

## **Digital Academic Public Service Performance: A Study on the Effectiveness of Integrated E-Learning Systems in State Universities**

Yolla Fabiola Dude, Irawaty Igirisa and Rusli Isa

Gorontalo State University Postgraduate Program

DOI: 10.46609/IJSSER.2025.v10i12.035 URL: <https://doi.org/10.46609/IJSSER.2025.v10i12.035>

Received: 28 October 2025 / Accepted: 20 November 2025 / Published: 30 December 2025

### **ABSTRACT**

*This study aims to analyze the performance of digital academic public services through a study of the effectiveness of integrated e-learning systems in state universities. The research uses a qualitative approach with a case study method. Data was collected through in-depth interviews, observations, and document review of system managers, lecturers, and students as service users. The analysis of public service performance is carried out using five dimensions of effectiveness, namely productivity, service quality, responsiveness, responsibility, and accountability. The results of the study show that an integrated e-learning system plays an important role in improving the efficiency of academic services, transparency of the learning process, and ease of access to educational services. However, the effectiveness of digital academic public services has not been fully optimal, especially in terms of consistency in system utilization, quality of technical support, and the availability of standard operating procedures. The limitations of interactive learning features and variations in users' digital literacy levels also affect service performance. This study emphasizes that strengthening system governance, developing internal policies, and increasing the capacity of human resources are the main prerequisites in improving the performance of digital academic public services in a sustainable manner in state universities.*

**Keywords:** public service performance, e-learning, digital public services, academic information systems, public universities

### **1. Introduction**

Digital transformation in public services has become a strategic agenda in public administration reform as people's demands for efficient, transparent, and accountable services increase. The use of information technology is no longer understood solely as an administrative support tool, but as the main instrument in improving the performance of public organizations and the quality of service to users. In this context, state universities have a dual role as educational institutions as

well as academic public service providers that are required to be adaptive to the development of digital technology.

As a form of digital transformation implementation, state universities develop an integrated academic information system equipped with e-learning features. This system is designed to integrate academic administration services and digital learning processes in one platform to improve service efficiency, expand access to education, and strengthen transparency and accountability of academic services. However, the implementation of the e-learning system has not fully demonstrated the optimal performance of digital academic public services. Various problems are still found, such as fluctuations in the level of system utilization, limitations of interactive learning features, variations in users' digital literacy, and the lack of operational standards for procedures that govern the use of the system comprehensively. On the other hand, studies on e-learning tend to focus on pedagogical aspects, so it does not place e-learning as part of the academic public service system that needs to be assessed from the perspective of performance and service governance.

Based on these conditions, a research is needed that specifically analyzes the performance of digital academic public services through the effectiveness of the use of integrated e-learning systems in state universities. This research aims to fill the gap in the study by using a public service effectiveness approach that includes the dimensions of productivity, service quality, responsiveness, responsibility, and accountability. Through this approach, the research is expected to make a theoretical contribution to the development of digital public administration studies as well as practical contributions to policy formulation and strengthening the governance of information technology-based academic services in state universities

## **2. Theoretical Foundations**

### **2.1 Public Service in Perspective**

#### **Public Administration**

Public services are the main function of public sector organizations that aim to meet the needs of the community in a fair, efficient, and accountable manner. From the perspective of public administration, public services are not only understood as administrative activities, but also as a form of state responsibility in guaranteeing the rights of citizens. The quality of public services is an important indicator in assessing the performance of public institutions, including state universities as providers of academic public services that are required to be managed professionally and oriented towards user satisfaction.

## **2.2 Digitalization as Service Innovation**

### **Public**

Digitization of public services is a form of innovation that utilizes information technology to improve efficiency, effectiveness, and quality of services. In the higher education sector, digitalization is realized through the implementation of an integrated academic information system that manages administrative services and online learning. The success of digital public service innovation is not only determined by technology, but also by the readiness of human resources, clarity of internal policies, and adequate infrastructure support.

## **2.3 E-Learning System as a Service**

### **Digital Academics**

E-learning is an information technology-based learning system that allows the teaching and learning process to be carried out online through digital platforms. In the context of public universities, e-learning not only functions as a learning medium, but also as part of a digital academic public service that is integrated with academic information systems. The effectiveness of e-learning as a public service is determined by the level of system utilization, the quality of service features, and the consistency of its management in supporting the academic process.

## **2.4 Effectiveness of Public Services**

Effectiveness is a key concept in assessing the performance of public organizations. Public services are said to be effective if they are able to achieve the goals that have been set and provide real benefits for service users. Measuring the effectiveness of public services requires a multidimensional approach that includes aspects of service outcomes, processes, and impacts, so the evaluation of digital academic public services needs to consider the contribution of e-learning systems to improving service performance and ease of user access.

