

Digital Libraries and Community Literacy Development: An Evaluation of Their Effectiveness in Bojonegoro, Indonesia

Musta'ana^{1*}, Ahmad Suprastiyo², Nadiya Eka Puspita Virginia³

^{1,2,3}Public Administration, Faculty of Social and Political Science, Universitas Bojonegoro, Bojonegoro, East Java, Indonesia

ABSTRACT	ARTICLE DETAILS
The rapid development of information technology has encouraged public libraries to adopt digital services to improve access to information and enhance service quality. This study aims to analyse the effectiveness of the e-Maos online library service managed by the Department of Library and Archives of Bojonegoro Regency. The study employs a qualitative descriptive approach and uses Richard M. Steers' organisational effectiveness theory, which consists of four dimensions: productivity, goal achievement, user satisfaction, and efficiency. Data were collected through interviews, observations, and document analysis involving library administrators, staff members, and service users. The findings indicate that the e-Maos online library has contributed positively to the digital transformation of library services in Bojonegoro Regency. In terms of productivity, the service has experienced growth in users, visitors, and digital collections. Regarding goal achievement, e-Maos has improved public access to digital information and supported digital literacy initiatives. User satisfaction was generally positive, particularly in relation to accessibility, flexibility, and the availability of digital resources. Furthermore, the digitalisation of services has increased efficiency by reducing the time, cost, and effort required to access information. However, several challenges remain, including unequal internet access, limited service coverage in certain areas, technical constraints within the application, and varying levels of digital literacy among users. The study concludes that the effectiveness of e-Maos can be categorised as relatively high, although continuous improvements in digital infrastructure, service quality, and community digital literacy are necessary to ensure sustainable and inclusive digital library services. KEYWORDS: organisational effectiveness, digital library, e-Maos, public service, digital information, Bojonegoro Regency.	Published On: 10 July 2026 Available on: https://ijiissh.com/

1. INTRODUCTION

The rapid advancement of Information and Communication Technology (ICT) has transformed various sectors, including public governance, education, and information services. The increasing integration of technologies such as the Internet, Artificial Intelligence (AI), cloud computing, and big data analytics has accelerated digital transformation worldwide. In Indonesia, internet penetration increased from 62.8% in 2020 to 77.02% in 2022, indicating a significant expansion of digital technology adoption across society (BPS, 2023).

Within the public sector, digital transformation is not only intended to improve administrative efficiency but also to enhance public access to information and knowledge. This objective aligns with Presidential Instruction No. 3 of 2003 on the National Strategy for E-Government Development, which emphasises the utilisation of information technology to improve public services and disseminate information. At the global level, digital technologies are increasingly recognised as essential instruments for strengthening societal resilience, promoting lifelong learning, and supporting sustainable development (World Economic Forum, 2021; United Nations, 2022).

One important manifestation of digital transformation in the education and information sector is the development of digital libraries. Digital libraries provide flexible access to various information resources, including electronic books, scientific journals, research reports, and other learning materials, regardless of geographical and temporal limitations. Beyond improving access, digital libraries are also expected to support literacy development by facilitating information acquisition, independent learning, and critical thinking. Literacy in the contemporary context extends beyond the ability to read and write. According to UNESCO (2006), literacy involves the ability to identify, understand, interpret, create, communicate, and utilize information effectively in various contexts. In the digital era, individuals are increasingly required to locate, evaluate, and critically use information amid the growing volume of digital content (Martin, 2008). Consequently, digital libraries have become strategic tools for supporting information literacy and lifelong learning.

Recognizing the importance of literacy development, the Government of Bojonegoro Regency has implemented an online library service to expand public access to knowledge resources. However, literacy conditions in the region remain relatively low compared

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to the provincial average. Data from Statistics Indonesia show that Bojonegoro ranked 32nd out of 38 regencies and municipalities in East Java in terms of the Literacy Development Index in 2023.

