

Public Service in the Era of Digitalization: Effectiveness of SIMANIZ Application Innovation in Local Government Scope

Musta'ana¹, Septi Wulandari¹, Esa Septian¹, Manuel Ximenes²

¹Department of Public Administration, Faculty of Social and Political Science, Universitas Bojonegoro, Indonesia
Jl. Letda Sutoyo No. 19-21, Bojonegoro, Jawa Timur, 62119 Indonesia

²Department of Socio Economic, Faculty of Agriculture, Universidade Nacional Timor Lorosa'e, Timor Leste
Av. Cidade de Lisboa, Dili, Timor-Leste

Email Corresponding: anarochim@gmail.com

Article History:

Received: 02 /07/2025

Revised: 23/10/2025

Accepted: 3/12/2025

Publish: 05 /12/2025

Keywords:

Public Service;

Digitalization;

Effectiveness;

Application Innovation

Abstract: Licensing Management (SIMANIZ) in supporting the quality of public services at DPMPTSP Bojonegoro Regency. This research uses a quantitative approach with survey techniques on 100 respondents of the service user community. A total of 15 service attributes were used to evaluate the performance and level of importance of services, which were then analyzed using the (IPA) method. The results showed that the majority of attributes were in a strategic position with high performance and importance values. This finding indicates that the SIMANIZ application has played a role in improving the speed, efficiency, and accessibility of public services. However, some attributes are in priority areas for evaluation, especially related to service speed and continuity of system development. This study recommends the need for continuous improvement of service features that are considered important by the community in order to achieve digital services that are effective, adaptive, and oriented to the needs of service users.

1. Introduction

The development of information technology has brought a fundamental revolution in the paradigm of public services in Indonesia (Aditya et al., 2025). Digitalization is not only an administrative tool, but also a strategic instrument in supporting effective and responsive governance (Inga-Avila et al., 2025). As public expectations for fast and accurate services increase, local governments are required to carry out digital-based innovations, in order to adapt and answer the complexity of the needs of public service users in a sustainable manner (Kassjański et al., 2025).

The digital era has driven a major transformation in the public service system in Indonesia (Cortez-Clavo et al., 2025). Both central and regional governments are required to be able to adapt to the development of information technology in order to create fast and quality services (Pardiyono et al., 2025). Within the framework of bureaucratic reform, various digital-based technologies have begun to be widely applied, one of which is a digital application that has been developed and implemented by local governments to improve the quality of service and expand the reach of services to the community (W. Chen & Song, 2025).

DPMPTSP (Investment and One-Stop Integrated Service Office) of Bojonegoro Regency is an agency that has a strategic role in providing public services in the field of licensing and investment. DPMPTSP is at the forefront of efforts to increase regional investment and licensing services. In facing challenges such as lack of responsiveness, delays and other problems, which can reduce the satisfaction index of the community and investors, which will have an impact on the regional business climate, DPMPTSP has begun to develop and implement digital-based strategies through the innovation of the Licensing Management Information System (SIMANIZ) application, a digital platform designed to simplify and facilitate public services in Bojonegoro Regency.

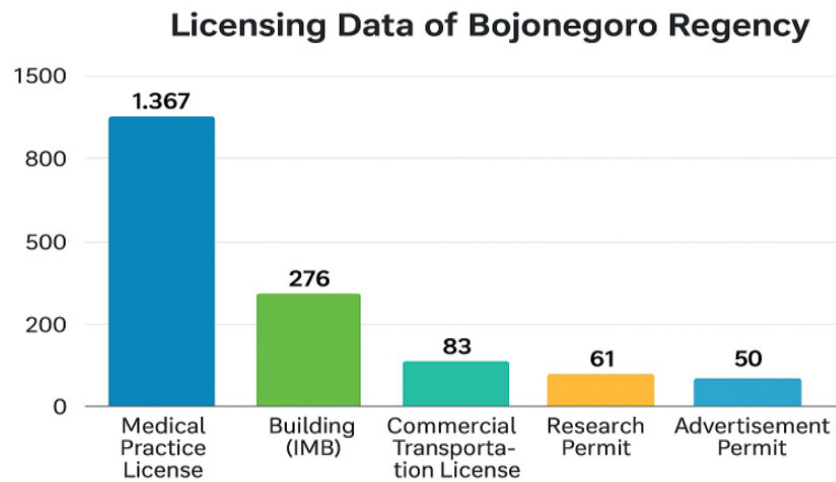


Figure 1. Visual Licensing Diagram
Source: Bojonegoro data (2025)

The diagram in Figure 1 shows the total number of requests for all types of permits received at DPMPTSP, which is 1,837 permits (DPMPTSP, 2025). However, in this innovation, it is necessary to examine the digitalization process, namely the problems that arise in this innovation, whether this innovation is a solution to create effective public services in Bojonegoro Regency or whether this innovation is a boomerang that can hinder or worsen the public service process at DPMPTSP in Bojonegoro Regency. Therefore, this study aims to determine how effective the application innovation (SIMANIZ) can provide a positive impact and benefits for DPMPTSP service users as a whole.

