

Bibliometric Analysis of Public Service Digitalization in Villages: Mapping Trends and Collaboration Networks

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Abstract

Digital transformation in governance has become a global priority, yet research on the digitalization of public services in rural villages remains fragmented and underexplored. Limited infrastructure, disparities in digital literacy, and institutional readiness highlight the urgency of mapping existing scholarship to identify research trends and gaps. This study aims to provide a systematic overview of the literature on village-level public service digitalization through bibliometric analysis of Scopus data published between 2015 and 2025. Methods include trend analysis of publications, distribution of documents, co-authorship networks among authors and institutions, and keyword co-occurrence analysis using VOSviewer. Findings indicate that publications on this topic are still limited but show a rising trend in recent years, dominated by multidisciplinary journals in the social sciences. Contributions come primarily from developing countries, especially India and Indonesia, with research themes focusing on digital skills development for village officials, community participation, and policy support. Collaboration networks among authors and institutions remain weak, reflecting a fragmented research community. This study contributes by clarifying the current state of knowledge, highlighting the relevance of e-Government, Sociotechnical Systems, Digital Divide, and Citizen-Centric Government theories, and recommending stronger international collaboration to accelerate inclusive and effective implementation of digital public services in villages.

Keywords: Bibliometric analysis, Digital public services, e-Government, Village governance

Abstrak

Transformasi digital dalam tata kelola pemerintahan telah menjadi prioritas global, namun penelitian mengenai digitalisasi layanan publik di desa masih terfragmentasi dan kurang dieksplorasi. Keterbatasan infrastruktur, kesenjangan literasi digital, dan kesiapan kelembagaan menunjukkan urgensi untuk memetakan literatur yang ada guna mengidentifikasi tren dan kesenjangan penelitian. Penelitian ini bertujuan memberikan tinjauan sistematis terhadap literatur digitalisasi layanan publik di desa melalui analisis bibliometrik terhadap data Scopus yang dipublikasikan pada rentang tahun 2015–2025. Metode yang digunakan meliputi analisis tren publikasi, distribusi dokumen, jejaring kolaborasi antar penulis dan institusi, serta analisis ko-okurensi kata kunci menggunakan perangkat lunak VOSviewer. Hasil penelitian menunjukkan bahwa publikasi pada topik ini masih terbatas namun cenderung meningkat dalam beberapa tahun terakhir, dengan dominasi jurnal multidisipliner di bidang ilmu sosial. Kontribusi penelitian terutama berasal dari negara berkembang, khususnya India dan Indonesia, dengan tema riset yang berfokus pada pengembangan keterampilan digital aparatur desa, partisipasi masyarakat, dan dukungan kebijakan. Jejaring kolaborasi penulis dan institusi masih lemah, mencerminkan komunitas riset yang terfragmentasi. Studi ini berkontribusi dengan memperjelas kondisi literatur terkini, menegaskan relevansi teori e-Government, Sociotechnical Systems, Digital Divide, dan Citizen-Centric Government, serta merekomendasikan penguatan kolaborasi internasional untuk mempercepat implementasi layanan publik digital desa yang inklusif dan efektif.

Kata kunci: Analisis bibliometric, e-Government, Layanan publik digital, Tata kelola desa

INTRODUCTION

The development of information and communication technology (ICT) has driven a paradigmatic transformation in governance, particularly in the delivery of public services. The digitalization of public services has become the foundation of the e-Government agenda, aimed at strengthening transparency, efficiency, and public trust in bureaucracy (Nugraha, 2020; Saputra et al., 2024). In Indonesia, the initiative to establish Digital Villages has become a national policy priority, with the target of implementing digitalization in all villages by 2025, although to date only around 14,000 villages have utilized village funds for digitalization programs (Sitepu & Mahesa, 2022). The digital divide in rural Indonesia remains evident: only 18% of villages have been digitalized, despite 4G LTE penetration reaching 97%, while financial inclusion and digital literacy remain low (Oktavianoor, 2020). This condition underscores the strategic importance of digitalizing public services in villages as an instrument to bridge regional disparities, empower communities, and support the achievement of inclusive and sustainable development.

