

Research.

Digital Government Transformation : A Bibliometric Analysis Review

Fandi Prasetya;^{*1} Izzato Millati;² Sandra Sukma Embuningtiyas;³ Delia Eca Fitria⁴

¹²³⁴ Airlangga University

¹ fandi.prasetya@feb.unair.ac.id ; ² izzato@feb.unair.ac.id ; ³ Sandra-sukma-e@feb.unair.ac.id ;

⁴ delia-eca-fitria-2023@feb.unair.ac.id

*Corresponding author

Received: November 9, 2025 Accepted: December 2, 2025 Published: December 31, 2025

To cite this article: **Prasetya, Fandi; Millati, Izzato; Embuningtiyas, Sandra S.; Fitria, Delia Eca.** (2025) *Digital Government Transformation: A Bibliometric Analysis Review*. *The Accounting Journal of BINANIAGA*, 10(2) 151-164. doi: [10.33062/ajb.v10i02.145](https://doi.org/10.33062/ajb.v10i02.145).

Abstract. Digital transformation in government has become a central focus of public service modernization. This study charts the evolution of research on digital transformation in government through bibliometric analysis. Data were retrieved from the Scopus database (2015–2025) using the keyword "digital transformation of government," resulting in 99 articles analyzed using VOS viewer software. The analysis identified 11 major clusters within the keyword network, with central themes including digital transformation, digital government, and technology adoption. Current trends indicate that the literature remains heavily focused on the practical implementation of technology in public services. Author collaborations are concentrated among a few dominant scholars, with China emerging as the most productive country and Government Information Quarterly as the most cited journal. Density and overlap visualizations highlight emerging topics such as green innovation performance and digital governance, while interest in institutional theory declines. These findings significantly contribute to understanding the intellectual landscape of digital transformation in government and offer strategic directions for future research, particularly in underexplored areas such as technology adoption, government data processing, and public innovation systems. This study also serves as an important reference for policy evaluation and curriculum development in public sector digital governance.

Keywords: Digital Government Transformation; E-Government, Bibliometric Visualization, Information Technology, Governance

INTRODUCTION

Background

When organizations adhere to the same industry standards, they will have similarities (Hinings et al., 2018). The impact of this condition is that there will be a need to innovate and create business excellence (Tate et al., 2018). Organizations that are able to adapt to rapid technological changes and in innovative ways produce a new organizational transformation phenomenon, namely digital transformation (Reis et al., 2018). Digital transformation is not only occurring in the private sector; the public sector has also transformed using digital technology (Faro et al., 2021; Xanthopoulou et al., 2024). The Internet of Things (IoT) is a key driver of this transformation (Ambia et al., 2025). The introduction of IoT in public sector organizations will impact informed decision-making and increase transparency (Malik, 2024; Zaman et al., 2024).

Technology is inherently neutral and objective when isolated from users, thus free from human perceptual bias. However, its nature becomes subjective and "enacted" when humans begin to interact with it (Mu et al., 2022). The existence and role of information and

Fandi Prasetya; Izzato Millati; Sandra Sukma Embuningtiyas; Delia Eca Fitria. *Digital Government Transformation : A Bibliometric Analysis Review*

communication technology as a primary driver of change in the government sector is increasingly crucial (Cordella & Paletti, 2019; Sarwar & Abbas, 2023). In the context of modernizing public services, the core of the concept of modernization is the digital transformation process (Terlizzi, 2021). Digital transformation is a key term that describes the changes and direction of digital government in the future (Mergel et al., 2019). This transformation changes the way governments interact with their citizens, especially in providing public services and managing their internal activities. In other words, digital transformation is one of the main drivers of public sector innovation (Al-qatamin, 2020; Attour et al., 2020). This process is inseparable from the use of digital technologies such as *cloud computing*, *artificial intelligence*, *big data analytics*, and so on as an effort to improve more transparent and efficient governance (Mergel et al., 2019).

Digital transformation in government goes beyond technical steps in technology adoption; it requires significant and fundamental changes in organizational culture, business processes, ways of thinking, and decision-making (Chen et al., 2023). The recent COVID-19 pandemic has become a major trigger, requiring governments worldwide to quickly adapt and transform in an effort to provide digital services to the public. Digital transformation is seen as a driver for addressing inefficiencies (Di Giulio & Vecchi, 2021) and promoting inclusive governance.

