

Effectiveness of Digital-Based Public Services Through the NGEKIR Online Program in Trenggalek Regency

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ABSTRACT

Objective: This study aims to analyze the effectiveness of digital-based public services through the NGEKIR Online program at the Department of Transportation of Trenggalek Regency. The analysis is based on Richard M. Steers' effectiveness theory, which includes goal achievement, integration, and adaptation indicators. **Method:** This research uses a descriptive qualitative method. Data were collected through observation, interviews, and documentation involving key informants, including the Head of the Vehicle Testing Unit, operational service staff, and service users. Data analysis employed the interactive model of Miles and Huberman, consisting of data reduction, data display, and conclusion drawing. **Results:** The findings indicate that the NGEKIR Online program has been relatively effective. In terms of goal achievement, the program has improved service accessibility, reduced queue times, and increased efficiency in the vehicle testing registration process. From the integration aspect, coordination among divisions has been strengthened through an integrated digital system that supports accurate data verification and supervision. Regarding adaptation, both officers and the organization have demonstrated readiness through technical training and system adjustments to digital transformation. **Novelty :** This research provides an in-depth analysis of digital vehicle testing services using Steers' organizational effectiveness framework, highlighting how local digital innovation contributes to improving public service quality and supporting e-government implementation at the regional level.

INTRODUCTION

In the lives of Indonesian people, transportation plays a very important role and is inseparable from daily activities. From traditional times to the modern era, the transportation system has continued to develop and become the main support for community mobility. Indonesia's geographical conditions consisting of thousands of islands and vast water areas require the availability of land, sea, and air transportation facilities that reach all regions. In this regard, the regional government through the Transportation Agency has the authority to supervise and inspect motorized vehicles in operation, including in Trenggalek Regency. Every vehicle is required to meet roadworthiness requirements through periodic motor vehicle inspections (KIR tests). This supervision not only contributes to regional revenue, but also has an impact on creating social order, increasing traffic safety and comfort, reducing accident rates, and improving transportation infrastructure such as road signs [1], [2].

One form of public service provided by the government for the community is the fulfillment of traffic safety needs through the transportation sector, which is an important means in supporting the smooth running of various community activities. This is in line with Law Number 22 of 2009 concerning Traffic and Road Transportation, specifically

Article 5 paragraph (1) which states that "The State is responsible for Traffic and Road Transportation and its development is carried out by the Government." The law aims to create safe, orderly, and smooth traffic conditions. Along with the development of information technology, the government has begun to implement electronic-based administrative services. One form of implementation of these services is organized by the Trenggalek Regency Transportation Service, which refers to the Regulation of the Minister of Transportation of the Republic of Indonesia Number 12 of 2014 concerning Electronic Procurement Services within the Ministry of Transportation. Initially, Motor Vehicle Testing services at the Trenggalek Regency Transportation Service, starting from the registration process, inputting data or files, paying fees, to carrying out vehicle technical tests, were still carried out manually. However, in March 2019, the Trenggalek Regency Government innovated by providing online and electronic-based motor vehicle inspection administration services through the E-KIR application [3].

The E-KIR application is a motor vehicle inspection service system designed to simplify the service process, both for service providers and users. Through this application, the public can register for vehicle inspections from home without having to come directly to the inspection location more than once. In addition, the use of E-KIR can reduce long queues and speed up the service process. E-KIR also facilitates the input of valid vehicle data, allows the public to take a queue number online, and monitor the vehicle inspection process in real time. By adhering to the Standard Operating Procedure (SOP) for motor vehicle inspections, this application helps ensure that motor vehicle inspection services run effectively, efficiently, and transparently. Through the implementation of E-KIR, the Trenggalek Regency Transportation Agency strives to realize more modern and accountable public services to the public [4].

The NGEKIR Online program implemented by the Trenggalek Regency Transportation Agency has had a significant positive impact in improving the quality of motor vehicle KIR testing services as part of a digital-based public service innovation. The main focus of this program is to provide convenience, speed, and certainty of service through an online registration system, so that the service process becomes more effective and efficient and is able to reduce queues and congestion at testing locations. In addition, NGEKIR Online encourages transparency and accountability of services because all stages of registration and scheduling are systematically recorded, thereby minimizing the practice of brokers and illegal levies. In terms of government support, the implementation of this program is in line with the policies of the central and regional governments in encouraging the digitalization of public services and improving traffic safety, as mandated in laws and regulations in the field of traffic and road transportation. This support is realized through the provision of regulations, strengthening the Transportation Agency's institutions, and utilizing information technology as a means of improving services to the public and ensuring the roadworthiness of motor vehicles on the highway [4].