The phenomenon of digitalizing public services in villages reflects a transformation process that is not only technical but also social and institutional. According to Sociotechnical Systems Theory, the success of digital transformation is determined by the balance between technological tools and social dimensions, such as human resource capacity, organizational culture, and supportive regulatory frameworks (Baxter & Sommerville, 2011). Recent studies affirm that the digital literacy of village officials remains a major constraint, making capacity-building programs an essential prerequisite for sustaining transformation (Hidayati, 2022). Adaptive policies tailored to local needs have also been proven to accelerate the acceptance and effectiveness of digital services at the village level (Sá et al., 2021; Sundberg & Holmström, 2024). From the perspective of Institutional Theory, norms, rules, and social practices in rural communities must align with technological innovations to ensure that digitalization is not merely symbolic adoption but is genuinely integrated into village governance (Scott, 2013; Smit et al., 2024). Thus, village digitalization constitutes a holistic effort that requires synergy between technical readiness, social capacity, and institutional sustainability.

The Digital Divide Theory proposed by van Dijk (2006) explains the existence of inequalities in access to, utilization of, and the ability to use digital technology among different social groups. In the village context, the digital divide is driven not only by infrastructural limitations but also by the low digital literacy of communities and the limited capacity of village governments to manage technology-based transformations (Sahita et al., 2025). This condition has the potential to exacerbate social and economic disparities if not addressed through inclusive development strategies. Recent studies emphasize that low levels of citizen participation, caused by digital literacy barriers, can hinder the success of public service transformation, particularly for vulnerable groups such as women, the elderly, and low-income communities (Sahita et al., 2025). Therefore, the digitalization of public services in villages must be designed as an effort to ensure equitable access, strengthen human resource capacity, and reinforce adaptive policies so that the benefits of digital transformation are distributed evenly while minimizing the risk of inequality (Lailiyah, 2022).

The digitalization of public services can be understood as a form of Public Service Innovation that places citizens' needs and experiences at the center of service development (Osborne & Brown, 2011). Such innovation requires changes not only in technological aspects but also in the

governance paradigm, emphasizing the design of services that are more responsive, inclusive, accessible, and transparent. The concept of Citizen-Centric Government, as proposed by Fountain (2001), underscores that digital transformation should be directed toward strengthening public trust and enhancing citizens' active participation in decision-making processes. Recent studies indicate that citizen-centered approaches can improve the quality of public services, expand digital inclusion, and foster the sustainability of transformation programs, particularly at the local level such as villages (Godjali et al., 2021; Pislaru et al., 2024). Thus, the digitalization of public services in villages is not merely an administrative modernization but a strategy to realize participatory governance oriented toward the actual needs of society.

Along with the dynamics of globalization and information openness, academic attention to the issue of digitalizing public services in villages has been increasing. Nevertheless, existing studies remain scattered, fragmented, and tend to emphasize urban contexts, leaving the absence of a systematic synthesis that could provide a comprehensive picture of the field's development. Within this framework, bibliometric analysis emerges as a relevant approach to quantitatively map the scientific literature, identify research trends, and trace collaboration networks among authors and institutions (Donthu et al., 2021; Kokol et al., 2021). The use of analytical tools such as VOSviewer enables the visualization of knowledge maps that reveal thematic patterns, citation relationships, and collaborative ties, thereby offering a comprehensive understanding of research dynamics on the digitalization of public services at the village level (Ding & Yang, 2022; McAllister et al., 2022). Accordingly, this study seeks to fill the gap in the literature by mapping research trends and scholarly collaboration, while also providing strategic directions for the development of more inclusive and sustainable digital village governance.