Digital transformation in the public sector is often discussed through a concept known as *e-government*. (Mergel et al., 2019). The main focus of *e-government* is discussing how the adoption of *Government as a Platform* (GaaP) can produce more efficient public services (Cordella & Paletti, 2019) and can be easily accessed by the public (Meijer & Bekkers, 2015). The idea of *Government as a Platform* (GaaP) describes a transformation in the pattern of coordination between all government agencies at the national and regional levels, from closed, structured, and hierarchical relationships to a more open and flexible form of coordination (Cordella & Paletti, 2019). The ongoing global changes in digital transformation in the government sector have reawakened interest among academics to not only understand the technology used, but also understand the various factors that support or hinder the process of digital transformation of government (Zuiderwijk et al., 2021).

Most research on digital government transformation still focuses on the technical aspects of technology implementation and the general concept of *e-government*. Research that conducts comprehensive bibliometric mapping, such as to understand the development of research trends, author networks, country distribution, and emerging topics in the last decade, is still limited. Given the rapid evolution of technology and the growing body of literature on digital government, bibliometric approaches offer a systematic and quantitative way to synthesize this growing field. By examining patterns in scholarly output, co-citation networks, thematic focus, and author collaborations, researchers can better understand how the field is evolving and where gaps remain. Therefore, this study uses bibliometric methods to map the intellectual landscape of digital government transformation research by analyzing metadata extracted from the Scopus database and visualizing these patterns using VOS Viewer.

This study seeks to provide a conceptual map of the intellectual landscape of government digital transformation while identifying research gaps *that* can be explored in the future. With this approach, this research not only enriches the academic literature but also offers practical implications for governments and policymakers in formulating more inclusive, adaptive, and sustainable digital transformation strategies.

Formulation of the problem

Based on this background, the problem formulation in this research is:

1. How has the research landscape on digital transformation of government evolved over the past decade (2015–2025)?
2. What are the key topics and thematic trends emerging in the literature on digital transformation in the public sector?
3. Who are the authors and countries that have most actively contributed to this field?
4. What are the most cited journals?

5. What topics are still rarely researched and could become research opportunities in the future?

LITERATURE REVIEW

Digital Transformation

Digital transformation is a process designed to bring improvements to an entity through major changes in its core characteristics by utilizing the integration of information, computing, communication, and connectivity technologies (Vial, 2019). In the context of the public sector, digital transformation encompasses not only technological aspects, but also changes in organizational culture, business processes, and stakeholder engagement (Mergel et al., 2019). This transformation implies the redesign of public services to be more responsive and data-driven. For most governments, adopting technology is the first step because the scope of changes related to technology use is not yet clear (Bharadwaj et al., 2013). Commonly used digital technologies are social networking technologies, mobile technologies, (big) data analytics, cloud computing, and the Internet of Things (IoT) (Gong et al., 2020).

Elements of Digital Transformation in the Public Sector

Mergel et al., (2019) in their article provide information on the elements of digital transformation in the public sector, including the following:

- 1) Using Technology to Transform Service Delivery

The use of technology in the context of digital transformation plays a crucial role in transforming the way services are provided to the public. Technology not only supports efficiency but also plays a role in opening up new spaces for interaction between service providers and users (Mart et al., 2023). In the public sector, digital transformation is more often studied through an e-government approach that focuses on increasing the efficiency and accessibility of services to citizens (Mergel et al., 2019). E-government is the result of government adoption that enables the delivery of public services in a more efficient, open, and responsive manner through the use of digital platforms (Ali et al., 2021; Cordella & Paletti, 2019; Meijer & Bekkers, 2015)

- 2) The application of technology as a means to reform the internal culture of organizations and build more adaptive relationships with citizens.

Digital transformation is largely viewed as a cultural shift that must occur within an organization (Mergel et al., 2019). Digital transformation is not only about the use of new technologies but also about how we think, operate, and make decisions. With this transformation, organizations must reform their work patterns to adapt sustainably to an increasingly complex and dynamic environment. The use of digital technology or devices within organizations, especially in the public sector, allows for changes in communication processes and the delivery of services to the public. Changes in the way citizens interact with stakeholders make them more active and enable citizen participation through specific platforms as communication media (Luna-Reyes, 2017)

- 3) Value generated through the transformation process

The presence of information and communication technology in the transformation process makes various parties involved in value creation (Cordella & Paletti, 2018). This occurs when information and communication technology is used in an effort to increase efficiency within the organization by strengthening standardization and supporting the automation of practices and procedures (Cordella & Paletti, 2018). In the public sector, digital transformation can be observed in several forms such as reducing paper use and replacing it with the use of technology such as filling out forms online, downloading information online and providing services online.