The demand for quality public services is getting stronger in this digitalization era (M. Chen et al., 2025). The public perspective now not only assesses services from an administrative aspect alone, but also from how these services are able to provide responses and results that satisfy service users, especially amidst limited human resources related to digitalization and infrastructure that is not yet fully evenly distributed (Assegaf et al., 2019). This is a major challenge faced by DPMPTSP, namely regarding the effectiveness of services amidst the high volume of requests and the variety of community needs (Maulani & Setiawan, 2024). The urgency of this research lies in the need for analysis of the effectiveness of digital innovation carried out through the application (SIMANIZ), there has been no in-depth empirical study of the effectiveness of the application (SIMANIZ) in the local government environment, and it has not been measured to what extent this application has an impact on improving service quality, public satisfaction, which makes this an important gap to be studied (Robby, UB and Tarwini, 2019; Irawan et al., 2020; Yuspita Widiyaningrum, 2022). Researchers do analysis use look for novelty research (novelty) with vos viewer software help.

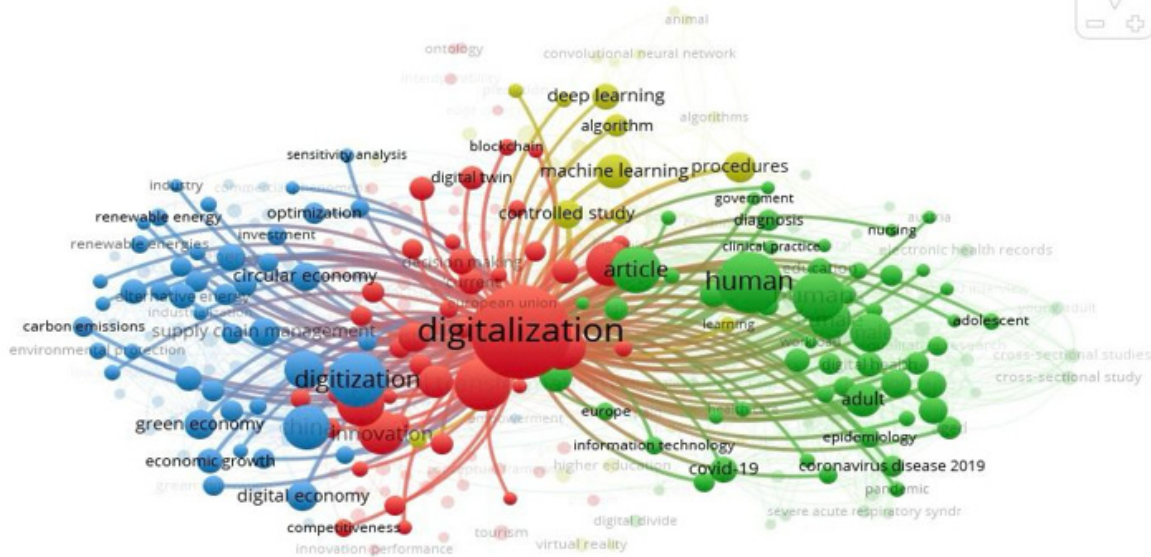


Figure 2. Visual network keyword
 “Digitalization, Public Service, Local Government” by Scopus Database
 Source: VosViewer (2025)

Results Visual analysis of the Vosviewer software in Figure 2 shows that keyword network “*Digitization*” No show existence relatedness via the line with “*Public Service*” And “*Local Government*”. The analysis results also show that there is no emergence of nodes (circles) that appear. those two keywords. From this said the researcher can show the existence of novelty (renewal), which is then will researcher study in study This, where the keywords that the researcher chose have never been used before in detail And no relevance yet on study previously (Arruda et al., 2022; Oyewola & Dada, 2022). Despite various studies on digital public service innovations (e.g., SIPEKA, SIIPADU, SIPECI), there remains a research gap in measuring the effectiveness of locally developed digital service applications that integrate licensing and investment management functions. Previous studies tend to emphasize descriptive implementation or physical integration rather than evaluating organizational effectiveness attributes derived from public administration theory. Therefore, this study aims to analyze the effectiveness of the SIMANIZ application at the Bojonegoro Regency DPMPSTP using the organizational effectiveness framework of Gibson et al. (2003). Theoretically, this study contributes to the literature on digital governance and public-sector effectiveness, highlighting how digital innovation can strengthen bureaucratic performance, efficiency, and citizen satisfaction within local government contexts. Research objective this research to evaluate the effectiveness of SIMANIZ in enhancing digital public service delivery through five dimensions of organizational effectiveness productivity, efficiency, satisfaction, adaptability, and development. This study bridges the gap between *digital public service innovation* and *organizational effectiveness theory*, offering empirical evidence from a local government setting rarely explored in previous research.

2. Literature Review

Viewed from a theoretical perspective, in the discipline of public administration, there are five indicators. For evaluate organizational effectiveness according to (Gibson et al., 2003), namely: Productivity,

Efficiency, Satisfaction, Adaptation, Development . By Because that, Researcher interested do study This with use theory organizational effectiveness according to (Gibson et al., 2003) , use know how effective implementation digital innovation application (SIMANIZ) in DPMPTSP Bojonegoro district ? Researchers use theory organizational effectiveness which was initiated by (Gibson et al., 2003) , as runway theoretical study This , with reasons when viewed from the perspective of relevance researchers found that there was compatibility between the chosen theory with theme And subject study.