The Online Vehicle Roadworthiness Test Registration Program (NgekirOnline) is implemented through an integrated digital-based service system to make it easier for the

public to register for motor vehicle roadworthiness tests. The process begins with the vehicle owner accessing the NgekirOnline page of the Trenggalek Regency Transportation Agency, then filling in the vehicle data according to the requested identity, such as the police number and vehicle chassis number. After the data is verified by the system, the applicant selects an available test schedule and obtains proof of registration online. On the day of the test, the vehicle owner comes to the test location according to the predetermined schedule to undergo a technical inspection of the vehicle, including a physical inspection, function, and completeness of the vehicle according to the KIR test standards. The test results are then recorded in the system, and if the vehicle is declared to have passed, the applicant will receive proof of passing the KIR test in accordance with applicable regulations. In addition, the NgekirOnline system also provides a registration status monitoring feature and a public satisfaction survey as material for evaluating service performance, so that the entire series of programs runs in a planned, transparent, and measurable manner [3].

Table 1. NGEKIR Online Users

Year	Number of Vehicles
2023	7,499 Units
2024	6,882 Units
2025	6,162 Units

Source: Trenggalek Regency Transportation Agency 2025

Based on Table 1, it can be concluded that the number of NGEKIR Online service users in Trenggalek Regency shows a downward trend from year to year. In 2023, the number of vehicles undergoing KIR testing through the NGEKIR Online service was recorded at 7,499 units, reflecting the initial level of utilization of digital services to support the motor vehicle testing process. Subsequently, in 2024, this number decreased to 6,882 units, indicating a decline in public participation in using the NGEKIR Online service. The decline occurred again in 2025, with the number of vehicles undergoing KIR testing through this service reaching 6,162 units. This condition indicates that the utilization of the NGEKIR Online service has not been running optimally and still faces various obstacles in its implementation, both in terms of system technicalities and the level of public acceptance and understanding of digital-based services.

Several previous studies have examined the implementation of e-KIR and Online KIR services in order to improve the quality and effectiveness of motor vehicle inspection services within local government. Research conducted at the Pasuruan Regency Transportation Agency (2024) regarding the effectiveness of e-KIR services showed that the implementation of the e-KIR system was able to increase service speed, simplify administrative procedures, and reduce queues for vehicle inspection applicants. However, the study also found a number of obstacles, particularly limited technological infrastructure, system disruptions, and low understanding of some members of the

public regarding the use of digital-based services, which indicates that service effectiveness is still influenced by technological readiness and human resources [3].

Furthermore, research on the implementation of online vehicle inspection (KIR) in Pekanbaru City (2023) highlighted the implementation process of online vehicle inspection registration and user responses. The results showed that online vehicle inspection (KIR) provided easy access and scheduling certainty for the public, thus increasing user satisfaction. However, the study also noted obstacles such as low digital literacy, limited internet access, and a tendency for some people to continue using conventional services [5].

Meanwhile, research on the quality of motor vehicle inspection services through Drive-Thru and e-KIR innovations (2023) assessed service quality using the SERVQUAL indicator. This study found that these service innovations were able to improve service quality, particularly in terms of speed, reliability, and officer responsiveness. However, improvements in physical facilities and service consistency are still needed so that service innovations can run optimally and sustainably. Based on these studies, it can be concluded that the implementation of e-KIR and KIR Online has made a positive contribution to improving public services, but the success of their implementation is highly dependent on infrastructure support, human resource competence, and institutional commitment to implementing digital transformation on an ongoing basis [6].