Table 1. Literacy Development Index of Bojonegoro Regency Compared to the East Java Average (2023)

No.	Regency/City	Literacy Development Index	Year	East Java Ranking
1	Bojonegoro	57.4800	2023	32
2	East Java Average	100.000	2023	-

Source: Statistics Indonesia (BPS) East Java Province (2023)

The data indicate that literacy development in Bojonegoro still requires substantial improvement. In response, the local government has introduced digital library services as part of its broader strategy to strengthen literacy and human resource development. Nevertheless, the effectiveness of these services remains questionable due to relatively low levels of utilization.

Data from the Department of Library and Archives of Bojonegoro Regency reveal that the online library has attracted only limited participation. Of approximately 7,500 active university students residing in Bojonegoro in 2025, only 270 individuals (3.6%) were registered as online library members. Furthermore, the platform recorded an average of only 50 daily logins and approximately 774 annual visitors.

Table 2. Online Library Utilization Data in Bojonegoro Regency (2025)

No.	Indicator	Data
1	Active university students in Bojonegoro (2025)	±7,500 individuals
2	Registered online library members	270 individuals (3.6%)
3	Average daily access	50 logins/day
4	Total annual visitors	±774 visitors/year

Source: Department of Library and Archives of Bojonegoro Regency (2025)

The low utilization rate suggests a gap between the availability of digital library services and their actual use by the community. Previous studies have identified several factors influencing digital library adoption, including limited public awareness, inadequate digital literacy skills, insufficiently relevant content, and technological constraints such as unstable internet connectivity (Aharony, 2014; Vassilaki & Moniarou-Papaconstantinou, 2017). These challenges indicate that the provision of digital infrastructure alone is insufficient to achieve meaningful literacy outcomes without corresponding improvements in user competencies and engagement. Several studies have examined the effectiveness of digital public services and digital library platforms. Julianti (2023) and Barimbing (2024) found that digital library applications improved public access to library services but faced challenges related to user participation, promotion, and collection completeness. Similarly, Yuningsih (2022) reported that digital public services enhanced efficiency and accessibility, although infrastructure limitations and low digital literacy remained significant obstacles. International studies also demonstrate that digital libraries can support lifelong learning and literacy development when supported by adequate infrastructure and digital competencies (Helsper & Eynon, 2013; Xie & Matusiak, 2016).

Despite the growing literature, existing studies primarily focus on technological implementation, user acceptance, or general service performance. Limited research has comprehensively evaluated the effectiveness of digital library utilization in improving community literacy, particularly in regions with relatively low literacy development indicators. Moreover, previous studies rarely integrate multiple dimensions of organisational effectiveness into a single analytical framework.

To address this gap, this study adopts the organizational effectiveness framework developed by Richard M. Steers (1985), which evaluates effectiveness through four dimensions: productivity, user satisfaction, efficiency, and goal attainment. These dimensions provide a comprehensive basis for assessing whether online library services effectively contribute to literacy improvement in Bojonegoro Regency.

The novelty of this study lies in its application of Steers' four-dimensional effectiveness framework to evaluate online library utilisation in a regency characterised by literacy performance below the provincial average. Unlike previous studies that focus primarily on technological adoption or service implementation, this research links organisational effectiveness with literacy development outcomes. Therefore, the study is expected to contribute to the literature on digital public services while providing evidence-based recommendations for improving digital library management and literacy development policies in Bojonegoro Regency.

Accordingly, this study aims to evaluate the effectiveness of digital library utilization in promoting community literacy development in Bojonegoro Regency, Indonesia, identify the factors that support and hinder its effectiveness, and formulate strategic recommendations to optimize digital library services as instruments for enhancing literacy, lifelong learning, and equitable access to information.

2. METHODOLOGY

This study employed a qualitative descriptive approach to examine the effectiveness of digital library utilization in enhancing community literacy in Bojonegoro Regency, Indonesia. A qualitative approach was considered appropriate because the study sought

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to explore the experiences, perceptions, and perspectives of stakeholders regarding the management and utilization of digital library services, as well as their contribution to literacy development (Creswell, 2018). This approach enabled a comprehensive understanding of contextual factors, user experiences, and service effectiveness that could not be adequately captured through quantitative measurements alone.