This study aims to conduct a bibliometric analysis of the literature on the digitalization of public services in villages, focusing on mapping publication trends, patterns of collaboration among authors and institutions, and the identification of emerging core topics in the field. The analysis is expected to provide a comprehensive overview of the dynamics of research development while addressing the fragmented nature of the existing literature. The findings are intended to offer strategic directions for future research and to support the formulation of evidence-based policies that can accelerate the implementation of inclusive, effective, and sustainable digital public services in villages.

RESEARCH METHOD

This study employed a bibliometric analysis approach to map the development of literature on the digitalization of public services in villages. This approach was chosen because it provides a quantitative overview of publication trends, patterns of author collaboration, thematic distribution, and the quality of publication sources over time.

The research data were obtained from the Scopus database covering the period 2015-2025. The search was conducted using the query: TITLE-ABS-KEY ("digitalization" OR "digitization" OR "e-government" OR "digital government") AND ("public service" OR "public administration") AND ("village" OR "rural area" OR "desa"). The initial search yielded 26 documents. A screening process was then applied using the following inclusion criteria: (1) journal articles or conference proceedings, (2) publication period between 2015–2025, (3) written in English or Indonesian, and (4) relevance to the digitalization of public services in villages. Documents such as editorials, book chapters, short reports, or articles outside the scope of the study were excluded (n = 14). At the

final stage, 12 articles met the criteria and were analyzed further. This process followed the PRISMA Flow principle to ensure transparency in document selection.

The analysis was carried out on publication metadata, including titles, abstracts, keywords, authors, affiliations, countries, document types, and citation data. The aspects analyzed included: (1) publication trends per year, (2) distribution by type of source, (3) contributions of authors, institutions, and countries, (4) keyword analysis to identify core themes, (5) collaboration networks among authors, and (6) quality of publications based on the CiteScore metric. Bibliometric visualization was performed using VOSviewer, which generated network visualizations for co-authorship, overlay visualizations for thematic evolution, and density visualizations for the intensity of keyword co-occurrence.

RESULTS AND DISCUSSION

Publication Trends and Document Distribution

The bibliometric analysis reveals that the number of publications on the digitalization of public services in villages during the period 2015–2025 remains limited, totaling only 14 documents. The distribution of publications per year (Figure 1) shows a fluctuating pattern with an overall upward tendency in the last five years. The first publications appeared in 2016 with two documents, while in 2015, 2017, and 2018 no relevant publications were identified based on the search keywords. This pattern indicates that the issue of digitalizing public services in villages had not yet received significant scholarly attention during the early years of the decade.

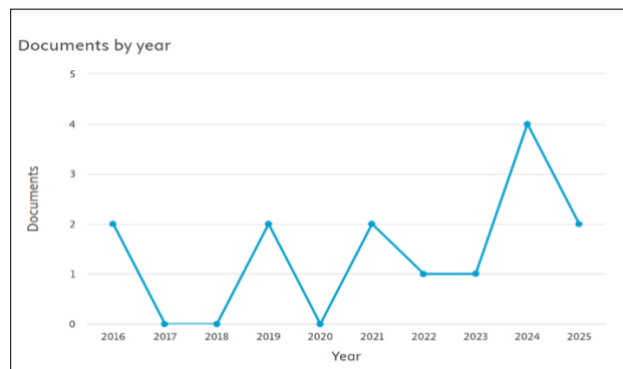


Figure 1. Line chart displaying the trend in the number of publications per year (2015-2025).

An increase reappeared in 2019 and 2021, with two documents each. However, no publications were identified in 2020, which may be attributed to the global research focus shifting toward issues related to the COVID-19 pandemic. Subsequently, publications stabilized with one document each in 2022 and 2023, before reaching their peak in 2024 with four documents. In 2025 (up to August), two publications had already been recorded, indicating that the topic is attracting growing attention from the academic community and is likely to continue increasing by the end of the year.