RESEARCH METHODOLOGY

This research is a bibliometric analysis using the *Vos Viewer tool*. The first step was to conduct a literature search in the Scopus database, obtained from <https://www.scopus.com/>. The Scopus database was chosen because it provides a more

detailed analysis than *Web of Science*. (Hariningsih et al., 2024) and articles in the Scopus database are guaranteed quality (Paul et al., 2021). The search was conducted online on May 2, 2025. In the database, the search was conducted using several criteria aimed at narrowing the scope, including:

- Scopus articles published during the last 10 years, namely 2015 – 2025. The search period was determined over 10 years to capture the evolution of themes, publication volumes, author collaborations, and the most recent topics;
- The keywords entered in the search within column for article title, abstract, and keywords are "digital government transformation";
- document type in the form of an article with the publication stage being final
- the type of source is a journal

After finding articles that meet the criteria, the search results are exported and saved as a CSV. The second step is to process the information obtained and saved in CSV format into *Vos Viewer*. *Vos Viewer* has the advantage of being able to provide compelling visual displays, analysis, and investigations (van Eck & Waltman, 2010) and can group keywords and co-occurring terms, making it possible to identify thematic areas or topics within a specific research field (Martínez-López et al., 2020)

RESULTS AND DISCUSSION

Bibliometric Analysis Of The Keywords

The topic of *digital government transformation* in the Scopus database published over the past 10 years, namely 2015-2025, and in accordance with the criteria specified in the research methodology section, 99 documents were obtained. The documents were saved in CSV format by selecting all the articles and then exporting them. Before the export process was carried out, in the column of what information to export, the researcher selected all information contained in *citation information*, *bibliographical information*, *abstract* and *keywords*, and *included references*. After the data was saved in CSV format, the data was then input into VOSviewer for analysis. For the *type of analysis*, the researcher chose *Co-occurrence* while for the unit of analysis was all keywords. From this step, 580 were obtained, then for the *minimum number of occurrences of a keyword* was 2, resulting in 83 keywords that met and were then selected. VOS Viewer groups keywords that frequently appear together in the same document or publication (Mishra et al., 2024). The results of this processing yielded 11 clusters divided into several colors. The following is a cluster table.

Table 1. Cluster Table

No	Cluster Color	Number of Items
1	Red	15
2	Green	14
3	Blue	12
4	Yellow	10
5	Purple	9
6	Light blue	7
7	Orange	6
8	Chocolate	3
9	Violet	3
10	Light brown	3
11	Light green	1
Total		11

Source: Data processed by the author

The eleven clusters are presented in Figure 1 below:

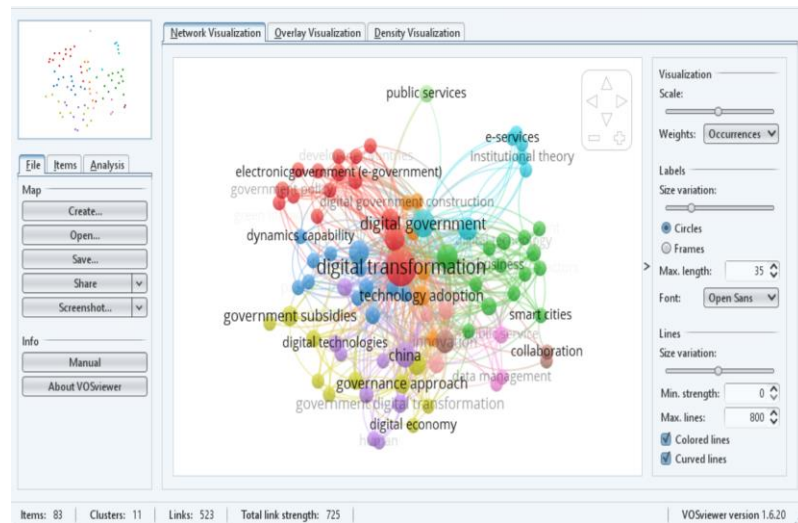


Figure 1 . Network Visualization of Keywords

Figure 1 is a network map that visualizes the overall picture of research topics, what experts are discussing, which topics are most important, and how these topics are interconnected. To read it, there are a few simple rules. Each circle (or "node") represents a keyword or research topic. A larger circle indicates how frequently that topic appears in the 99 articles analyzed. A line connecting two circles indicates that the two topics are frequently discussed together in a single article and have a strong thematic connection. Finally, different colors indicate clusters. Keywords of the same color mean they form a group of topics that are closely related to each other. In this network map, VOSviewer found 11 distinct topic clusters. Within these, there is a large circle located in the center. These three circles represent *digital transformation*, *digital government*, and *technology adoption*. Their large size and central position indicate that these three topics are central to the entire research field. *Digital transformation* is the central concept, the idea of a major shift in the use of technology. *Digital government* is the manifestation or result of a government that has implemented its processes digitally. *Technology adoption* is the process, namely how the government begins to adopt or use new technology. The excessive focus on these three topics indicates that current research is too preoccupied with the technical aspects of transformation. Thus, this overfocus indirectly ignores other, far more complex dimensions that often determine the failure or success of technology implementation. These aspects include social, institutional, and other aspects. However, although the core of the entire article focuses solely on the technical aspects of transformation, the 11 different color clusters indicate that research is beginning to move towards several more specific research areas.

The red cluster is the largest cluster, consisting of 15 topic items. This cluster encompasses *digital transformation* itself, but also links it to *e-government*, *government policy*, and *developing countries*. This indicates that a major research stream seeks to understand how policy can guide transformation, particularly the challenges faced in developing countries. Next, the green cluster contains 14 topics centered around "*digital government*." It connects with practical topics such as *smart cities* and *business*. This cluster looks at how digital government is built in real contexts, such as in cities, and how the public and private sectors work together. The blue cluster consists of 12 topics and is located in the top right. This cluster connects *e-services* with highly theoretical terms such as *institutional theory* and *technology enactment*. In this case, researchers not only look at what the technology is, but examine why people decide to adopt the technology and how

the rules or old culture within the organization ultimately shape the way the technology is used. The fourth largest cluster, the yellow cluster, consists of 10 topics and is located at the bottom of the map. This cluster connects *governance approaches* with *the digital economy*, *innovation*, and *government subsidies*.

Bibliometric Analysis Network Map Of Authorship

Network Map of Authorship Analysis is a form of network visualization analysis that maps the collaborative network between authors to identify key researchers in the field of digital transformation of government research in a publication database obtained from a database. Based on *the Network Map of Authorship analysis*, there are 305 authors divided into 89 clusters, with each cluster containing a group of authors. When visualized, it will look like this :

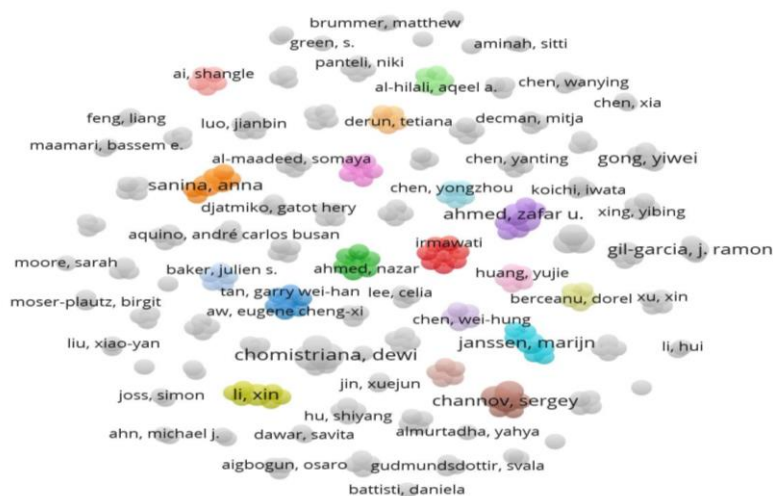


Figure 2. Analysis Network Map of Authorship

Figure 2 does not show a large, interconnected collaborative network. The pattern in the image above indicates that the field of digital government transformation in the last 10 years remains fragmented. A *network map of authorship* is a visualization of the collaborative network between authors in a publication database obtained from a database, in this case, Scopus. Of the 89 clusters, cluster 1, in red, is the cluster with the most authors, with 8 authors, compared to the other 88 clusters. The following is a *map of the red cluster network writing*.