The research was conducted at the Bojonegoro Regency Library and Archives Office, which is responsible for managing digital library services and promoting public access to information. The study adopted the effectiveness framework proposed by Steers (1985), focusing on four dimensions: productivity, efficiency, user satisfaction, and goal attainment. Productivity was assessed through the frequency of service utilization and the volume of digital information accessed, while efficiency examined the speed of information retrieval and ease of system navigation. User satisfaction focused on perceived service quality and usefulness, whereas goal attainment evaluated the contribution of digital library services to public information access and literacy enhancement.

Informants were selected using purposive sampling to ensure that participants possessed relevant knowledge and experience regarding digital library management and utilisation (Sugiyono, 2021). A total of nine informants participated in the study, comprising the Head of the Library and Archives Office, technical staff members, and digital library users.

Table 3. Research Informants

Informant Category	Institution	Number of Informants
Head of Library and Archives Office	Bojonegoro Regency Library and Archives Office	1
Technical Staff	Bojonegoro Regency Library and Archives Office	5
Digital Library Users	Community Members	3
Total Number of Informants		9

Source: Data processed by researchers (2026)

Data were collected through semi-structured interviews, direct observation, and document analysis. The collected data were analysed using the interactive model developed by Miles, Huberman, and Saldaña (2014), which includes data condensation, data display, and conclusion drawing and verification. To enhance the credibility and trustworthiness of the findings, source triangulation was employed by comparing information obtained from different participant groups and data collection methods.

3. RESULTS AND DISCUSSION

The effectiveness of online library management in Bojonegoro Regency was analysed using the organisational effectiveness theory proposed by Richard M. Steers, which encompasses several key indicators: productivity, goal achievement, user satisfaction and efficiency. These four indicators form the basis for evaluating how optimally the digital library is managed through the e-Maos application in supporting information and literacy services for the community.

A. Productivity

Productivity refers to an organization's ability to generate outputs that are aligned with its predetermined objectives. In the context of the e-Maos online library, productivity can be observed through the number of active users, visitor statistics, and the availability of digital collections accessible to the public. In 2025, e-Maos recorded 270 registered members and provided access to 2,277 digital collections. These figures indicate that the digital library service has been utilized by the community, although increasing the number of users remains a primary concern for library management.

One of the efforts undertaken to increase user participation was explained by the Head of the Library Division as follows:

"We increase the number of e-Maos users by promoting the application through social media platforms such as Instagram, Facebook, and other social media channels. We also collaborate with other government agencies that have a large number of followers to help spread information about e-Maos more widely."

The interview results indicate that efforts to increase user participation are carried out through digital promotion strategies and inter-organizational collaboration. These initiatives have contributed to greater utilization of the e-Maos service compared to previous periods when public awareness of Bojonegoro Regency's digital library was still limited.

From the users' perspective, the usefulness of the e-Maos service is reflected in the following statement:

"This digital library is very helpful for students because it allows us to access books and journals anytime without having to go to the library. It is practical, saves time, and offers a wide range of resources. It is very useful for finding materials needed for our studies."

This statement demonstrates that e-Maos provides convenient access to information resources, particularly for university students, thereby supporting academic needs in a more flexible and efficient manner.

A similar view was also expressed by the library administrator:

"The e-Maos administrators promote the platform to the public through more intensive campaigns, collaboration with other government agencies, and by enhancing community literacy."

This statement suggests that improving service productivity is pursued not only through system development but also through broader outreach efforts and the strengthening of community digital literacy.

Table 4. Productivity of the Online Library

Productivity Indicators	Year 2025
Number of Online Library Visitors	774
Total Digital Collections (Titles)	2,277
Registered Members	270
Average Daily Access (login/user)	50
Percentage of Active Users (%)	62%

Source: Department of Library and Archives of Bojonegoro Regency (2025)

Based on Table 4, the productivity of e-Maos is reflected in the number of online library visitors, which reached 774 individuals, the availability of 2,277 digital collection titles, and 270 registered members. In addition, the platform recorded an average of 50 daily logins, with an active user percentage of 62%. These data indicate that the digital library service has been actively utilized by the community and demonstrates a positive trend in service development.

