regency. Data collection methods include observation, stakeholder interviews, and literature review. The findings indicate that several public services fulfill four e-government business models and correspond to the fourth stage of e-government development. Therefore, certain public services in Tapin Regency have attained the fourth level of e-government maturity.

Keywords: E-Government, public policy, innovation, public services.

1. INTRODUCTION

E-government refers to the use of digital technologies, particularly the internet, to provide government services and information to the public, and it has the potential to transform public administration by enhancing efficiency, transparency, and accessibility (Zhang & Kaur, 2024). Based on Presidential Instruction Number 3 of 2003 concerning the National Policy and Strategy for E-Government Development, e-government is defined as an effort to advance the implementation of governance through the use of electronic systems in order to improve the quality of public services in an effective and efficient manner. Through the development of e-government, management systems and work processes within government institutions are reorganized by optimizing the utilization of information technology. The utilization of information technology encompasses two interrelated activities which can be described as (1) electronic data processing, information management, management systems, and work processes; and (2) the utilization of advances in information technology to ensure that public services can be accessed easily and at low cost by the public across all regions of the country. The e-government extends beyond mere digitization of existing workflows; it entails a fundamental reimagining of governance structures, aiming to enhance transparency, efficiency, accessibility, and citizen engagement. The scope of e-government encompasses multiple

dimensions, including government-to-citizen (G2C), government-to-business (G2B), government-to-government (G2G), and government-to-employee (G2E) interactions.

E-government typically refers to the use of Information and Communication Technologies (ICTs) in government, accompanied by organizational changes, to enhance government structures and processes. The adoption of e-government is anticipated to enable governments to deliver improved services and foster better interactions with citizens, businesses, and other governmental entities (Jejenywa et al., 2024; Tiika et al., 2024).

To integrate e-government as an integral component of good governance achievement, governments adopt administrative practices that emphasize speed and efficiency. In categorizing research and design related to public services and their relationship with e-government, governments employ specific indicators and evaluation mechanisms to assess whether e-government implementation has met its required criteria, as proposed in the research framework developed by Wirtz and Piehler.

E-government does more than just implement technology; it also brings new public values and ways of governing (OECD, 2016; United Nations, 2022). Good service performance in e-government strongly affects public service results and public trust (Tolbert & Mossberger, 2006; Morgeson, VanAmburg, & Mithas, 2011). Using technology to improve public services helps make government processes more efficient, which depends on the maturity of e-government and the quality of ICT infrastructure (Layne & Lee, 2001; United Nations, 2022).

Research on the transition from traditional government systems to e-government demonstrates that public service facilities in Tapin Regency can significantly impact key stakeholders. This study aims to analyze e-government facilities in Tapin Regency, with a focus on public service delivery and innovation. The research employs a review of public service and e-government theories, as well as an analysis grounded in the e-government maturity level framework.

2. METHODOLOGY

This research employed a descriptive, qualitative approach utilizing both normative and empirical methods, including statutory and conceptual analysis. The study concentrated on websites, applications, and public service innovations in Tapin Regency. Data sources included literature, regulations, stakeholder interviews, and observations of e-government websites. The analysis primarily focused on several key applications, using parameters from Wirtz and Piehler's e-government maturity levels.

Data collection involved literature, regulations, in-depth stakeholder interviews, and observations of e-government websites. The primary subjects of analysis were several applications, assessed using parameters from Wirtz and Piehler's theory of e-government maturity levels.

The procedures for conducting the analysis using the theory used are as follows:

- a. Explain the business model as defined in the research (by Wirtz and Piehler), using the following table.
- b. Analyze the research subjects based on the levels of information, communication, transaction, integration, and participation.
- c. Group the results of the analysis and briefly explain them.
- d. Draw conclusions regarding the e-government maturity level.

3. FINDINGS AND DISCUSSION

3.1 Public Services

Public services in Indonesia are specifically regulated by Law Number 25 of 2009 concerning Public Services. This law defines public services as activities or a series of activities designed to fulfill the service needs of every citizen and resident, in accordance with statutory regulations, for goods, services, and/or administrative services provided by public service providers.

From a conceptual perspective, public services are understood as a manifestation of the welfare state's function, where the state not only plays a role as a guardian of order (*nachtwakerstaat*) but also takes an active responsibility to ensure public welfare through quality services.