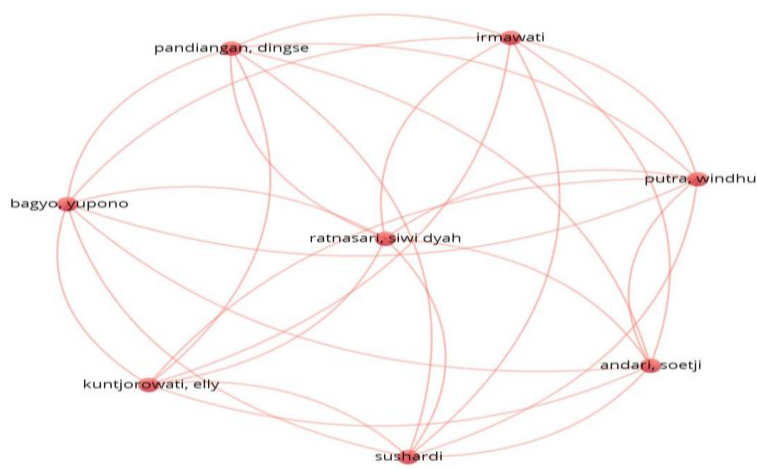


Figure 3. Map of the red cluster network writing

Figure 3 shows that Ratnasari is the central author in the red cluster. This indicates that Ratnasari is in the middle position, having *co-authorship relationships* with most of the other authors, making her the most connected author in the network. Other authors surround Ratnasari and are connected to one another. This suggests the possibility of collaboration within a research group.

This fact demonstrates that in the field of digital government transformation, academic collaboration is still heavily influenced by highly productive core researchers with extensive access to global research networks. This pattern is certainly beneficial in accelerating the exchange of ideas within specific circles. However, it also carries the risk of concentrating discourse on relatively homogeneous perspectives.

Bibliometric Analysis Network Map Of Countries

Based on the network map analysis of *countries* presented in Figure 3, 37 countries are the most active in conducting research on digital government transformation. China is the country that has contributed the most to *digital government transformation research*.



Figure 4. Analysis Network Map of Countries

The finding that China tops the list in terms of publication volume underscores the country's crucial role in advancing the government's digital transformation agenda. This dominance not only reflects academic capacity but also aligns with the Chinese government's strategic policy direction, which places digital transformation as a key pillar of national development. However, disparities in contributions remain between countries, with the majority of research dominated by developed countries and large economies. Developing countries, particularly in Southeast Asia, still face relatively minimal contributions, despite the complex and unique challenges of digital transformation in this region. Therefore, future cross-national research is needed that can uncover differences in the social, cultural, political, and economic contexts involved in implementing digital transformation in government.

Bibliometric Analysis Network Map Of cited journals

Citation analysis was performed using VOSviewer with *the type of analysis* being *citation* and the unit of analysis being *sources*. The minimum number of documents in a source is one and the minimum number of citations in a source is 0. Of the 72 sources, 50 met the criteria. The distribution of the most cited journal source is *Government information quarterly* as shown in Figure 5 below :



Figure 5. Analysis Network map of most cited journals

Government Information Quarterly can be considered a primary reference in academic discourse on digital government. The dominance of this journal indicates a concentration of literature within a specific academic forum. However, the presence of other journals that are increasingly being cited frequently indicates a diversification of publication spaces, potentially broadening the theoretical and methodological perspectives of this study.

Density Visualization Based on Text Data

In this visualization, each item is represented by its label, and the density of items in various areas of the network is indicated by a color gradient (Mishra et al., 2024; Putri et al., 2023). Density visualization makes it easier for researchers to quickly see frequently used research areas. These areas are indicated by bright colors. Areas with a faint brightness level indicate items that are still rarely used in research. The following is a *Density Visualization Based on Text Data*