The absence of publications in 2015, 2017, 2018, and 2020 can be explained by the lack of research explicitly combining the keywords *digitalization/digitization*, *public service*, and

village/rural area in the Scopus database during those years. This indicates that research on digital villages remained sporadic and had not yet become a central focus in the international literature. Nevertheless, the upward trend from 2021 to 2025 reflects a shift in academic interest in line with the broader agenda of digital government transformation, *smart village* programs, and efforts to achieve the Sustainable Development Goals (SDGs), which emphasize digital inclusion in rural areas.

Distribution of Documents by Source of Publication

The distribution of documents by source indicates that the topic of digitalizing public services in villages has been published across a wide range of academic outlets. Of the 14 documents analyzed, the majority were published as journal articles (57.1%), while conference proceedings accounted for 35.7%, and the remaining 7.1% were review articles. The dominance of journal articles demonstrates that this issue has gained academic recognition within established scholarly channels, although the relatively high proportion of conference proceedings also suggests that the topic remains in a conceptual exploration stage.

Publications on this topic are spread across various international journals without a clear dominance of any single outlet. Some of these include *Government Information Quarterly*, *Future Internet*, *Cogent Business and Management*, *Public Policy and Administration*, and *Population Research and Policy Review*. In addition, reputable conference proceedings such as the *Conference on Human Factors in Computing Systems Proceedings* and *IFIP Advances in Information and Communication Technology* were also represented. Most of these journals report CiteScore values ranging between 2.0 and 4.5, reflecting a moderate to high level of credibility, while also demonstrating that this issue has attracted significant attention across diverse international academic forums.

The pattern of publication distribution indicates that research on the digitalization of public services in villages remains multidisciplinary, attracting attention from diverse fields such as public policy, information technology, environmental studies, and management. The absence of a *core journal* serving as a primary reference point suggests that this theme is still at the stage of an emerging topic. This condition underscores the importance of strengthening the research community so that the resulting literature can develop more consistently and systematically, thereby contributing to the establishment of a robust theoretical framework.

Table 1. Summary of Document Distribution by Source of Publication

| No | Publication Source (Journal/Proceeding) | Document Type | CiteScore |
|----|---|------------------|--------------|
| 1 | Government Information Quarterly | Journal Article | 9.2 |
| 2 | Future Internet | Journal Article | 4.4 |
| 3 | Cogent Business and Management | Journal Article | 3.1 |
| 4 | Public Policy and Administration | Journal Article | 2.6 |
| 5 | Population Research and Policy Review | Journal Article | 4.0 |
| 6 | International Journal of Environmental Sciences | Journal Article | 2.0 |
| 7 | Journal of Information Technology Teaching Cases | Journal Article | 2.3 |
| 8 | Rivista Di Studi Sulla Sostenibilita | Journal Article | 2.2 |
| 9 | IFIP Advances in Information and Communication Technology | Conference Paper | No CiteScore |

| | | | |
|----|--|------------------|--------------|
| 10 | Conference on Human Factors in Computing Systems Proceedings | Conference Paper | No CiteScore |
|----|--|------------------|--------------|

The table above illustrates that publications on the digitalization of public services in villages are distributed across a variety of academic outlets, including both journals and conference proceedings. Most articles were published in international journals with CiteScore values ranging between 2.0 and 4.5, indicating that the overall quality of publications falls within a moderate to high level. Two relatively prestigious journals are *Government Information Quarterly* (CiteScore 9.2) and *Future Internet* (CiteScore 4.4), demonstrating that part of the literature has been disseminated in highly reputable outlets specializing in e-government and digital transformation.

In addition, reputable conference proceedings such as the *Conference on Human Factors in Computing Systems Proceedings* and *IFIP Advances in Information and Communication Technology* have also included this theme, suggesting that the issue of digitalizing village public services remains actively presented in international academic forums. The even distribution of publications without the dominance of a single journal further reinforces the finding that this topic remains an *emerging field*. This condition has resulted in the existing literature being spread across multiple disciplines ranging from public policy and management to information technology and environmental studies without a single mainstream outlet serving as a consistent point of reference.