The management of e-Maos is carried out under the Department of Library and Archives of Bojonegoro Regency, supported by organizational resources consisting of the department head, technical staff, and operational personnel responsible for digital collection management, system maintenance, service promotion, and user assistance. Such organizational support constitutes an important factor in maintaining the sustainability of digital library services.

Based on interview findings and document analysis, the productivity of e-Maos can be considered relatively positive. The increase in the number of users, visitors, and digital collections indicates that the online library service has become increasingly recognized and utilized by the community. The findings also suggest that digital promotion strategies and inter-agency collaboration have contributed to the increased use of the service.

Nevertheless, the productivity of the service has not yet reached its full potential. Several challenges remain, particularly limited internet accessibility in certain areas and low levels of digital literacy among community members, both of which affect the utilization rate of the service. Furthermore, broader socialization efforts and user assistance programs are still required to ensure that the benefits of e-Maos can be experienced more equally across different segments of society.

Referring to Richard M. Steers' (1985) organizational effectiveness theory, productivity reflects an organization's ability to generate outputs consistent with its established goals. In this study, the increasing number of users, visitors, and digital collections indicates that e-Maos has achieved positive outcomes. However, these achievements should be accompanied by improvements in the quality of service utilization and broader public access. Such efforts are necessary to ensure that productivity gains are not merely quantitative in nature but also contribute more substantially to literacy development within the community of Bojonegoro Regency.

B. Goal Achievement

Goal achievement is an indicator of organisational effectiveness that reflects the extent to which a programme is able to realise its predetermined objectives. In the management of the e-Maos online library, goal achievement can be assessed through the service's ability to increase public access to digital information, expand service coverage, and support the development of digital literacy within the community.

Based on an interview with the Head of the Library Division, the achievement of service objectives is assessed not only through the number of users but also through the level of utilisation of available features and feedback received from users.

"We usually measure user satisfaction by paying attention to usage data, such as how many people log in, what content is most frequently searched for, and which features are used the most. Sometimes we also receive direct feedback from universities or students, so we can immediately identify what needs to be improved."

This statement indicates that the evaluation of goal achievement is conducted through a combination of quantitative indicators and direct user feedback, which serve as an important basis for service improvement and development.

A similar perspective was expressed by a library staff member:

"We usually measure it by looking at users' experiences when using the service, starting from ease of access, the completeness of the collection, to the application interface. In addition, we also look at the number of active users and how often certain features are used. If there are comments or suggestions, they also become part of our evaluation process. Sometimes we also talk directly with students who visit the library and ask for their opinions about the online service. From there, we can identify what has worked well and what still needs improvement."

This statement demonstrates that the library management team focuses not only on achieving usage targets but also on ensuring a positive user experience when accessing digital library services.

From the users' perspective, the benefits of the e-Maos service are reflected in the following statement:

"Personally, I do not measure it using numbers; I simply experience it. If the application is easy to use, the books are complete, and I can quickly find what I am looking for, then it is already good. Sometimes I also fill out surveys sent by the university or the library, giving ratings or comments. But the most important thing is that when I need references for assignments or my thesis and this application helps me, then I am satisfied."

The interview findings suggest that the achievement of programme objectives is also reflected in the application's ability to fulfil users' information needs quickly, effectively, and conveniently.

Table 5. Goal Achievement of the Online Library

Goal Achievement Indicators	2025
Public access to government documents through online services	4,120

Total digital public information requests	2,340
Service coverage in underdeveloped villages (%)	35%
Number of digital literacy education and outreach activities	12

Source: Department of Library and Archives of Bojonegoro Regency (2025)

As presented in Table 5, public access to government documents through online services reached 4,120 accesses in 2025, while the number of digital public information requests totalled 2,340. In addition, digital library services reached 35% of underdeveloped villages and were supported by 12 digital literacy education and outreach activities conducted throughout the year.

The substantial number of accesses to government documents indicates that e-Maos has contributed to enhancing public information transparency and facilitating access to information required by the community. Likewise, the high number of digital public information requests reflects an increasing reliance on digital services as accessible and efficient sources of information.