Public services are also viewed as a key instrument in realizing good governance. From this perspective, Law Number 25 of 2009 is not merely interpreted as a technical regulation, but as a conceptual framework for transforming the relationship between the state and citizens, from a power relationship to a service relationship.

This conceptual approach also positions the public as active subjects, not merely objects of service. Therefore, public services are understood as a means of increasing public trust in the government.

One of the legal entities that provides public services is the government, and public services are guided by principles such as legal certainty, equal rights, professionalism, participation, and accountability (Law Number 25 Republic of Indonesia, 2009).

3.2 E-Government

E-government can be defined in several ways. Using technology in governance is important for making systems more effective and efficient. Two main elements are using the internet as a tool and simplifying processes through internet-based solutions. This makes services more accessible to the public.

E-government services can be grouped by type. The main categories are Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Employee (G2E), and Government-to-Government (G2G).

Based on this, the applications in Tapin Regency can be described as follows:

Table 1. Description the methods

Type	E-Government Public Services
G2C	1. Information and data related to Tapin Regency
	2. Administration, ie Population
	3. Registration for licensing
	4. Public complaints services.
G2B	Procurement
G2E	General administration, personnel information, attendance application
G2G	Regional cooperation for vertical or horizontal institutions

3.3 E-Government Maturity Level

After collecting data from several applications and innovations in Tapin Regency, the results are shown in the table below. The study used the approach developed by Wirtz and Piehler, which includes the stages of information, communication, transactions, integration, and participation.

After collecting data from several applications and innovations in Tapin Regency, the results are shown in the table below. The study used the Wirtz and Piehler approach, which is based on the stages of information, communication, transaction, integration, and participation.

The e-government maturity level shows the stage of public services in the regency. Most applications have similar information stages, but communication varies by service. In the transaction stage, public services can handle two-way transactions with the public or third parties. Integration means systems are combined to speed up administration and share data with other agencies. The final stage involves active public participation, where users can give feedback or raise concerns about the service.

The services provided by Tapin Regency to the public related to the e-government maturity level are described as follows:

Table 2. Analysis of SIMPEL OM AE

Name and Acronym	Instution
SIMPEL OM AE (Sistem Pelayanan Produk Hukum Daerah)	Law Section, Regional Secretariat Of Tapin Regency
SIMPEL OM AE (Sistem Pelayanan Produk Hukum Daerah) is a digital service innovation developed to simplify and expedite the administrative process of submitting regional legal products from Regional Government Agencies (SKPD) to the Legal Division, whether in the form of Regional Regulations (Peraturan Daerah), Regent Regulations (Peraturan Bupati), or Regent Decrees (SK). This application is integrated with the Tapin Regency JDIH website (jdih.tapinkab.go.id) and is designed to provide transparent, effective, and efficient service. Through this system, Regional Government Agencies can obtain complete and clear information on	

legal product submission requirements, the process flow, and other necessary provisions from the initial submission stage onward.

In terms of communication, SIMPEL OM AE provides a fast and responsive coordination space between the Legal Division and SKPDs via WhatsApp. This communication includes notes, corrections, and guidance on drafts of submitted legal products, allowing for document refinement without the need for face-to-face meetings.

In terms of service transactions, this system allows Regional Government Agencies to upload and download legal product documents online. This simplifies document archive management, reduces paper use, and speeds up administrative processes.

SIMPEL OM AE is also supported by system integration, where the server is managed by the Department of Communication and Informatics and connected to the Tapin Regency JDIH and integrated with the National JDIH. This integration ensures data uniformity, system security, and transparency of legal information to the public.

Furthermore, this system encourages user participation by providing notes, feedback, and satisfaction surveys, accessible directly through the JDIH website. This participation serves as evaluation material for the Legal Department to continuously improve the quality of regional legal product services.