Contributions of Authors, Institutions, and Countries

The contribution of authors to research on the digitalization of public services in villages demonstrates a highly dispersed pattern. No single author consistently dominates the publications, as each article was authored by different individuals. Scholars such as Al-Adwan, Alonso-Carrillo, Barrasa-Rioja, Gurung, Hasnah, and Jung Bahadur Rana each contributed only one publication. This pattern indicates that the scholarly community in this field remains at an early *emerging stage* and has yet to form a group of *core authors* who continuously advance research on village digitalization.

The distribution by institution exhibits a similar characteristic. Each institution contributed only one publication, including Hasanuddin University and Universitas Negeri Malang from Indonesia, De Montfort University from the United Kingdom, Technische Universität Dresden from Germany, and Universidad de Santiago de Compostela from Spain. The involvement of such diverse international institutions suggests that the issue of digital village digitalization has global appeal, although the overall intensity of research remains relatively low.

The contribution by country shows India as the largest contributor, with a total of four documents, followed by Indonesia and Spain, each contributing two documents. Other countries such as Azerbaijan, France, Germany, Jordan, Nepal, the United Kingdom, and the United States contributed one publication each. This distribution indicates that attention to the digitalization of public services in villages is relatively widespread, with India's dominance reflecting the context of a developing country. Indonesia's involvement highlights the academic urgency aligned with its national policy on village digital transformation, while contributions from European countries underscore the cross-regional academic interest in this issue.

Table 2. Contributions by Author, Institution, and Country

| No | Aspect | Key Findings |
|----|-------------|---|
| 1 | Writer | All authors contribute only 1 document, no dominance |
| 2 | Institution | All institutions only contribute 1 document |
| 3 | Country | India dominates with 4 documents; Indonesia and Spain each with 2 documents; other countries each with 1 document |

The distribution of authors, institutions, and countries demonstrates that research on the digitalization of public services in villages remains fragmented. The absence of dominance by any particular author or institution indicates that a strong research center in this field has yet to be established. Nevertheless, the dominance of publications from India and the involvement of Indonesia show that developing countries are more active in studying village digitalization due to its relevance to rural development agendas. Meanwhile, the participation of European and American countries confirms that this topic has also gained recognition within global academic discourse, highlighting its potential to evolve into a cross-national field of study with broader coverage.

Keyword Analysis (Co-occurrence)

The keyword analysis was conducted on the 38 initial documents retrieved from the Scopus search before the final screening reduced the corpus to 14 documents for the main bibliometric analysis. Using all 38 documents at this stage was intended to provide a broader mapping of keywords and to capture thematic clusters that might otherwise be overlooked with a smaller sample size. The keyword data (author keywords and index keywords) were exported from Scopus in CSV format and processed using VOSviewer. The analysis employed the *co-occurrence* method with *all keywords* as the unit of analysis and applied the *full counting* approach. A minimum occurrence threshold of two was set, ensuring that only keywords appearing in at least two documents were included in the map.

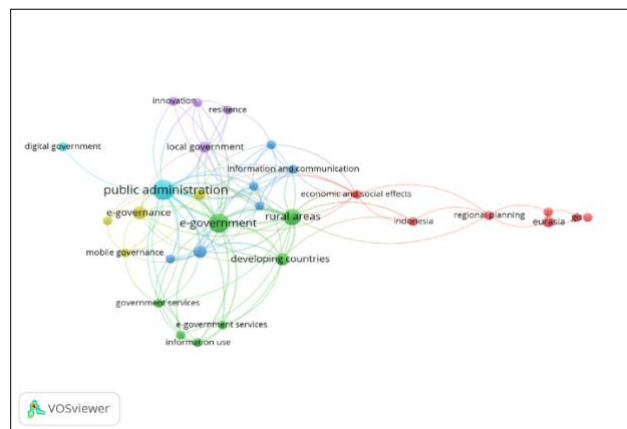


Figure 2. Keyword Co-occurrence Map of Public Service Digitalization Publications in Villages (2015–2025)