## **2.5 Dimensions of Public Service Effectiveness**

This research uses five dimensions of public service effectiveness, namely productivity, service quality, responsiveness, responsibility, and accountability. Productivity is related to service efficiency and resource utilization, service quality refers to the reliability and convenience of using the system, responsiveness indicates the ability of managers to respond to user needs, responsibility is related to compliance with procedures, and accountability reflects accountability for managing the system administratively and publicly. These five dimensions are used as an analytical framework in assessing the performance of digital academic public services.

### **3. Research Methods**

This study uses a qualitative approach with a case study design. This approach was chosen because the research aims to understand in depth the performance of digital academic public services through the effectiveness of the use of integrated e-learning systems in academic information systems in state universities. The qualitative approach allows researchers to explore empirical reality, user perceptions, and the dynamics of digital service implementation in a contextual and comprehensive manner.

The research location was carried out at state universities that have implemented an integrated academic information system with e-learning features as part of digital academic services. The focus of the research is directed at the performance of digital academic public services which are analyzed through five dimensions of public service effectiveness, namely productivity, service quality, responsiveness, responsibility, and accountability.

Research informants are determined purposively by considering direct involvement in the management and utilization of e-learning systems. Informants consist of academic information system managers, lecturers, and students as service users. The selection of informants is carried out until it reaches a level of data saturation, so that the information obtained has adequately reflected empirical conditions.

Data collection techniques are carried out through in-depth interviews, observations, and document reviews. The interviews were used to explore the perceptions, experiences, and assessments of informants on the effectiveness of the e-learning system as a digital academic public service. Observation is carried out to see firsthand the pattern of system utilization, while document review is used to support empirical data through policy documents, system usage reports, and academic guidelines.

Data analysis is carried out interactively through the stages of data reduction, data presentation, and conclusion drawn. The analysis process was carried out simultaneously from data collection to the final stage of research. The validity of the data is maintained through triangulation techniques of sources and techniques, as well as re-checking findings to informants to ensure the credibility of research results.

### **4. Results and Discussion**

#### **4.1 Digital Academic Public Service Productivity**

The results of the study show that the implementation of an integrated e-learning system in the academic information system contributes to increasing the productivity of academic services,

especially in the distribution of learning materials, assignment management, and digital documentation of academic activities. The integration of this system reduces reliance on manual processes and speeds up administrative services related to learning.

However, the productivity of digital academic services is not fully optimal. The level of utilization of the e-learning system by lecturers and students is still fluctuating, so the increase in service output has not been consistent. This condition is influenced by the limitations of learning features, variations in user readiness, and the absence of institutional policies that regulate the use of e-learning uniformly. These findings confirm that the productivity of public services is not only determined by the availability of the system, but also by the sustainability and intensity of its utilization.

#### **4.2 Quality of Service of E-Learning System**

From the aspect of service quality, the integrated e-learning system is considered to be quite helpful for users in accessing academic services flexibly. Ease of access, integration with the academic system, and clarity of usage flow are the main advantages felt by lecturers and students in supporting the online learning process.

Despite this, the quality of service has not fully met user expectations. The limitations of interactive learning features, technical constraints, and differences in the quality of internet access affect the convenience of using the system. These findings show that the quality of digital academic public services depends not only on the design of the system, but also on the reliability of the service and the overall user experience.

#### **4.3 Service Manager Responsiveness**

##### **Digital Academics**

The responsiveness of digital academic public services is reflected in the ability of system managers to respond to user needs and problems. The study found that a technical support mechanism is in place, but the response to user complaints is still situational and has not been systematically structured.

The absence of standard procedures in handling technical problems causes variations in the quality of responses and has the potential to disrupt the learning process. This shows that responsiveness as a dimension of digital public service effectiveness still needs to be strengthened through integrated reporting systems and clear service standards.

#### **4.4 Responsibilities in System Management**

##### **E-Learning**

The responsibility of digital academic public services is related to compliance with applicable policies and procedures. The results of the study show that the use of e-learning has not been fully supported by internal policies that regulate the roles and responsibilities of users and system managers in detail. The absence of Standard Operating Procedures (SOP) causes the practice of using the system to run non-uniformly.

From the perspective of public administration, weak accountability has implications for low service consistency and difficulties in controlling the quality of digital academic services. Therefore, strengthening internal regulations is an important prerequisite to ensure effective service governance.

#### **4.5 Academic Public Service Accountability**

##### **Digital**

In terms of accountability, an integrated e-learning system has great potential in supporting transparency and accountability of academic services through digital recording of learning activities. However, this potential has not been optimally utilized in system management practices.