Based on observations of the implementation of the NGEKIR Online Program in vehicle registration services in Trenggalek Regency, two main problems were identified that affect the effectiveness of this digital-based public service. First, limited human resources (HR), both from the apparatus and service users, in understanding and operating the online vehicle registration system. Some people are still unfamiliar with using digital services, resulting in difficulties in the registration process, data entry, and selecting a test schedule. On the other hand, the limited technical capabilities of some officers in managing the system and providing assistance to users also have the potential to hinder the optimal use of NGEKIR Online. The lack of ongoing socialization and training are factors that exacerbate these problems. Second, technical constraints on technology infrastructure and application systems. Internet network disruptions, both on the user side and within the Transportation Agency's service environment, often hinder access to the NGEKIR Online system. Furthermore, technical issues such as system errors, limited server capacity, or data inconsistencies in the application can slow down the service process and reduce public trust in digital services. This condition impacts service efficiency and reduces the effectiveness of the NGEKIR Online program's goal of providing fast, easy, and transparent public services [7], [8].

The research entitled "Effectiveness of Digital-Based Public Services Through the NGEKIR Online Program in Trenggalek Regency" uses the Theory of Effectiveness According to Richard M. Steers (1985), this theory serves as a basis for analysis. This theory was chosen because it can explain the level of success of a public service program in achieving its stated goals through relevant and measurable effectiveness indicators.

According to Steers, organizational effectiveness is not only assessed by the final results, but also by the organization's ability to carry out service processes in an integrated and adaptive manner to environmental changes.

In the context of implementing the NGEKIR Online Program, indicator 1) goal achievement is used to assess the extent to which this program is able to realize its main objective, namely increasing the effectiveness of KIR test registration services through a digital system. The achievement of this goal is reflected in the ease of service access, acceleration of the registration process, reduction of queues, and increased public satisfaction with the services of the Trenggalek Regency Transportation Agency. Indicator 2) is integration, which relates to the ability of the Transportation Agency to build coordination and cooperation between work units and related parties in the implementation of the NGEKIR Online Program. Integration includes integration between application systems, service procedures, human resources, and communication between officers and the public who use the service. A good level of integration will support the smooth implementation of the program and minimize administrative and technical obstacles. Indicator 3) is adaptation, which shows the ability of organizations and service systems to adjust to technological developments, policy changes, and community needs. In the NGEKIR Online Program, adaptation is reflected in the readiness of officials to operate digital systems, the ability to resolve technical issues, and the response to public input and complaints. Good adaptability is an important factor in maintaining the sustainability and effectiveness of digital-based public services [9].

RESEARCH METHOD

This study uses a qualitative descriptive research method with a focus on the effectiveness of digital-based public services through the NGEKIR Online Program in Trenggalek Regency. The qualitative descriptive method is used to provide an in-depth description and explanation of the program implementation based on facts and conditions that occur in the field, with researchers as the main instrument in the data collection process [10], [11], [12]. According to Sugiyono, the descriptive method aims to analyze data by describing the data that has been collected as it is without generalizing. This approach is applied to analyze the effectiveness of the NGEKIR Online Program in improving the quality of digital KIR test registration services in Trenggalek Regency. The research location was chosen at the Trenggalek Regency Transportation Agency because of the existence of digital-based service innovations that need to be evaluated for their effectiveness.

In analyzing the effectiveness of the NGEKIR Online Program, this study uses the Effectiveness Theory according to Richard M. Steers (1985) as the basis for analysis, with three main indicators: 1) goal achievement, 2) integration, and 3) adaptation. The goal achievement indicator is used to assess the extent to which the program is able to realize the goal of increasing the effectiveness of online KIR testing services. The integration indicator is used to see the level of coordination between work units, the integration of the application system, and communication between service providers and users.

Meanwhile, the adaptation indicator is used to assess the ability of organizations and apparatus to adapt to technological developments, policy changes, and community needs.

The determination of informants in this study used a purposive sampling technique, namely the selection of informants based on certain considerations in accordance with the research objectives. The main informants consisted of the Head of the Trenggalek Regency Motor Vehicle Testing Unit, Operational Service Administrator and NGEKIR Users. The types of data used in this study include primary data and secondary data, with data collection techniques in the form of observation, interviews, and documentation.

Data analysis in this study uses the interactive analysis model of Miles and Huberman (1984), which includes the process of data collection, data reduction through data sorting and focusing, systematic data presentation, and drawing conclusions to answer research problems based on findings in the field [12], [13].