The mapping process generated a keyword network with several prominent nodes, such as *e-government*, *public administration*, *rural areas*, and *developing countries*. The size of each node in

the map reflects the frequency of keyword occurrences across the documents, while the thickness of the connecting lines indicates the strength of the relationships between keywords that co-occur within the same articles. Accordingly, large nodes such as *e-government* and *public administration* signify that these terms were used in more than three articles within the corpus of 38 documents.

The visualization results reveal the formation of five thematic clusters:

1. Green cluster (Governance and Digital Villages): consisting of the keywords *e-government*, *rural areas*, *developing countries*, *e-government services*, and *government services*. This cluster represents research that emphasizes the transformation of digital services in rural areas of developing countries.
2. Blue cluster (Public Administration and Local Government): consisting of the keywords *public administration*, *local government*, and *information and communication*. This theme focuses on village governance and the integration of ICT into public administration.
3. Red cluster (Regional and Geospatial Contexts): consisting of the keywords *Indonesia*, *regional planning*, *Eurasia*, and *GIS*. This cluster highlights research grounded in specific geographical contexts with a regional planning approach.
4. Purple cluster (Innovation and Resilience): consisting of the keywords *innovation* and *resilience*. This theme reflects research orientations that address institutional capacity and digital adaptation.
5. Yellow cluster (Varieties of Digital Services): consisting of the keywords *e-governance* and *mobile governance*. This cluster points to studies that discuss different platforms for digital service provision.

The connection between these mapping results and the research methods lies in the data extraction process. The methods section explained that the initial search yielded 38 documents, all of which were exported from Scopus for keyword analysis, producing the keyword network map illustrated in Figure 3. From these 38 documents, screening based on inclusion and exclusion criteria resulted in 14 documents that were analyzed further in the core bibliometric assessment (publication trends, source distribution, contributions of authors and institutions, publication quality, and collaboration networks). Accordingly, the VOSviewer diagram does not represent the number of papers but rather the keywords that appeared in those 38 initial papers. Larger nodes indicate keywords that were used repeatedly across multiple articles, while smaller nodes represent keywords that appeared only in two to three papers.

This analysis reinforces the finding that the literature on the digitalization of public services in villages revolves around three overarching dimensions: governance, digital inclusion and capacity-building, and regionally contextualized citizen participation. These dimensions demonstrate that the digital village agenda is not solely a technological issue but also encompasses social, institutional, and spatial aspects.

Collaboration Networks of Authors and Institutions

The collaboration network analysis employed a co-authorship approach on the set of 38 initial documents retrieved from Scopus (prior to the final screening to 14 documents for the core bibliometric analysis). Metadata on authors, affiliations, and countries were exported in CSV format and subsequently mapped in VOSviewer using *co-authorship* analysis with two units: authors and countries/organizations. The full counting method was applied with a minimum threshold of one

publication per node, given the relatively small size of the corpus. The size of each node represents the number of publications, the intensity (color density) in the *density visualization* reflects the concentration of collaboration, and the absence of connecting lines indicates weak or non-existent relationships among nodes.