Nevertheless, service coverage in underdeveloped villages remains relatively limited. The achievement of only 35% coverage suggests that equitable access to digital services continues to face several challenges, particularly with regard to internet infrastructure availability and the capacity of local communities to utilise digital technologies effectively. To address these challenges, the Department of Library and Archives of Bojonegoro Regency organised 12 digital literacy education and outreach activities during 2025. These initiatives represent an important effort to improve public understanding and encourage the optimal utilisation of online library services.

Based on the interview findings and documentary evidence, the achievement of the objectives of online library management demonstrates positive progress. This is reflected in increased public access to digital information, growing demand for public information services, and the implementation of various digital literacy education activities. These findings indicate that the primary objectives of e-Maos, namely providing digital information services and supporting community literacy development, have begun to be realised.

However, goal achievement has not yet reached an optimal level due to limitations in service coverage across certain regions and the relatively low level of digital literacy among some members of the community. Consequently, greater efforts in public outreach, digital infrastructure development, and collaboration with various stakeholders remain necessary to ensure that the benefits of the service can be experienced more equitably by all segments of society.

From the perspective of Richard M. Steers' (1985) theory of organisational effectiveness, goal achievement is assessed based on an organisation's ability to realise its predetermined objectives. The findings of this study indicate that e-Maos has successfully enhanced public access to information and supported the digital transformation of library services in Bojonegoro Regency. Nevertheless, expanding equitable access and strengthening digital literacy remain important priorities to ensure that the programme's objectives can be achieved more effectively, comprehensively, and sustainably.

C. User Satisfaction

User satisfaction is one of the key indicators in assessing the effectiveness of online library services. The level of user satisfaction reflects the extent to which the services provided are able to meet the needs and expectations of the community. In the context of e-Maos, user satisfaction can be evaluated through the ease of access to services, the comprehensiveness of digital collections, system quality, and users' overall experiences in utilising digital library services.

Based on an interview with the Head of the Library Division, user satisfaction is currently measured through the level of service utilisation, as reflected in the increasing number of users.

"At present, the indicator of user satisfaction is measured by the extent of the increase in the number of users accessing the service over the past few months."

This statement indicates that growth in the number of users is regarded as one of the indicators of the service's success in meeting community needs and expectations.

From the users' perspective, the benefits of the e-Maos service are experienced directly by university students as one of the primary user groups. This was expressed by one user as follows:

"Because they can access books, journals, and course materials anytime and anywhere. It is practical, time-saving, and there is no need to visit a physical library. The collection is also quite comprehensive, especially for completing assignments or writing a thesis. Although there are occasionally issues such as slow access or unavailable books, in general, students find this application very helpful in supporting their learning process."

This statement demonstrates that ease of access, flexibility of use, and the availability of digital collections are the main factors contributing to user satisfaction with the online library service.

A similar view was expressed by a library staff member, who explained that user satisfaction is currently measured through digital book borrowing activities.

"At present, user satisfaction is measured by examining the number of e-book borrowers."

An increase in the number of digital book loans indicates that the services provided have been utilised by the community and are delivering benefits that correspond to users' needs.

Table 6. User Satisfaction with the Online Library

User Satisfaction Indicators	2025
User Satisfaction Score (Scale 1–5)	3.6
Users Reporting Easy Access to Services (%)	68%

Users Reporting Technical Issues (%)	28%
Users Suggesting Additional Features (%)	22%

Source: Department of Library and Archives of Bojonegoro Regency (2025).

Based on Table 6, the average user satisfaction score for the online library was 3.6 on a five-point scale. This result indicates that users are generally satisfied with the services provided. A total of 68% of users reported that the service was easy to access, suggesting that the system has been successful in facilitating the search and utilisation of digital information.

Nevertheless, 28% of users reported experiencing technical issues, including network disruptions, slow application performance, and difficulties in using certain service features. In addition, 22% of users proposed the introduction of new features to improve the overall user experience. These findings indicate that users are not merely recipients of services but also play an active role in providing feedback for system improvement and development.