Previous studies have examined the effectiveness of digital-based public service innovations, such as research conducted by (Yuspita Widiyaningrum, 2022) , related to the Effectiveness of the Public Service Mall (MPP) by the DPMPTSP of Bandung Regency. However, the focus of this study is still centered on the physical integration of services, not reaching the in-depth implementation of digital systems such as application-based platforms or online service delivery. Furthermore, research by (Nisak & Hertati, 2024) examines the effectiveness of the SIIPADU (Integrated Licensing Service Information System) application in Sidoarjo Regency, this study highlights the success of the system in increasing public access to digital licensing services, findings show that there are still various obstacles such as server disruptions, incomplete NPWP, and problems with service delays. This study is also still descriptive qualitative without involving measurement instruments for user satisfaction or application effectiveness values according to operational standards. Another study conducted by (Yustina & Zainuri, 2022) conducted an analysis related to the SIPECI (Cilegon Electronic Licensing Information System) application, this study concluded that the system had not been running effectively due to the low level of socialization (only done once since the initial launch), as well as the lack of readiness of human resources and technological facilities. In addition, the Android version of the application can only be used for tracking and cannot be used for permit applications, this directly reduces the efficiency of using the application system.

In the study of public administration, public service is a concrete manifestation of the state's function in fulfilling the basic needs and rights of citizens. Public service is not only understood as an administrative bureaucratic mechanism, but also as a representation of the state's accountability to its people (Mao & Zhu, 2020; Mashur et al., 2024).

The era of technological transformation is a phenomenon of shifting governance paradigms towards a more adaptive and participatory system through the digitalization process. Digitalization in the context of public services is not only interpreted as the transfer of manual processes to electronic systems, but also as a transformational effort to increase the effectiveness, efficiency, and responsiveness of the bureaucracy (M. Chen et al., 2025; Masitho et al., 2024).

As technology develops, it demands us to think critically in order to create various innovations in public services that not only increase the efficiency of bureaucratic work, but also dynamically respond to the challenges of community needs and create new technology-based solutions (Yodchai et al., 2022) (Maryuni, 2024).

3. Research Methods

This study adopts a quantitative survey approach to measure the effectiveness of the SIMANIZ digital innovation (Ethods & Arwell, 2011) . Location research established at the Investment and One-Stop Integrated Services Agency (DPMPTSP), Jl . Veteran No. 227 , Ngrowo , Bojonegoro District, Bojonegoro Regency, East Java 62119.

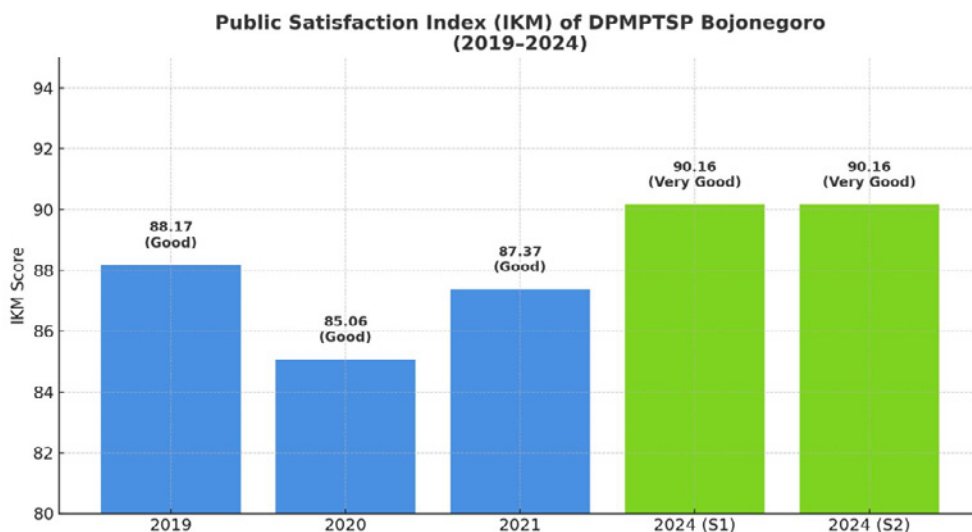


Figure 3. Results of the DPMPSTP Bojonegoro Community Satisfaction Survey
Source: DPMPSTP Bojonegoro (2025)

The visual that displays the diagram in Figure 1 is the reason for choosing this location, because it is based on data from the results of the public satisfaction index survey uploaded via the official website of DPMPSTP Bojonegoro. The data shows a significant achievement with a score above 80, where from 2019-2024 with the intensity of the score it can be classified in the good category. This achievement indicates optimal service performance, so it is interesting to study further to measure the extent to which the SIMANIZ application plays a role in supporting excellent service digitally. In a quantitative framework, variables are understood as attributes inherent in a particular individual or entity, which show variation and relevance to be studied scientifically (Sugiyono, 2022). This study classifies variables into two main categories, namely independent and dependent variables. The independent variable in this context is the level of service performance (X), while the dependent variable is the level of public expectations of public services (Y). In order to support the measurement of these variables, this study uses an instrument based on 5 organizational effectiveness values as developed by (Gibson et al., 2003), as listed in table 1 below:

Table 1. Research Indicators

Indicators	Sub Indicators
1. Productivity	To what extent does the use of the SIMANIZ application increase the volume or speed of public services?
2. Efficiency	How the SIMANIZ application can save time, operational costs, and energy in providing services.
3. Satisfaction	The level of satisfaction of the community or users of the SIMANIZ application service.
4. Adaptability	The ability of local governments to adapt to technological changes and the needs of digital society through the development of SIMANIZ.
5. Development	Government efforts to develop human resource capacity, infrastructure, and SIMANIZ application features to maximize compatibility.