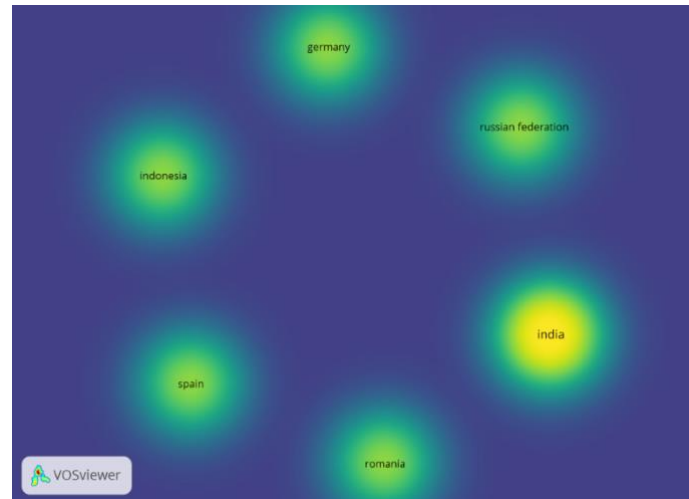


Figure 3. Density Map of Collaboration by Country

The density pattern highlights India as the center of the highest activity within the corpus (represented by the brightest area), followed by Indonesia, the Russian Federation, Germany, and Spain. This mapping is consistent with the country distribution results obtained from Scopus, where India contributed the largest number of documents, followed by Indonesia and Spain, while other countries accounted for only one document each. The relatively distant spacing among nodes and the absence of bridging links between countries reflect the limited level of cross-national collaboration on the topic of digitalizing public services in villages.

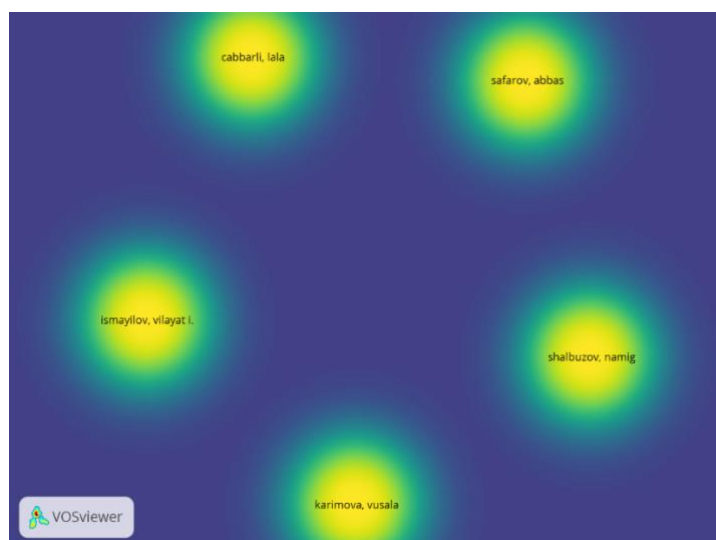


Figure 4. Density Map of Collaboration by Authors

The author nodes appear as separate peaks without overlapping density areas. Each author contributed only one document to the corpus, resulting in the absence of a group of *core authors*. This condition indicates a fragmented research community in which scholarly output is thinly spread across many authors, without any group demonstrating sustained productivity or forming extensive inter-institutional networks.

The discontinuous character of the network explains why the literature on this topic remains sporadic and lacks a clear “center of gravity.” The absence of bridging connections among countries and authors has the potential to hinder knowledge transfer and the standardization of concepts (for instance, the consistent use of terms such as *e-government services*, *mobile governance*, and *rural areas*). Strengthening international collaboration could enrich research design (e.g., cross-context comparisons of rural settings), broaden data coverage, and enhance the visibility of publications in reputable journals.

Synthesis of Results with Theory and Previous Research

The bibliometric analysis indicates that research on the digitalization of public services in villages remains relatively limited, fragmented, and lacking a strong core research community. This finding aligns with e-Government Theory (Layne & Lee, 2001; Malodia et al., 2021), which emphasizes that digital transformation progresses gradually from the provision of basic information to more interactive participation. The fact that publications have increased significantly only since 2021 suggests that research on digital villages is still at an early *emerging stage* and is gradually shifting toward more participatory implementation.

The keyword co-occurrence mapping underscores the importance of balancing technological, social, and policy aspects, as highlighted in Sociotechnical Systems Theory (Baxter & Sommerville, 2011). Clusters emphasizing *digital literacy*, *capacity building*, and *developing countries* demonstrate that human resource readiness and organizational support are critical factors. This reinforces prior arguments in the literature (Hidayati, 2022; Sá et al., 2021) that social and institutional capacity is just as important as technological infrastructure for the success of digital villages.