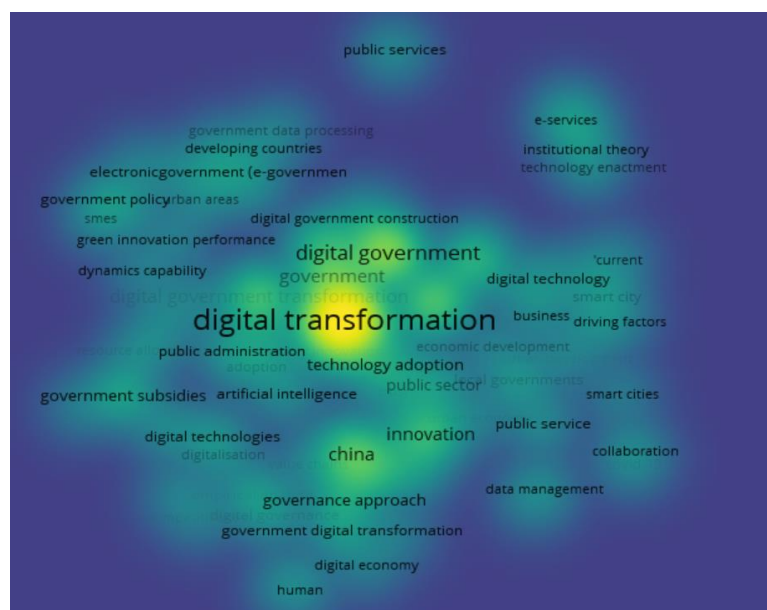


Figure 6. Density Visualization Based on Text Data

Figure 6 shows that *digital transformation* is a topic with a high density, making it the most frequently discussed topic in government digital transformation research. This term is often confused with "*digital government*," "*government*," and "*public administration*," which are closely positioned. This proximity indicates that current dominant research no longer views technology in isolation, but rather as something fundamentally present in government governance. Meanwhile, the term e-government lies slightly outside the main core. In the upper left quadrant (green area), there are several closely related terms, such as *electronic government (e-government)*, which is closely related to *government data processing*, *government policy*, and *developing countries*. This suggests the potential for research examining e-government in the context of developing countries, where issues such as policy, data infrastructure, and capacity are crucial. The term "*green innovation performance*" also appears in this quadrant, indicating interest in how digitalization can impact environmental or sustainability outcomes. In the upper right quadrant, there is a cluster that appears to focus on theoretical foundations. The term "*e-services*" is closely related to *institutional theory* and *technology enactment*. This cluster uses *institutional theory* to explain *why* and *how* public organizations adopt, adapt, and "enact" new technologies to provide e-services. In this section of the visualization, we see the terms "*governance approach*," "*government digital transformation*," and "*digital technologies*." gathered here. This indicates the research focus on broader shifts in governance models enabled by digital technologies. The term "China" in the middle of the cluster implies that a large amount of literature in this field focuses on or originates from China.

Overlay Visualization

This visualization displays research trends with a specific topic appearing significantly and provides information on the development of the research topic over time. In the VOS Viewer, research topic trends are indicated using color elements. The darker (dark blue) a circle is, the older the topic is, while the brighter (yellow) a circle indicates a new topic. Furthermore, the larger the circle, the more frequently the word appears in the analyzed document. The following is an *overlay visualization* of the topic of *digital government transformation*.

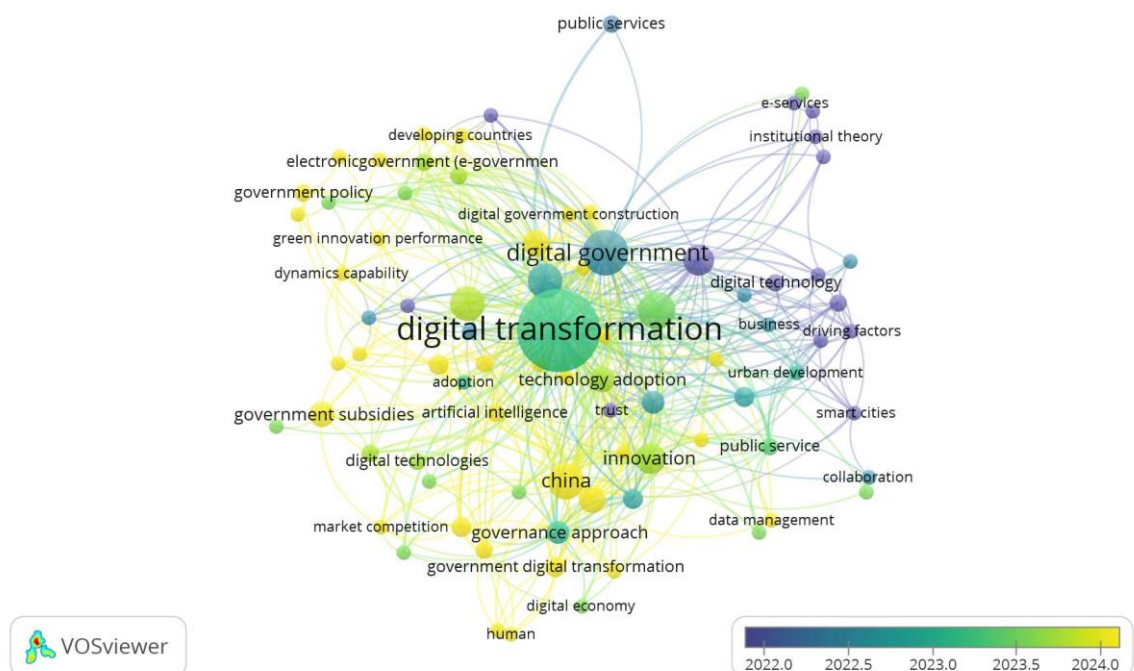


Figure 7. Overlay Visualization

Fandi Prasetya; Izzato Millati; Sandra Sukma Embuningtiyas; Delia Eca Fitria. *Digital Government Transformation : A Bibliometric Analysis Review*