Source: Law Section, Regional Secretariat Of Tapin Regency

Table 3. Analysis of E-TAPIN MESRA

Name and Acronym	Instution
E-TAPIN MESRA (Elektronik Data Tapin Menuju Keluarga Sejahtera)	Social Agency Of Tapin Regency
<p>E-Tapin Mesra (Tapin Electronic Data Towards Prosperous Families) is a digital innovation developed by the Tapin District Social Service to improve the management and classification of poverty data in the region. This application was developed due to the lack of poverty data sourced from relevant ministries that classified the level of community welfare into the categories needed at the regional level. The website is etapinmesra.dinsos.tapinkab.go.id/.</p> <p>The development of E-Tapin Mesra began with a website built based on data from the Ministry of Social Affairs. The ministry-developed questionnaire was used as an indicator for grouping community welfare levels. Based on the assessment results, the community was classified into four categories: the very poor (20-29), the poor (30-46), the vulnerable (47-63), and the middle class (64-80). This grouping aims to optimize the accuracy of social assistance recipients in Tapin Regency.</p> <p>From an informational perspective, E-Tapin Mesra provides structured explanations and data on the community's welfare conditions. In terms of communication, this application enables transactions through data entry by data entry officers. The transaction aspect is reflected in the process of electronic data collection and uploading. Furthermore, in terms of integration, E-Tapin Mesra is connected to the Population and Civil Registration Office (Disdukcapil) to ensure the accuracy of population data. However, in terms of participation, this application does not yet provide a space for feedback or a mechanism for complaints for the community.</p>	

Source: Social Agency Of Tapin Regency

Table 4. Analysis of Govern

Name and Acronym	Instution
<p style="text-align: center;">Govern (Government Employee)</p>	<p style="text-align: center;">Communication And Informatics Agency Of Tapin Regency</p>
<p>GOVEM (Government Employee) is a digital-based personnel service application initiated by the Department of Communication and Informatics of Tapin Regency. This application was developed as a means of attendance recording for the State Civil Apparatus (ASN) within the Tapin Regency Government.</p> <p>GOVEM can be accessed via the website web.govem.tapinkab.go.id and is also available as an app that can be downloaded from the Play Store, making it easier for ASN to record their attendance and work activities in a flexible and integrated manner.</p> <p>GOVEM provides a brief explanation of the application's functions and usage on the home page before users log in. This information serves as an initial guide for employees in using the system.</p> <p>In terms of communication, the GOVEM application includes a chat group feature that covers all Regional Work Units (SKPDs). This feature enables faster, more efficient internal coordination and communication among employees and work units.</p> <p>In terms of service transactions, GOVEM facilitates the recording of employee attendance and daily activities. The activity data that has been entered can be edited in accordance with the provisions, providing flexibility while maintaining the accuracy of employee performance data.</p> <p>GOVEM is also supported by system integration, which connects this application to the Padaringan application. The integration aims to synchronize employee attendance and activity data with other personnel systems within the Tapin Regency Government.</p> <p>Additionally, regarding user participation, GOVEM provides a complaints column for submitting feedback and complaints. Participation can also be done via WhatsApp, giving users more than one channel to provide feedback regarding the application's use.</p>	

Source: Communication And Informatics Agency Of Tapin Regency

Table 5. Analysis of Talitarang

Name and Acronym	Instution
<p style="text-align: center;">Talitarang (Sistem Informasi Tata Ruang Berbasis Geospasial Terintegrasi, Mewujudkan Pembangunan Tapin yang Transparang dan Maju)</p>	<p style="text-align: center;">Regional Development Planning, Research, And Development Agency Of Tapin Regency</p>
<p>Talitarang (Sistem Informasi Tata Ruang Berbasis Geospasial Terintegrasi, Mewujudkan Pembangunan Tapin yang Transparang dan Maju) Regional Development Planning, Research, And Development Agency Of Tapin Regency</p> <p>TALITARANG (Integrated Geospatial Spatial Planning Information System) is a digital platform developed to support transparent, advanced development in Tapin Regency. This application can be accessed at talitarang.tapinkab.go.id and serves as a platform for providing regional spatial planning information.</p> <p>The main objective of TALITARANG is to provide information on Regional Spatial Plans</p>	

(RTRW), Detailed Spatial Plans (RDTR), and regional infrastructure data, presented openly and based on geospatial data. Through this system, the community, business actors, and regional officials can easily and accurately access spatial information. From an information perspective, TALITARANG provides various data and explanations related to regional spatial planning and infrastructure, which are displayed directly on the application page. This information is presented visually through digital maps, making it easy for users to understand.