Source: Data processed by researchers (2025)

In the framework of quantitative research, population is defined as the entire research subject that has certain characteristics and is relevant to the focus of the study being studied (Creswell, 2018). Based on the focus of the problem and the scope of the research, the sample was determined using

the accidental sampling technique, which is a sampling technique based on anyone who is accidentally met by researchers in the field and is willing to be a respondent, as long as they are considered to meet the research criteria (Sugiyono, 2022). This technique is considered relevant considering the context of public services which are open and involve direct interaction between the community and digital service officials.

The number of respondents involved in this study was set at 100 people, consisting of the public service users at DPMPSTP Bojonegoro where the SIMANIZ application was implemented. This number is considered an adequate representation to obtain strong data, both quantitatively and substantively, in assessing the effectiveness of the digital-based service.

The data collected through the distribution of questionnaires will be processed based on descriptive and inferential statistical rules, in order to obtain a systematic understanding of the effectiveness of public services through SIMANIZ. The data collection instrument uses a Likert scale, which is widely recognized in social research as a measure of individual attitudes, perceptions, and opinions towards a phenomenon, with an arrangement of 5 response categories, ranging from very high to very low levels for each indicator of digital service quality (Sugiyono, 2019).

The measurement format is presented in the form of gradations as shown in table 2 below:

Table 2. Composition of Overall Assessment Criteria

Answer	Score
a. Strongly Agree – Very Positive – Agree – Very Good	5
b. Agree – Positive – Often – Good	4
c. Doubtful – Neutral – Sometimes – Good Enough	3
d. Disagree – Negative – Almost Never – Less Good	2
e. Strongly Disagree – Strongly Negative – Never – Strongly Unfavorable	1

Source: Data processed by researchers (2025)

In this study, researchers applied the Importance Performance Analysis (IPA) method with the help of Microsoft Excel software as a data processing process, as an analytical approach to measure the level of conformity between the level of importance (Importance) and the level of performance (Performance) of digital public service attributes integrated in the SIMANIZ application. This method was chosen because it has advantages in mapping improvement priorities and identifying aspects of services that have been running optimally or that still need improvement (Phadermrod et al., 2019).

The calculation of the level of conformity is done using the following formula:

$$\bar{X} = \frac{\sum_{i=1}^N \bar{X}}{K} \quad \bar{Y} = \frac{\sum_{i=1}^N \bar{Y}}{K} \quad y = \frac{\sum yi}{n}$$

Information:

- x = Average level value performance
- y = Average level value interest
- n = Total respondents who provide an assessment of each attribute X, Y

To support the interpretation of the analysis results, researchers use a Cartesian diagram as a visualization tool. It consists of 4 quadrants formed by 2 perpendicular axes, namely the horizontal axis (X) representing performance, and the vertical axis (Y) representing importance. The intersection of the two axes reflects the average value of all service attributes analyzed.

$$\bar{X} = \frac{\sum_{i=1}^N \bar{X}}{K} \quad \bar{Y} = \frac{\sum_{i=1}^N \bar{Y}}{K}$$

Information :

X = Cumulative average of the weight of respondents' perceptions of the actual performance of a service attribute.

Y = Average weight of perception of the level of importance of each attribute.

K = Total number of service attributes used as the basis for comprehensively measuring the quality of public services.

The division and grouping of quadrants in the Cartesian diagram, researchers visualize as shown in Figure 4 below:

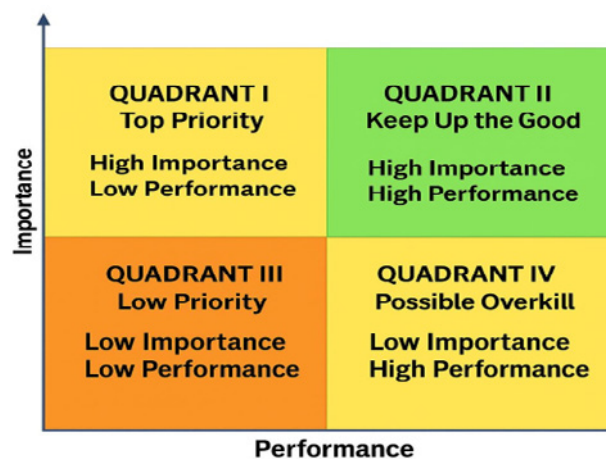


Figure 4. Cartesian diagram
 Source: John A. Martilla & John C. James (1977)

4. Results and Discussion

Importance-Performance Analysis of Public Service Innovation through the SIMANIZ Application in Local Government

Excellent public service is part of the bureaucratic transformation strategy in the digital era, local governments continue to encourage improvements in service quality through the use of technological innovation, one of which is through the SIMANIZ application. Researchers apply the Importance Performance Analysis (IPA) method as an analysis instrument to measure the level of importance and performance of each service attribute integrated with SIMANIZ. Based on data that has been collected from respondents and has been processed through quantitative procedures, researchers have compiled an analysis of the perception of performance and service importance. The results of the processed data will be presented as a basis for strategic analysis in evaluating the effectiveness of the SIMANIZ application, the following data that has been processed and analyzed, researchers will present in table form.