The interview and observational findings further revealed that user satisfaction is influenced by the comprehensiveness of the available digital collections. The availability of 2,277 digital titles was considered beneficial in supporting users' learning, research, and information-seeking activities. However, some users expressed a desire for additional collections, particularly in the areas of educational textbooks, local literature, and children's books, in order to better meet the diverse information needs of the community. Based on the interview findings and documentary evidence, the level of user satisfaction with e-Maos can be categorised as reasonably good. Users acknowledged the benefits of the service in obtaining information more quickly, conveniently, and flexibly than through conventional library services. Furthermore, the high level of user participation in providing suggestions and feedback reflects active community involvement in the development of digital library services.

Despite these positive findings, several aspects still require attention, particularly the resolution of technical issues, the development of additional service features, and the expansion of digital collections. Such improvements are necessary to ensure that service quality continues to improve and remains responsive to the increasingly diverse needs of users.

From the perspective of Richard M. Steers' (1985) theory of organisational effectiveness, user satisfaction reflects an organisation's ability to fulfil the needs and expectations of the groups it serves. The findings of this study indicate that e-Maos has achieved a reasonably positive outcome in facilitating access to information and supporting the learning needs of the community. Nevertheless, improvements in system quality, feature development, and the expansion of digital collections remain necessary to further enhance user satisfaction and support the long-term effectiveness of online library services.

D. Efficiency

Efficiency refers to an organisation's ability to utilise available resources in order to deliver services optimally through the effective use of time, costs, and labour. In the management of the e-Maos online library, efficiency is reflected in the utilisation of digital technology, which enables users to access library services without having to visit the library physically. Through the e-Maos application, users can search catalogues, borrow books, and return materials online, making service processes faster and more convenient.

Based on an interview with the Head of the Library Division, the existence of the online library has significantly improved the efficiency of information access for users.

"The online library makes information delivery much more efficient because we can access books or journals at any time without having to go to campus. Finding references is also very easy; we simply type in a keyword. It does not take much time and saves both effort and costs. Overall, it is extremely suitable for students who need information quickly and conveniently."

This statement indicates that the digitalisation of library services has facilitated faster access to information without the limitations of time and location.

A similar opinion was expressed by a library staff member:

"This digital library was specifically designed to accelerate access to information, particularly for university and school students. Previously, they had to visit the library in person, but now they can simply use a mobile phone or laptop. The process of searching for books is also much faster because the system is fully digital. As a result, information can be obtained immediately without unnecessary difficulty. That is why we consider this service to be highly efficient and very helpful."

This statement demonstrates that service efficiency is not only experienced by users but also constitutes one of the primary objectives of the digital library system's development.

From the users' perspective, the benefits of service efficiency are also experienced directly, as expressed by one e-Maos user:

"In my opinion, this online library is truly helpful. Whenever I need a book or journal, I simply open the application instead of going to a physical library. It saves time, is faster, and is very practical. For busy students, it is an extremely efficient way to find references for assignments or a thesis."

The interview findings indicate that the online library service reduces the time and costs required for users to obtain the information resources they need.

Table 7. Efficiency of the Online Library

Efficiency Indicators	2025
Average service request completion time (days)	3.2
Average operational cost per month (IDR million)	17.9
Number of completed digital services	8,150
Percentage of services completed on time	73%
Total workforce (human resources)	34

Source: Department of Library and Archives of Bojonegoro Regency (2025)

As shown in Table 7, the efficiency of the online library service is reflected in the system's ability to complete 8,150 digital service requests during 2025, with an average completion time of 3.2 days. Furthermore, 73% of services were completed within the established service standards. These achievements indicate that the management of digital services has been relatively successful in meeting the information needs of the community.

From a resource management perspective, the operation of the online library is supported by 34 staff members responsible for system administration, user services, promotional activities, and overall service management. With an average operational expenditure of IDR 17.9 million per month, the digital library is able to provide information services to a relatively large number of users. This condition suggests that organisational resources have been utilised in a reasonably efficient manner.

Nevertheless, observations and interview findings revealed several challenges that continue to affect service efficiency. These include internet network disruptions, reduced application performance at certain times, and limitations in the utilisation of some features due to the need for enhanced technical capacity among system administrators. In addition, unequal internet access across several areas remains a barrier to the optimal utilisation of online library services.