The use of e-learning activity data as a basis for evaluating service performance is still limited and has not been integrated in the policy decision-making process. This condition shows that the accountability of digital academic public services has not been fully internalized in institutional governance, even though the system infrastructure is already available.

Overall, the integrated e-learning system has made a positive contribution to the transformation of digital academic public services in state universities. However, the effectiveness of its utilization is still not optimal due to the gap between the system capacity and the user utilization rate. These findings confirm that the success of digital public service innovation is not only determined by technological aspects, but also by institutional policies, human resource readiness, and service governance oriented towards effectiveness and accountability.

#### **5. Conclusion**

This study concludes that the integrated e-learning system in the academic information system has contributed positively to improving the performance of digital academic public services in state universities, especially in improving the efficiency of the learning process and ease of

access to academic services. In terms of productivity and service quality, the existence of an e-learning system is able to reduce dependence on manual processes and accelerate the implementation of digital-based academic services.

On the other hand, the effectiveness of digital academic public services has not been fully optimal. The use of e-learning systems is still inconsistent among lecturers and students, influenced by the limitations of interactive learning features, variations in users' digital literacy, and technical and infrastructure constraints. In addition, the responsiveness and responsibility aspects of service are still facing challenges due to the lack of standard operating procedures that govern the comprehensive use of e-learning.

From an accountability perspective, the e-learning system has great potential in supporting transparency and evaluation of the performance of digital academic services through systematic recording of activities. However, this potential has not been optimally utilized as a basis for policy decision-making. These findings confirm that the success of digital academic public service innovation is not only determined by the availability of technology, but also by strengthening internal policies, increasing human resource capacity, and service governance oriented towards effectiveness and accountability.

## **6. Suggestions**

1. State universities need to strengthen internal policies related to the use of the e-learning system as an integral part of digital academic public services through the preparation and implementation of clear and binding Standard Operating Procedures (SOPs) to ensure the consistency of the use of the system by lecturers and students and strengthen the aspect of responsibility for service management.
2. Academic information system managers are advised to develop systems in a sustainable manner by improving service quality, system stability, and enrichment of interactive learning features, as well as providing responsive and structured technical support to encourage optimal use of e-learning.
3. Increasing the capacity and digital literacy of users needs to be prioritized through continuous training and socialization programs for lecturers and students so that the use of the e-learning system can take place effectively and productively.
4. Universities need to systematically utilize e-learning activity data as the basis for evaluating the performance of digital academic services to strengthen accountability, transparency, and evidence-based decision-making in the development of digital academic public service policies.

## **Bibliography**

Andika, R. (2022). Evaluation of the implementation of academic information systems as public service innovations in state universities. *Journal of Public Administration*, 18(2), 145–158.

Arie Bowo, & Mahrudi. (2022). The effectiveness of public services in the perspective of regional bureaucratic performance. *Journal of Administrative Sciences*, 19(1), 23–35.

Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning*. BCcampus.

Campbell, J. P. (1977). On the nature of organizational effectiveness. In P. S. Goodman & J. M. Pennings (Eds.), *New perspectives on organizational effectiveness* (pp. 13–55). Jossey-Bass.

Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction* (4th ed.). Wiley.

Denhardt, J. V., & Denhardt, R. B. (2015). *The new public service: Serving, not steering* (4th ed.). Routledge.

Dwiyanto, A. (2006). *Realizing good governance through public services*. Gadjah Mada University Press.

Dwiyanto, A. (2018). *Public service management: Caring, inclusive, and collaborative*. Gadjah Mada University Press.

Febrianti, D. (2022). Digitization of public services in the higher education sector. *Journal of Public Policy*, 14(3), 201–214.

Hartley, J. (2005). Innovation in governance and public services: Past and present. *Public Money & Management*, 25(1), 27–34.

Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3–19.

Mahendro, D., & Abimanto, D. (2022). Student satisfaction analysis of e-learning using a machine learning approach. *Journal of Information Technology*, 9(2), 101–112.

Mergel, I., Edelman, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385.

Nugroho, R. (2022). Digital public service innovation in higher education. *Journal of Administrative Reform*, 9(1), 45–60.

Pasolong, H. (2019). *Theory of public administration*. Alfabeta.

Rahmawati, R., & Pratikno. (2022). Digital governance and public service challenges in Indonesia. *Journal of State Administration*, 28(1), 77–90.

Rosenberg, M. J. (2001). *E-learning: Strategies for delivering knowledge in the digital age*. McGraw-Hill.

Sari, D., & Trisnawati, R. (2021). The effect of e-learning on student motivation and learning outcomes. *Journal of Higher Education*, 15(2), 89–101.

Steers, R. M. (1985). *Organizational effectiveness: A behavioral view*. Goodyear.

UNDP. (1997). *Governance for sustainable human development*. United Nations Development Programme.