The overlay visualization depicted in Figure 7 is dominated by the two largest nodes, namely *digital transformation* and *digital government*. Significantly, these two terms are colored in bluish green, and fall in the middle of the analyzed timeframe (approximately 2022.5 to 2023.0). This indicates that *digital transformation* and *digital government* are not new concepts but rather dominant and central to the entire research field during this period. *Digital transformation* in particular serves as an intellectual center of gravity, connecting nearly every other theme on the map, confirming its role as a central concept. From this central core, we can trace the foundational or earlier themes of this period. These terms are colored in purple and dark blue (approximately 2022.0 to 2022.5). In the upper right quadrant, we see a clear cluster between *e-services*, *institutional theory*, and *technology enactment*. This indicates that early research in this period focused heavily on the adoption of individual digital services (e-services) and sought to explain them through theoretical lenses such as *institutional theory*.

Meanwhile, the newest topics are identified by nodes colored light green, especially yellow (around 2023.5 to 2024.0). This evolution is moving in several distinct but interrelated directions. First, there's a shift toward specific, high-impact technologies: the term *artificial intelligence* or AI is a bright yellow node, indicating that AI is a significant new driver in digital transformation research. Second, the research focus has shifted significantly from *technical implementation* to *broader policy and economic implications*. This is evident in the emergence of a large yellow cluster at the bottom and left, featuring terms such as *government policy*, *government subsidies*, *digital economy*, and *market competition*. This implies that researchers are now focusing on how governments can strategically direct, fund, and regulate the broader digital economy resulting from this transformation. Recent research trends reveal a focus on new performance outcomes and specific geographic contexts. The emergence of the term "*green innovation performance*" shows a new stream of research linking digitalization to sustainability and environmental goals. The most prominent node for this new topic is the China node, which is bright yellow and is connected to *the governance approach* and *government digital transformation*. Finally, more abstract and human-oriented terms such as *human and dynamics capability* which is also colored yellow, indicates a new shift towards understanding the human resource and agility aspects of organizations. Thus, this overlay map provides insights that illustrate the new directions of research fields such as AI, digital economy, green innovation and focuses on human and organizational elements.

CONCLUSION AND SUGGESTIONS

Digital transformation, *digital government*, and *technology adoption* are the most frequently mentioned and most connected topics, demonstrating that researchers' primary focus to date tends to focus on the application of technology as a primary instrument for driving change. This trend has led to research focusing largely on how technology is implemented and how it can improve efficiency and effectiveness in providing public services. By focusing solely on technical aspects, researchers have indirectly overlooked other aspects that determine the success or failure of a transformation.

The density visualization analysis reveals that *digital transformation* is the area with the highest density, indicated by bright yellow. This term is surrounded by *digital government*, *government*, and *public administration*. This proximity indicates a significant paradigm shift, as technology is no longer viewed as merely an external tool but has become an integral part of modern governance processes. On the other hand, the term *e-government* is located slightly outside the main core, indicating that it is evolving into a broader concept. The cluster in the upper left quadrant illustrates the relationship between *electronic government* and *government data processing*, *government policy*, and *developing countries*. This highlights the research stream that examines the challenges of e-government implementation in the context of developing countries, where policy and data infrastructure issues are crucial. Elsewhere, the relationship between *e-services* and *institutional theory* and *technology enactment is evident*, demonstrating academic efforts to build theoretical frameworks to explain *why* and *how* public organizations adopt new technologies. Furthermore, China's emergence amidst the cluster containing *governance approaches is notable* and *digital technologies* suggests that digital governance models,

particularly those from China, have become the subject of significant research. The analysis of *authorship* collaborations presents interesting findings. Numerous smaller research groups are evident. However, within this fragmented field, strong collaborations exist. The red cluster is the largest, with eight authors. This indicates the presence of a central researcher, "Ratnasari," who acts as the primary link in the network.