The finding that only a few developing countries (notably India and Indonesia) dominate the contributions highlights the relevance of Digital Divide Theory (van Dijk, 2006). Limited access and digital literacy continue to restrict broader participation by other countries in this body of literature. Large nodes such as *rural areas* and *developing countries* in the keyword network reaffirm that the rural digital divide remains a central issue, consistent with recent studies (Smit et al., 2024).

Keywords such as *citizen participation*, *mobile governance*, and *service delivery* point to a shift toward the paradigm of Citizen-Centric Government (Fountain, 2001; Osborne & Brown, 2011). This indicates that recent research goes beyond the technical aspects of digitalization, placing greater emphasis on citizen experience and public trust. Such a shift supports findings from contemporary studies (Pislaru et al., 2024; Sundberg & Holmström, 2024), which highlight the need for citizen-oriented service design to strengthen the legitimacy of digital government at the local level.

This bibliometric mapping provides important contributions both academically and practically. Academically, this study represents one of the first systematic efforts to map the global literature on the digitalization of village public services using bibliometric analysis. It demonstrates that although the literature is still dispersed and limited in volume, the thematic patterns are consistent with major theoretical frameworks, including e-Government, Sociotechnical Systems, Digital Divide, and Citizen-Centric Government. This suggests both continuity and a clear research gap, namely the absence of core author networks and the concentration of publications in only a few developing countries.

Practically, the findings highlight that strategies for developing digital villages must integrate three key dimensions: (1) infrastructure and technology, to bridge the digital divide; (2) social and institutional capacity, to ensure sustainable transformation; and (3) citizen participation, to realize governance that is truly citizen-centered. This mapping can serve as a foundation for researchers and policymakers to design more targeted, collaborative, and inclusive research agendas and interventions for the advancement of digital village governance.

CONCLUSION

This study conducted a bibliometric analysis of the literature on the digitalization of public services in villages using a two-stage data corpus. In the first stage, 38 documents retrieved from Scopus (2015-2025) were analyzed through VOSviewer to generate thematic maps and collaboration networks. In the second stage, these documents were screened down to 14 articles according to inclusion criteria and examined in greater depth to assess publication trends, source distribution, author contributions, journal quality, and collaboration patterns. Accordingly, the relationship between methods and results is clarified: the VOSviewer maps represent the broader thematic landscape of the entire corpus, while the core analysis provides a focused examination based on the most relevant articles.

The findings show that research on the digitalization of village public services remains limited in volume and fragmented, yet it has experienced notable growth in the last five years. Publications are distributed across various multidisciplinary journals, with most appearing in mid-tier outlets (Q2-Q3) and a few achieving placement in high-impact journals such as *Government Information Quarterly*. Contribution analysis highlights India and Indonesia as the most active developing countries due to the urgency of advancing digital village agendas, while author and institutional networks remain fragmented without the formation of core research groups.

Keyword analysis of the 38 initial documents underscores three major axes of the literature: (1) governance and public policy, framed by the concept of e-government; (2) capacity and digital inclusion, as explained by Sociotechnical Systems Theory; and (3) citizen participation, aligned with the paradigm of Citizen-Centric Government. The findings also reaffirm the relevance of Digital Divide Theory by showing that infrastructural limitations, digital literacy gaps, and disparities across countries remain dominant issues.

Academically, this study contributes by presenting the first systematic mapping of digital village literature from a global perspective, integrating bibliometric findings with major theoretical frameworks. Practically, the results emphasize the need for holistic strategies in digital village development through three agendas: (1) investment in infrastructure and technology to bridge the digital divide, (2) strengthening the social and institutional capacity of village officials, and (3) enhancing citizen participation through citizen-centered service design.

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