RESULTS AND DISCUSSION

Results

Effectiveness refers to the degree of success of a program or organization in achieving its stated goals, both theoretically and practically. Effectiveness not only assesses the final outcome but also reflects the implementation process and the organization's ability to respond to environmental changes. Etzioni et al. (1985:54–55) in *Modern Organizations* define effectiveness as the degree of success of an organization's efforts in achieving its stated goals (Gibson et al., 2000). In the context of digital-based public services, the effectiveness of the NGEKIR Online Program is an important measure for assessing the success of KIR testing service innovations in meeting community needs. This research was conducted through direct interviews with informants to obtain in-depth empirical data, thereby describing the suitability between program implementation and user expectations as stated by Richard M. Steers (1985).

Goal Achievement

Goal achievement indicators are one of the main measures in assessing the effectiveness of a program, namely the extent to which predetermined goals can be realized through the implementation of activities. According to Richard M. Steers (1985), organizational effectiveness can be measured by the level of success in achieving previously formulated goals, both in terms of results and the implementation process. Goal achievement indicates the conformity between program outputs and expected targets, thus becoming the basis for assessing whether a program can be said to be effective or not. Goal achievement indicators are used to assess the extent to which this program is able to improve the quality of digital motor vehicle testing services. Achievement of these goals can be seen from the ease of access to KIR test registration, accelerated service times, reduced queues, and increased public satisfaction with the services of the Trenggalek Regency Transportation Agency. Based on the results of interviews and observations of researchers, the conformity between the objectives of the

NGEKIR Online Program and its implementation in the field can be analyzed by comparing the established program objectives with the actual results experienced by service users.

"The NGEKIR Online program in Trenggalek Regency is considered to have made the KIR test process easier and faster. Through the online registration system, the public can register their vehicles by digitally filling in their personal and vehicle data. They then receive a registration code or number that they can show directly to officers at the Motor Vehicle Testing Service Office. Furthermore, with vehicle data integrated into the digital system, the testing process is faster and more efficient, thereby reducing waiting times and vehicle queues." (Interview 01 January 2025) From the statement of the Operational Service Administrator.

Based on interviews with the Operational Service Manager of the NGEKIR Online Program in Trenggalek Regency, the digital registration system is considered to simplify and expedite vehicle inspection (KIR) services. Integrating vehicle data into the system makes the testing process more efficient and reduces waiting times and queues at service offices.

"As a user of the NGEKIR Online service in Trenggalek Regency, I find this program very helpful. The KIR test registration process has become much easier because it can be done online without having to come in and wait in long lines," said one NGEKIR Online user.

The above facts, when linked to Richard M. Steers' theory of organizational effectiveness, show that the effectiveness of a program can be measured through the achievement of organizational goals, integration, and adaptation. Based on the interview results, the NGEKIR Online Program in Trenggalek Regency is considered to have met the indicators for achieving its goals, namely simplifying and accelerating vehicle inspection services through the implementation of a digital-based registration system. The public can register vehicles online by filling in personal and vehicle data, then obtaining a code or registration number that is used during services at the Motor Vehicle Inspection Office. In addition, the integration of vehicle data into the digital system allows the inspection process to run faster and more efficiently, so that waiting times and vehicle queues can be reduced. From the adaptation aspect, the implementation of NGEKIR Online demonstrates the organization's ability to adapt to developments in information technology and public demands for more practical and transparent services. Thus, the implementation of the NGEKIR Online Program has reflected the effectiveness of the program as stated by Steers, although in practice, continuous strengthening is still needed so that the benefits of the program can be felt more optimally by all service users.

Integration

One aspect of an organization that seems simple but has a significant impact on the smoothness and quality of public services is integration between processes and work units. According to Richard M. Steers (1985), integration is an indicator of effectiveness that shows the extent to which an organization is able to build coordination, system integration, and harmonious cooperation between departments in implementing programs. Integration is important because all stages of service – from registering vehicle

test applications, document validation, the vehicle testing process at the test line, to issuing Electronic Test Pass Certificates (BLUE).