Table 3. Average Attribute Work Value

Attribute Code	Indicator	Attribute	Performance (X)	Importance (Y)
A 1	Productivity	Volume of work completed through the SIMANIZ application	4.64	4.45
A 2		The speed of public services is improved by SIMANIZ	3.67	4.55
A 3		Conformity of service output with agency objectives	4.57	4.46
A 4	Effectiveness	Utilization of time and costs by using applications	4.48	4.80
A 5		Reducing administrative errors through digital systems	4.53	4.55
A 6		Ease of access for employees and the community	4.66	4.49
A 7	Satisfaction	User satisfaction with SIMANIZ application performance	4.80	4.89
A 8		Level of comfort and ease in using SIMANIZ	4.78	4.67
A 9		Quick response to complaints or technical problems	4.56	4.78
A 10	Adaptation	SIMANIZ's ability to adapt to new user needs	4.54	4.67
A 11		Ease of upgrade or integration with other systems	4.58	4.65
A 12		Responsive to changes in policy or procedures	3.65	3.24
A 13	Development	Application support in improving employee competency	3.33	3.50
A 14		New features that expand the service functionality	4.88	3.67
A 15		System contribution to long-term service improvement	4.21	3.54
Total			65.88	64.91
Average value			4.39	4.33

Source: Data processed by researchers (2025)

Based on the calculation results in table 3, the overall average value of the performance level is 4.39, while the overall average value of the importance level is at 4.33. These two average values are used by researchers as the midpoint which functions as a dividing boundary to compile quadrants in the Importance Performance Analysis (IPA) analysis. These values serve as strategic references to evaluate attributes that have performance and importance above or below respondents' expectations in aggregate.

The results of the data tabulation show that there are a number of attributes that occupy positions above the average performance and importance, as well as several other attributes that are below the average. There are 12 attributes that show a higher level of performance than the average overall work value (4.39), while the level of importance shows that there are 11 attributes that exceed the overall average value (4.33).

The 15 attributes as a whole are then mapped into a two-dimensional Cartesian diagram, then the researcher transforms the average value of each attribute into decimal points according to the X (Performance) and Y (Importance) coordinate axes, in order to produce valid and representative visualizations

in the Cartesian quadrant, the arrangement of this quadrant can allow identification of which attributes need further intervention, and attributes whose performance is already optimal can be maintained, as the researcher has shown in Figure 5 below:

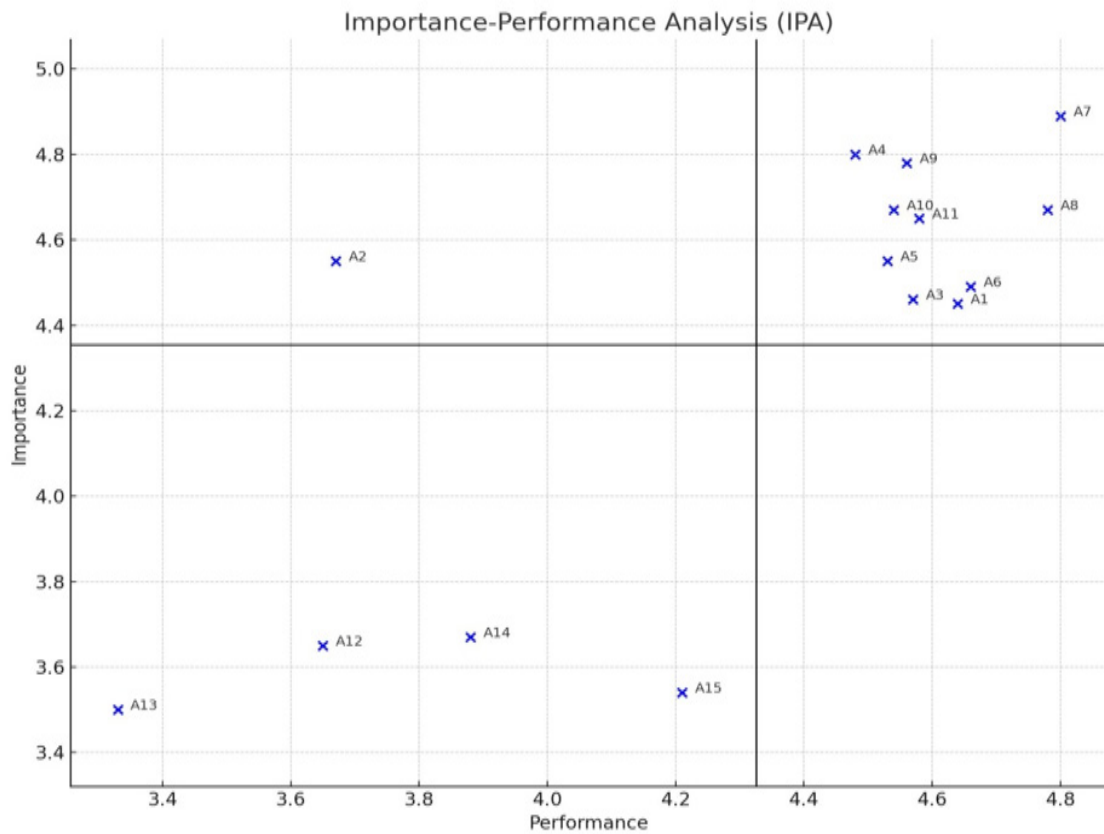


Figure 5. Cartesian Quadrant
 Source: Data processed by researchers (2025)

Based on the results of the Cartesian quadrant visualization in Figure 5, the researcher will then group the attributes to make it easier for researchers and readers to carry out the analysis process, as the researcher has listed in Table 4 below:

Table 4. Attribute Mapping

Quadrant	Attribute
1	A2
2	A1-A3-A4-A5-A6-A7-A8-A9-A10-A11
3	A12-A13-A14-A15
4	-

Source: Data processed by researchers (2025)

Quadrant I Strategic Action Priorities

This quadrant represents the attributes of digital public services that are considered very important by the public, but still show low performance. This condition indicates a significant gap between user expectations and service realization.