In terms of communication, TALITARANG provides a complaint and consultation channel via WhatsApp chat. This facility allows users to submit questions, feedback, and complaints related to spatial information quickly and in a responsive manner.

In terms of service transactions, TALITARANG provides users with access to display and browse spatial planning maps, as well as a feature for uploading geospatial data in shapefile (SHP) format. This feature supports the structured management and updating of geospatial data.

In terms of integration, the TALITARANG system is connected to the Investment and Integrated Services Agency (DPMPTSP) and the Communication and Information Agency. This integration aims to support data synchronization and strengthen licensing services and regional spatial information management.

In addition, public participation is facilitated through surveys and complaint features available directly on the TALITARANG website. This mechanism enables the community to actively provide input on the evaluation and improvement of spatial information services in Tapin Regency.

Source: Regional Development Planning, Research, And Development Agency Of Tapin Regency

Table 6. Analysis of E-Star

Name and Acronym	Instution
E-Star (Electronic Sustainable Tapin Research)	Public Works And Spatial Planning Agency Of Tapin Regency
<p>E-Star (Electronic Sustainable Tapin Research), accessible at e-starlitbang.tapinkab.go.id, is a digital service innovation that serves as a centralized repository for research and development results in Tapin Regency. E-Star addresses the need for a research documentation system that was previously unorganized and integrated. Through this platform, the local government not only systematically archives research and development results but also makes them easier for the public to access, thereby serving as a database of regional innovation in Tapin Regency.</p> <p>E-Star provides a variety of research and development results, accessible through the official website. This information is presented with adequate explanations so that it can be understood by users, including government officials, academics, and the general public.</p> <p>In terms of communication, E-Star has provided a means of interaction between the government and the public. This communication takes the form of a consultation service linked to the Polisip Tapin website, specifically focused on regional innovation, so users can submit questions, feedback, and requests online.</p> <p>Furthermore, in terms of transactions, this platform has enabled the electronic</p>	

exchange of data and documents. Users can upload, download, and access research documents and innovation support data documents online.

Furthermore, from a transactional perspective, this platform has enabled the electronic exchange of data and documents. Users can upload, download, and access research documents and innovation support documents directly through the system, demonstrating that the service is not only informative but also transactional.

In terms of integration, E-Star has been integrated with the official website portal of the Tapin Regency Government (tapinkab). This integration demonstrates the interconnection between systems within the local government environment, thereby supporting the effectiveness and efficiency of digital service delivery.

Meanwhile, in terms of participation, E-Star has provided a participatory space for the community through surveys and complaint services facilitated using Google Forms. This feature allows the community to provide feedback, input, and complaints related to existing services and innovations.

Source: Public Works And Spatial Planning Agency Of Tapin Regency

The transaction business model of these applications focuses on starting, handling, and processing administrative procedures through the e-government platform. The goal is to complement or replace existing offline government services.

The integration business model brings public stakeholders into the value chain of the public sector organization. This can involve participation, collaboration, or cooperation. The services provided include ways for the public to share preferences, feedback, and opinions, which are then used in policy-making, administrative procedures, and public management.

Based on the explanation above, the results of the research analysis using the method developed by Wirtz and Piehler can be summarized as follows: Table 7 presents a recapitulation of e-government services provided by the E-Government public services in Tapin Regency. Based on the recapitulation, the five applications were on the fourth development stage. Therefore it indicated that the e-government maturity level was 4 (four).

Table 7. Recapitulation of Applications

Name	Information	Communication	Transaction	Integration	Participation
SIMPEL OM AE	available	available	available	available	only feedback by users / survey in website jdih
E-TAPIN MESRA	available	available	available	available	non available
GOVEM	available	available	available	available	via offline/ <i>whatsapp app</i>
TALITARANG	available	available	available	available	website survey and online messenger surveys and complaint services
E-STAR	available	available	available	available	facilitated using Google Forms

Source: Author

4. CONCLUSION

Based on the explanation and research results above, Tapin Regency has applications and innovations related to public services in the fourth stage, with well-available information, adequate communication facilities, data transactions, administrative processes, and other types of transactions that can be handled and integration implemented, while participation is still very low.

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