"Inter-sectoral coordination within the Trenggalek Regency Transportation Agency in implementing the NGEKIR Online Program has been going quite well. In the Transportation Safety Sector, the NGEKIR Online system makes it easier for officers to monitor motor vehicles undergoing mandatory road tests. Vehicle test results recorded in the database can be easily accessed via smartphone by scanning the QR code for proof of test passed attached to the vehicle. The information displayed includes vehicle dimensions, technical test results, and the test validity period. Meanwhile, in the Transportation Sector, the NGEKIR Online Program is very helpful in the process of issuing public transportation permits, considering that one of the main requirements is having a valid proof of test passed. With vehicle test data integrated into the system, officers can easily verify the validity period of vehicle tests quickly and accurately." (interview January 1, 2026)

Based on the above description, it can be stated that the implementation of the NGEKIR Online Program at the Trenggalek Regency Transportation Agency has been supported by effective inter-sectoral coordination. The integration of vehicle test data into a single digital system has strengthened the synergy between the Transportation Safety and Transportation Sectors, both in the supervision of vehicles subject to mandatory testing in the field and in the verification process for public transportation licensing requirements. The ease of data access through QR code scanning and the accuracy of information on the validity period of the test indicate that this system not only improves the work efficiency of officers but also supports accurate decision-making in public services.

"I believe that the implementation of the NGEKIR Online Program has strengthened integration and coordination between sectors within the Transportation Agency. All service stages, from online vehicle test registration, document validation, technical testing at the test line, to the issuance of Electronic Test Pass Certificates (BLUE), have been connected in one integrated digital system. This system facilitates data synchronization between the Transportation Safety Sector and the Transportation Sector, both in the supervision of vehicles required to be tested in the field and in the verification process for public transportation licensing requirements," said the Head of the Motor Vehicle Testing Unit.

Based on the interviews above, it can be concluded that the NGEKIR Online Program has successfully strengthened integration and coordination between sectors within the Transportation Agency. The integration of all service stages within a single digital system enables effective data synchronization between the Transportation Safety and Transportation Sectors, thus supporting the supervision of vehicles subject to mandatory inspections and facilitating the verification process for public transportation licensing requirements, making it faster, more accurate, and more efficient.



Figure 2. Test Service Process Flow

Source: Managed by the Trenggalek Regency Transportation Agency 2025

Figure 2, regarding the process flow of vehicle inspection services through NGEKIR Online, when linked to the theory of organizational effectiveness according to Richard M. Steers, shows that program effectiveness can be seen from the aspects of goal achievement, integration, and organizational adaptation. In terms of goal achievement, the NGEKIR Online Program in Trenggalek Regency has been appropriate to realize its main objective, namely to increase the ease and speed of KIR test services through online registration of vehicle inspection applications. Applicants can register independently through the system, so that the administrative process is simpler and does not require an initial presence at the testing office. Furthermore, in terms of integration, the stages of validation of applications and vehicle documents by officers through a digital system demonstrates the integration between applicants, officers, and the information system, which supports the smooth process of vehicle inspection at the test line according to applicable standards. Meanwhile, from the adaptation aspect, the implementation of the testing process until the issuance of RFID-based Electronic Test Pass Proof (BLUE) reflects the organization's ability to adapt to technological developments and public demands for more modern, fast, and transparent services. Thus, based on the test service process flow, the NGEKIR Online Program can be assessed as having fulfilled the organizational effectiveness indicators as stated by Steers, although continuous improvement efforts are still needed to optimize the quality of service.

Adaptation

The program adaptation indicator is a measure to assess the extent to which service implementers and users are able to adapt to system changes implemented in a program. Adaptation is a crucial factor in determining the success of the Trenggalek Regency Transportation Agency's Online NGEKIR Program, particularly in the transition from a manual motor vehicle inspection system to a digital-based system. According to Richard M. Steers (1985), adaptation demonstrates the ability of organizations and communities to respond to changes in the environment, technology, and the demands of increasingly modern public services. The success of adaptation is influenced by the

readiness of human resources, the ease of use of the system, and the availability of assistance and outreach from relevant agencies. The following is information on the results of joint data from the Trenggalek Regency Transportation Agency, which is responsible for implementing the Online NGEKIR Program.

"Officers involved in the implementation of the NGEKIR Online Program have received special technical training. This training covers the application's operating procedures, from vehicle registration, inputting and processing test results, to the reporting system. Furthermore, officers are equipped with the ability to handle minor problems if problems occur with the application system, including procedures for synchronizing vehicle test results data to the central data system used to print Proof of Passing the Test. This training aims to improve the competence of officers so they can operate the NGEKIR Online system optimally and provide better and more accurate services to the public." (interview January 1, 2026)

From the interview results above, it can be concluded that the implementation of the NGEKIR Online Program has been supported by the readiness of human resources through adequate technical training. Providing training in application operation skills, handling minor problems, and synchronizing test data to the central system demonstrates that officers have sufficient competence to operate the system optimally. This contributes to improving service quality, particularly in the provision of accurate information and the timely issuance of Test Pass Certificates to the public.