The attributes in this quadrant are the main focus of intervention, because they have the potential to create dissatisfaction and reduce perceptions of the effectiveness of the SIMANIZ application service as a whole. The attributes included in this quadrant are (A2) related to the speed of public services improved by SIMANIZ.

Quadrant II Superior Performance Zone

This quadrant displays attributes that are perceived as important and at the same time have been implemented very well. Attributes in this area reflect the strategic advantages of SIMANIZ that need to be maintained, developed, and made into service quality standards in the future. Optimal performance in these elements also contributes to the achievement of the vision of effective and responsive digital public services, these attributes include: (A1) Related to the volume of work completed through the SIMANIZ application, (A3) Suitability of service output with agency objectives, (A4) Utilization of time and costs by using the application, (A5) Reduction of administrative errors through the digital system, (A6) Ease of access for employees and the public, (A7) User satisfaction with the performance of the SIMANIZ application, (A8) Level of comfort and ease of use of SIMANIZ, (A9) Quick response to complaints or technical problems, (A10) SIMANIZ's ability to adapt to the needs of new users, (A11) Ease of upgrade or integration with other systems.

Quadrant III Selective Monitoring Zone

This quadrant creates attributes that are considered less important by the community and also indicate an inadequate level of performance. Although not a priority for direct improvement, attributes in this area still need to be monitored periodically, especially if there is a shift in perception or policy context. These attributes include: (A12) Responsiveness to changes in policy or procedures, (A13) Application support in improving employee competence, (A14) New features that expand service functions, (A15) System contribution to long-term service improvement.

Quadrant IV

Based on the mapping in table 4, there are no attributes that fall into quadrant IV. This means that all attributes that show high performance but low importance levels are not found in this study, which also reflects the consistency between service performance and user expectations in most service dimensions.

Effectiveness of SIMANIZ Application Innovation in Regional Public Services

Digital transformation in public services demands measurable effectiveness, both in terms of performance and relevance of service attributes. The Licensing Management Information System (SIMANIZ) application implemented in the DPMPTSP of Bojonegoro Regency is one form of digital innovation that aims to accelerate, simplify, and improve the quality of public services, especially in the licensing and investment sectors. This study comprehensively analyzes the effectiveness of the SIMANIZ application starting from the theoretical framework of organizational effectiveness proposed by (Gibson et al., 2003), there are five main indicators, namely, Productivity, Efficiency, Satisfaction, Adaptation, and Development, as an evaluative basis for assessing the extent to which this digital innovation is able to overcome public service challenges. Through the Importance Performance Analysis (IPA) approach, this study not only describes user perceptions quantitatively, but also maps out service improvement and strengthening strategies systematically. The five indicators contribute to identifying key dimensions and producing new findings, even refuting the results of previous studies that assess the effectiveness of digital public services as still partial.

Productivity: Transforming performance in the volume and speed of digital services.

The first indicator in the organizational effectiveness framework is productivity, namely the extent to which the system is able to produce service output optimally and according to objectives. The productivity indicator is represented through three attributes, namely (A1) Volume of work completed through SIMANIZ, and (A2) Speed of service produced by the application, (A3) Suitability of service output with agency objectives. The results of the IPA analysis show that A1 and A3 are in quadrant II, which means that these attributes have a high level of importance and performance. This confirms that SIMANIZ has contributed significantly to increasing the service capacity of DPMPTSP, especially in handling the number of permit applications digitally to be more structured and efficient. However, attribute A2 is in quadrant I, which indicates a mismatch between user expectations and the reality of services in terms of system speed. Although speed is considered very vital in digital-based services, in reality users still feel delays at several stages, either due to server load, a user interface that is not yet fully intuitive, or limited integration between systems. This finding also adds to the richness of new discourse in the study of the effectiveness of digitalization of public services.

Efficiency: Optimization of Time, Cost, and Resources.

Efficiency reflects the system's ability to time, cost, and resources in implementing services. Attributes (A4) Utilization of time and cost, (A5) Reduction of administrative errors, and (A6) Ease of access for employees and the public, show high performance and are included in quadrant II. This indicates that SIMANIZ has succeeded in streamlining the licensing process which previously often faced manual bureaucratic obstacles. This finding strengthens the theory (Gibson et al., 2003) that efficiency is a central element of effectiveness in an organization, especially in digital-based services. This study also answers the weaknesses in the study (Yustina & Zainuri, 2022) which criticized the SIPECI application for being unable to streamline the licensing process technically, in contrast to SIMANIZ which has integrated time efficiency and system accuracy in concrete terms, as reflected in user perceptions.

Satisfaction: Positive Response to Access and Convenience of Services.

Satisfaction reflects the level of user comfort and acceptance of the system. Satisfaction indicators can be seen from the attributes (A7) User satisfaction with the performance of the SIMANIZ application, (A8) Level of comfort and ease of use of SIMANIZ, (A9) Quick response to complaints or technical problems, all of which are in quadrant II. This shows that the SIMANIZ application has created a satisfactory service experience for the community. This data support refutes the assumption (Maulani & Setiawan, 2024) in their study related to the SIPEKA application in Banten, which stated that digital transformation has not had a significant impact on the perception of public satisfaction. The findings of this study indicate that the level of user satisfaction is not only statistically high, but is also supported by the convenience of features and the stability of the application that runs smoothly and consistently.

Adaptability: System Capacity to Respond to Dynamic Changes in Service .