Based on the interview findings and documentary evidence, the efficiency of e-Maos management demonstrates positive progress. The digitalisation of services has accelerated service delivery processes, reduced the burden of manual administration, and improved public access to information. Furthermore, the digital system enables library collections and service data to be managed in a more structured and systematic manner compared with conventional library management systems.

From the perspective of Richard M. Steers' (1985) theory of organisational effectiveness, efficiency reflects an organisation's ability to achieve its objectives through the optimal utilisation of available resources. The findings of this study indicate that e-Maos has successfully improved the efficiency of library services through the application of information technology, resulting in significant savings in time, costs, and labour for both users and administrators. Nevertheless, continued improvements in digital infrastructure, the strengthening of human resource capacity, and ongoing system development remain necessary to ensure that service efficiency can be further enhanced and experienced more equitably by all members of the Bojonegoro Regency community.

E. Synthesis of Findings

This study examined the effectiveness of the e-Maos online library service in Bojonegoro Regency through the dimensions of productivity, goal achievement, user satisfaction, and efficiency as proposed by Richard M. Steers' (1985) organisational effectiveness theory. The findings indicate that the implementation of e-Maos has generated positive outcomes in supporting digital library services and improving public access to information. From the productivity perspective, the increasing number of users, visitors, and digital collections demonstrates that the service has been increasingly recognised and utilised by the community. Promotional activities through social media and inter-agency collaboration have contributed to expanding service utilisation.

In terms of goal achievement, e-Maos has successfully enhanced public access to digital information and government documents while supporting digital literacy initiatives. The growing number of public information requests and digital literacy outreach programmes suggests that the primary objectives of the service are gradually being realised. However, limited service coverage in underdeveloped villages indicates that equitable access remains a challenge.

Regarding user satisfaction, users generally expressed positive perceptions of the service, particularly in relation to ease of access, flexibility, and the availability of digital collections. Nevertheless, technical issues and demands for additional features indicate that continuous service improvement remains necessary to maintain and enhance user satisfaction.

From the efficiency dimension, the digitalisation of library services has significantly reduced the time, cost, and effort required for both users and administrators. The system has improved service delivery processes and enabled more structured management of digital collections and user services. However, challenges related to internet connectivity, system performance, and technical capacity still affect the overall efficiency of service provision.

Overall, the findings demonstrate that e-Maos has achieved a relatively positive level of organisational effectiveness. Nevertheless, improvements in digital infrastructure, service coverage, system quality, and digital literacy programmes are essential to maximise the long-term effectiveness and sustainability of the service.

4. CONCLUSION

This study concludes that the e-Maos online library has contributed positively to the digital transformation of library services in Bojonegoro Regency. Based on Richard M. Steers' organisational effectiveness framework, the service demonstrates satisfactory performance across the dimensions of productivity, goal achievement, user satisfaction, and efficiency. The findings indicate that e-Maos has enhanced access to digital information, improved the utilisation of library resources, increased service efficiency, and supported community learning needs through flexible and accessible digital services. Nevertheless, several challenges remain, including unequal internet accessibility, limited service coverage in certain areas, technical constraints within the application, and varying levels of digital literacy among users. These findings suggest that while the programme has achieved its primary objectives, continuous improvements in infrastructure, system quality, service innovation, and digital literacy initiatives are required to ensure more inclusive, equitable, and sustainable service delivery.

The findings also provide several practical implications for policymakers and library administrators. Strengthening digital infrastructure, expanding digital literacy programmes, enriching digital collections, enhancing user-oriented features, and fostering collaboration with educational institutions and community organisations are essential to maximise the effectiveness of digital library services. Furthermore, future research should explore the influence of digital literacy, technological factors, and organisational capacity on the utilisation of online library services using quantitative, mixed-methods, or longitudinal approaches. Comparative studies across regions and investigations employing frameworks such as the Technology Acceptance Model (TAM), Unified Theory

of Acceptance and Use of Technology (UTAUT), or Information Systems Success Model may provide deeper insights into user behaviour and service effectiveness. In addition, research on the integration of artificial intelligence and personalised digital library technologies could contribute to the development of more innovative and responsive public library services in the future.

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