"The implementation of the NGEKIR Online Program demonstrated a strong adaptability, both in terms of organization and human resources. The transition from a manual testing system to a digital-based system was possible because officers had been provided with specific technical training, from application operation and test data processing to the reporting system and data synchronization with the central office. Furthermore, officers also had the ability to handle minor issues that arose in the application's use, ensuring smooth service delivery."

Based on the interview results, the implementation of the NGEKIR Online Program was supported by adequate organizational adaptability and human resources. Technical training and staff skills in operating the digital system and handling minor issues enabled a smooth and sustainable transition from a manual to an online system, thus maintaining the quality of motor vehicle inspection services.

Table 2. Comparison of Manual and Online NGEKIR Usage

Aspect	Manual Testing	Online Testing
Registration	Come directly to the location,	Registration via app/website
Process	fill out the paper form	anytime
Service Hours	Long, long queue	Faster and scheduled
Efficiency	Less efficient because of many manual steps	Highly efficient, integrated stages
Data Accuracy	Prone to input errors and data duplication	Data is saved automatically and has minimal errors.
Transparency	Prone to non-transparent practices	More transparent and traceable
Operating costs	Higher (paper, energy, time)	More economical and paperless

Aspect	Manual Testing	Online Testing
Access to Information	Limited information on location	Information can be accessed in real-time
Monitoring & Reporting	Manual, hard to recap	Automatic, easy to monitor
Archive Security	Risk of loss or damage	Secure and backed up digital archives
Public Satisfaction	Relatively low	Higher because it is practical

Source: Managed by the Trenggalek Regency Transportation Agency 2025

Based on the comparison table, the implementation of NGEKIR Online is considered more effective than the manual system when linked to the theory of organizational effectiveness according to Richard M. Steers, which is in accordance with the adaptation indicator. From the aspect of achieving goals, online registration allows for faster, more scheduled services and is able to reduce queues. From the integration side, all stages of service have been connected in one digital system so that data is stored automatically, more accurately, and transparently. Meanwhile, from the adaptation aspect, the use of the online system demonstrates the organization's ability to adapt to technological developments and community needs. Cost efficiency, archive security, and real-time access to information also increase community satisfaction, so that NGEKIR Online reflects the effectiveness of the motor vehicle inspection service program [14], [15], [16].

Discussion

The findings of this study demonstrate that the implementation of the NGEKIR Online Program has contributed positively to the effectiveness of digital-based public services at the Trenggalek Regency Transportation Agency. Viewed through Richard M. Steers' organizational effectiveness framework, the effectiveness of the program is reflected in three interconnected dimensions: goal achievement, integration, and adaptation. The implementation of online registration has simplified administrative procedures, shortened service processes, and reduced the need for users to wait in long queues. These findings indicate that digital transformation is not merely a change from manual to electronic procedures, but also represents an organizational effort to create public services that are more accessible, efficient, and responsive to community needs. This finding is consistent with previous research on E-KIR services in Pasuruan Regency, which found that digital vehicle-testing services could accelerate service delivery, simplify administrative procedures, and reduce queues [3]. However, the continuing decline in NGEKIR Online users from 7,499 vehicles in 2023 to 6,162 vehicles in 2025 suggests that operational effectiveness has not automatically resulted in sustained growth in service utilization.

From the perspective of goal achievement, NGEKIR Online has substantially achieved its primary objective of providing easier and faster access to motor vehicle testing services. Users can register independently, submit the required vehicle information digitally, obtain a registration number, and arrive at the testing facility according to the established procedure. This reduces unnecessary administrative stages

and makes the service process more efficient. Such improvements are important because the effectiveness of digital public services should be assessed not only by the availability of technology but also by the extent to which technology produces tangible benefits for users. The results support previous findings that electronic KIR services improve the speed and efficiency of vehicle roadworthiness testing [4]. Nevertheless, the decreasing number of service users indicates that service efficiency alone cannot guarantee optimal public adoption. Technical system constraints, digital literacy, and public understanding of online procedures remain factors that should be considered when evaluating overall program effectiveness [5].