This indicator is the ability of agencies and their digital systems to adapt to the dynamics of community needs. Attribute (A10) SIMANIZ's ability to adapt to the needs of new users, (A11) Ease of upgrading or integration with other systems. Describes the advantages of SIMANIZ application adaptation to the dynamics of community needs. These two attributes are in quadrant II, indicating a fairly good level

of adaptation. However, there is one attribute that is included in quadrant II, namely (A12) Responsiveness to changes in policies or procedures, which means that the responsiveness aspect to policy changes has not been considered optimal either in terms of performance or in terms of public perception. This finding also fills the gap in literature in previous research conducted by (Nisak & Hertati, 2024) , on the SIIPADU application in Sidoarjo which only emphasized the success of the system in expanding digital access, but did not discuss in depth how the system adapts to dynamic regulatory or policy changes.

Development: Ongoing Challenges in HR and Advanced Innovation .

Development refers to efforts to improve HR capacity, service features, and system sustainability. Attributes that reflect the development aspect are, (A13) Application support in improving employee competency, (A14) New features that expand service functions, (A15) System contribution to long-term service improvement. All are in quadrant III. This shows that sustainable development is still not a priority in public perception, and its performance is not considered optimal. However, this finding is also an early signal that the development aspect has not been fully exposed to the naked eye by users. In this case, this study provides an expansion of perspective on the study conducted by (Yuspita Widiyaningrum, 2022) , which assesses that innovation is sufficiently assessed from the integration of physical services. This study shows that without strengthening development dimensions such as HR competency and feature innovation, the effectiveness of the digital system will stagnate.

Effectiveness of service through SIMANIZ application

The findings show that most of the public service attributes integrated into the SIMANIZ application are perceived to have been able to meet or exceed the expectations of service users, both in terms of actual performance and urgency in the service process. This is reflected in most of the attributes that are able to obtain high scores in terms of performance and importance, based on five indicators of organizational effectiveness according to (Gibson et al., 2003) , namely Productivity, Efficiency, Satisfaction, Adaptability, and Development. However, there are still attributes with performance that need to be improved, especially those in quadrants I and III. This finding is an important basis for system evaluation and improvement, so that resources can be focused on aspects that have a major impact on service effectiveness.

The findings reaffirm the central tenet of Public Administration Theory that effective service delivery relies on the alignment between bureaucratic capacity and citizen-centric responsiveness. The strong performance of SIMANIZ in productivity, efficiency, and satisfaction dimensions demonstrates the potential of digital bureaucratic reform to advance good governance principles accountability, transparency, and responsiveness.

However, limited adaptability and development aspects highlight the need for continuous capability building in human resources and system maintenance, consistent with the dynamic capabilities approach (Teece et al., 1997) that emphasizes *sensing*, *seizing*, and *transforming* capacities within public organizations.

Local governments should institutionalize digital innovation governance frameworks that integrate periodic performance evaluations, user feedback mechanisms, and inter-system interoperability to ensure sustainable digital transformation. SIMANIZ can serve as a policy model for regional governments aiming to optimize licensing services through adaptive digital platforms.

5. Conclusion

This study found that the implementation of public service application innovation through the Licensing Management Information System (SIMANIZ) application at the Bojonegoro Regency DPMPSTP showed high effectiveness in supporting the digitalization of licensing services. The results of the Importance Performance Analysis (IPA) mapping showed that most service attributes were in the optimal performance quadrant, this reflects the suitability between community interests and the quality of services provided. Although there are still several attributes, especially those related to service speed and continuity of system development, which still require strategic attention. The novelty of this study lies in the use of an evaluative approach based on specific attributes in the regional digital service system, which has not been analyzed in depth in the context of local government applications. In addition, mapping based on community perceptions produces more targeted strategic recommendations, not only in improving technical services, but also in strengthening the dimensions of adaptation and system efficiency as a whole. Thus, these findings are expected to be an important contribution in the development of digital public service policies that are more responsive, inclusive, and oriented towards the needs of service users.

6. References

- Aditya, B., Wulandari, S., & Suhindarno, H. (2025). *Public Excellent Service and Bapas Class II Students in Carrying out the Social Reintegration function 09* (February).
- Arruda, H., Silva, ER, Lessa, M., Proenza, D., & Bartholo, R. (2022). VOSviewer and Bibliometrics. *Journal of the Medical Library Association : JMLA*, 110 (3), 392–395. <https://doi.org/10.5195/jmla.2022.1434>
- Assegaf, MIF, Juliani, H., & Sa'adah, N. (2019). Implementation of Online Single Submission (Oss) in the Framework of Accelerating Business Licensing at the Central Java Investment and One-Stop Integrated Service Office (Dpmpstsp). *Diponegoro Law Journal*, 8 (2), 1328–1342. <https://ejournal3.undip.ac.id/index.php/dlr/article/view/24582>
- Chen, M., Tan, X., Zhu, J., & Dong, R. K. (2025). Can supply chain digital innovation policy improve the sustainable development performance of manufacturing companies? *Humanities and Social Sciences Communications*, 12 (1), 1–15. <https://doi.org/10.1057/s41599-025-04601-9>
- Chen, W., & Song, H. (2025). Digital village construction and national innovation systems: coordinated development dynamics. *Humanities and Social Sciences Communications*, 12(1), 1–19. <https://doi.org/10.1057/s41599-025-04794-z>
- Cortez-Clavo, L. K., Salazar-Muñoz, M. I., & Morán-Santamaría, R. O. (2025). Digitalisation to Improve Automated Agro-Export Logistics: A Comprehensive Bibliometric Analysis. *Sustainability (Switzerland)*, 17(10). <https://doi.org/10.3390/su17104470>
- Creswell, J. W. (2018). *Research Design*. SAGE Publication.
- DPMPSTP. (2025). *Bojonegoro Regency Licensing Data Total Per Year*. One Data Bojonegoro. <https://data.bojonegorokab.go.id/dinas-penanaman-modal-dan-ptsp.html@detail=data-perijinan>
- Ethods, M.I.M., & Arwell, MIRH (2011). *Research Design in Qualitative/Quantitative/Mixed Methods*.
- Gibson, Donnelly, Ivancevich, & Konopaske. (2003). *Organization: Behavior, Structure, Processes*. Irwin/McGraw-Hill.