Regarding integration, the findings indicate that NGEKIR Online has strengthened coordination and data connectivity between work units within the Trenggalek Regency Transportation Agency. The digital system connects online registration, document validation, technical vehicle testing, supervision, and the issuance of Electronic Test Pass Certificates (BLUE). Vehicle testing information can also be accessed through QR codes, enabling officers to verify vehicle dimensions, technical test results, and test validity periods more quickly and accurately. This integration is particularly important for coordination between the Transportation Safety Sector and the Transportation Sector because vehicle testing data are also required for public transportation licensing. Therefore, the program has not only digitized individual service activities but has also created a more integrated administrative process. In Steers' perspective, such coordination reflects organizational effectiveness because different organizational components are able to function collectively in achieving common service objectives [8].

The adaptation dimension further confirms the organizational readiness of the Trenggalek Regency Transportation Agency to respond to technological change. The transition from manual services to NGEKIR Online required officers to develop new competencies in operating applications, processing vehicle test data, synchronizing information with the central system, and resolving minor technical problems. The technical training provided to officers indicates that digital transformation is accompanied by efforts to strengthen human-resource capacity rather than relying solely on technological infrastructure. This is significant because the sustainability of digital public services depends on the ability of service providers to adjust their competencies and working procedures to technological developments. The comparison between manual and online services also shows advantages of the digital system in terms of registration flexibility, service time, data accuracy, transparency, operating costs, information accessibility, monitoring, archive security, and public satisfaction. These findings reinforce the argument that organizational adaptation is a critical component of effective digital public-service transformation [14], [15], [16].

Despite these positive outcomes, the findings also reveal an important gap between service effectiveness and service utilization. Although interviews indicate that users and officers perceive NGEKIR Online as faster, easier, and more integrated than manual services, the number of vehicles using the service declined consistently between

2023 and 2025. This apparent contradiction suggests that technological effectiveness at the organizational level does not necessarily ensure widespread acceptance at the community level. Limited digital literacy, internet connectivity problems, system errors, server limitations, and differences in users' ability to operate digital services may restrict broader adoption. Similar challenges were reported in previous studies, where technological infrastructure, human-resource readiness, and public understanding influenced the effectiveness of electronic vehicle-testing services [3], [5]. Therefore, future improvement should focus not only on maintaining system functionality but also on continuous public socialization, user assistance, infrastructure reliability, and evaluation of user experience.

Overall, the findings confirm that NGEKIR Online can be categorized as a relatively effective digital public-service innovation because it demonstrates goal achievement, organizational integration, and adaptation in accordance with Steers' effectiveness framework. Its contribution is particularly evident in transforming fragmented and manual vehicle-testing procedures into a more integrated, traceable, and efficient digital service process. At the same time, the findings emphasize that digital transformation should not be understood simply as the adoption of an online application. Sustainable effectiveness requires a balance between technological reliability, organizational capacity, employee competence, inter-unit coordination, and citizens' ability to access and use the service. Consequently, strengthening these dimensions is essential for ensuring that NGEKIR Online not only remains operationally effective but also achieves wider and more sustainable utilization among the people of Trenggalek Regency.

CONCLUSION

Fundamental Finding: This study found that the Trenggalek Regency Transportation Agency's NGEKIR Online Program has been running quite effectively in improving the quality of motor vehicle testing services, especially in terms of ease of access, time efficiency, transparency, process integration, and adaptation to digital systems, in line with the effectiveness indicators according to Richard M. Steers (1985). **Implication:** This finding indicates that the implementation of NGEKIR Online contributes positively in supporting electronic-based governance (e-government) and improving the quality of public services, so that it can be used as a model for digital service innovation in the transportation sector in other regions. **Limitation:** The limitations of this study lie in the persistence of technical system constraints and differences in the level of digital literacy of the community that affect the optimization of the use of NGEKIR Online services. **Future Research:** Further research is recommended to expand the scope of informants, examine the level of public satisfaction quantitatively, and research strategies for increasing digital literacy to support the sustainability and improvement of the NGEKIR Online Program.

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