- Inga-Avila, M., Churampi-Cangalaya, RL, Ulloa Ninahuaman, J., Mendoza Caballero, E., Soto Cardenas, FO, Visurraga Camargo, LA, & Salas Matos, TJ (2025). Digital talent and job satisfaction in the administrative staff of a public university with WarpPLS 8.0. *Decision Science Letters*, 14 (1), 169–178. <https://doi.org/10.5267/j.dsl.2024.10.003>
- Irawan, B., Nizar, M., Akbar, P., & Khanz, A.H. (2020). Samarinda City Capital Placement and Integrated Service Application Application Service Innovation One-Stop Integrated Services (DPMPTSP). *Matra Update*, 4 (2), 135–145. <https://doi.org/10.21787/mp.4.2.2020.135-145>
- Kassjański, M., Kulwiak, M., Przewoźny, T., Tretiakow, D., & Molisz, A. (2025). Development and testing of an open source mobile application for audiometry test result analysis and diagnosis support. *Scientific Reports*, 15(1), 1–17. <https://doi.org/10.1038/s41598-025-99338-5>
- Mao, Z., & Zhu, Y. (2020). Does e-government integration contribute to the quality and equality of local public services? Empirical evidence from China. *Humanities and Social Sciences Communications*, 2025, 1–11. <https://doi.org/10.1057/s41599-025-04539-y>
- Maryuni, S. (2024). PIONIRS: Implementation of Public Service Innovation Policy to Promote E-Government System in Pontianak City Government, West Kalimantan. *Journal of Public Service Management*, 08 (03).
- Mashur, D., Rusli, Z., Zulkarnaini, Z., Sadad, A., & Meiwanda, G. (2024). Public Service Management in Corporate Social Responsibility of PT. Pertamina International Refinery Unit II Sungai Pakning. *Journal of Public Service Management*, 8 (1), 130–143. <https://doi.org/10.24198/jmpp.v8i1.51025>
- Masitho, B., Siti, N., Siregar, S., Hidayat, N., Angelia, N., & Riadi, S. (2024). Measuring Public Perception of Service Quality and Government Policy in Batubara District, a Survey Analysis. *Journal of Public Service Management*, 08 (03).
- Maulani, S., & Setiawan, T. (2024). Public Service Innovation Through the Application of the Electronic Open Permit Service System (SIPEKA) at the DPMPTSP of Banten Province. *Policy: Journal of Administrative Science*, 15 (1), 1–17.
- Nisak, I., & Hertati, D. (2024). Effectiveness of Integrated Licensing Service Information System (SIPPADU) at DPMPTSP Sidoarjo Regency. *NeoRespublica: Journal of Government Science*, 5 (2), 440–452.
- Oyewola, D. O., & Dada, E. G. (2022). Exploring machine learning: a scientometrics approach using bibliometrix and VOSviewer. *SN Applied Sciences*, 4(5). <https://doi.org/10.1007/s42452-022-05027-7>
- Pardiyono, R., Rejeki, Y. S., & Martijanti. (2025). Innovation network for micro, small and medium enterprises in Indonesia. *Decision Science Letters*, 14(1), 9–18. <https://doi.org/10.5267/j.dsl.2024.12.002>
- Phadermrod, B., Crowder, R. M., & Wills, G. B. (2019). Importance-Performance Analysis based SWOT analysis. *International Journal of Information Management*, 44, 194–203. <https://doi.org/10.1016/j.ijinfomgt.2016.03.009>
- Robby, UB and Tarwini, T. (2019). Innovation of Disabled-Friendly Public Transportation Services. *Scientific Public Administration and Development*, 10 (2), 51–57.
- Sugiyono. (2019). *Quantitative, Qualitative, and R&D Research Methods*. Alfabeta.
- Sugiyono. (2022). *Quantitative, Qualitative, and R&D Research Methods*. Alfabeta.
- Yodchai, N., Thi, P., Ly, M., Trong, L., & Tran, T. (2022). *Co-Creating Creative Self-Efficacy To Build Creative Performance And Innovation Capability For Business Success : A Meta-Analysis*. 15 (1), 74–88.

- Yuspita Widiyaningrum, W. (2022). Effectiveness of Public Service Mall (Mpp) by the Investment and One-Stop Service Office (Dpmtsp) in Improving Public Services in Bandung Regency. *JISIPOL Journal* , 6 (P-ISSN 2087-4742), 57–68.
- Yustina, I., & Zainuri, A. (2022). Effectiveness Of Cilegon Electronic Licensing Information System (Sipeci) In The Cilegon City Capital Investment And One-Door Integrated Service Service (Dpmtsp) (Case Study: Sipeci Dpmtsp Application Of Cilegon City). *Journal of Research and Development on Public Policy* , 1 (3), 87–103.