Based on the results of the country and journal analysis, it was concluded that China is the country most actively contributing to research on digital government transformation. *Government Information Quarterly* is the primary reference journal, as evidenced by its position as the most cited source. Meanwhile, for trend analysis, there are several research areas that can be re-explored, such as *technology enactment*, *government data processing*, and *public innovation systems*. Furthermore, it is recommended that old topics such as *e-services* and *institutional theory* be shifted to emerging research topics for exploration, such as *artificial intelligence*, *the digital economy*, *government subsidies*, *green innovation performance*, and *human and dynamic capability*. Cross-national research is also needed. This aims to provide information on how existing differences, such as cultural, social, political, and economic differences in each country, can influence the implementation of digital government transformation.

REFERENCES

- Al-qatamin, A. A. (2020). *A Study of the Effect of Information Technology Governance on Quality of Information Technology Services: The Case of Jordan Customs Department*. 9(2), 41–55.
- Ali, A., Iqbal, S., Haider, S. A., Tehseen, S., Anwar, B., & Sohail, M. (2021). *Does Governance in Information Technology Matter When It Comes to Organizational Performance in Pakistani Public Sector Organizations? Mediating Effect of Innovation*. 5. <https://doi.org/10.1177/21582440211016557>
- Ambia, H., Sani, A., & Jaafar, N. I. (2025). *Exploring the impact of IoT on governance and public service transformation: evidence from Malaysia's public sector*. December. <https://doi.org/10.1108/SASBE-10-2024-0453>
- Attour, A., Chaupain-guillot, S., & Chaupain-guillot, S. (2020). Digital innovations in public administrations: Technological or policy innovation diffusion? Digital Innovations in Public Administrations: Technological or Policy Innovation Diffusion? 1. *Journal of Innovation Economics & Management*, 1(31), 195–219. <https://doi.org/10.3917/jie.pr1.0061>
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly: Management Information Systems*, 37(2), 471–482. <https://doi.org/10.25300/MISQ/2013/37:2.3>
- Chen, Y.-C., Ahn, M. J., & Wang, Y.-F. (2023). Artificial intelligence and public values: Value impacts and governance in the public sector. *Sustainability*, 15(6), 4796. <https://doi.org/10.3390/su15064796>
- Cordella, A., & Paletti, A. (2018). ICTs and value creation in public sector: Manufacturing logic vs service logic. *Information Polity*, 23(2), 125–141. <https://doi.org/10.3233/IP-170061>
- Cordella, A., & Paletti, A. (2019). Government as a platform, orchestration, and public value creation: The Italian case. *Government Information Quarterly*, 36(4), 101409. <https://doi.org/10.1016/j.giq.2019.101409>
- Di Giulio, Marco, & Vecchi, Giancarlo. (2021). Implementing digitalization in the public sector. Technologies, agency, and governance. *Public Policy and Administration*, 38(2), 133–158. <https://doi.org/10.1177/09520767211023283>
- Faro, B., Abedin, B., & Cetindamar, D. (2021). Hybrid organizational forms in public sector's digital transformation: a technology enactment approach. *Journal of Enterprise*
- Fandi Prasetya; Izzato Millati; Sandra Sukma Embuningtiyas; Delia Eca Fitria.** *Digital Government Transformation : A Bibliometric Analysis Review*

- Information Management*, 35(6), 1742–1763. <https://doi.org/10.1108/JEIM-03-2021-0126>
- Gong, Y., Yang, J., & Shi, X. (2020). Towards a comprehensive understanding of digital transformation in government: Analysis of flexibility and enterprise architecture. *Government Information Quarterly*, 37(3), 101487. <https://doi.org/10.1016/j.giq.2020.101487>
- Hariningsih, E., Haryanto, B., Wahyudi, L., & Sugiarto, C. (2024). Ten years of evolving traditional versus non-traditional celebrity endorser study: review and synthesis. In *Management Review Quarterly* (Issue 0123456789). Springer International Publishing. <https://doi.org/10.1007/s11301-024-00425-0>
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). *Information and Organization Digital innovation and transformation: An institutional perspective*. 28(March), 52–61. <https://doi.org/10.1016/j.infoandorg.2018.02.004>
- Luna-Reyes, L. F. (2017). Opportunities and challenges for digital governance in a world of digital participation. *Information Polity*, 22(2–3), 197–205. <https://doi.org/10.3233/IP-170408>
- Malik, S. (2024). Data-Driven Decision-Making: Leveraging the IoT for Real-Time Sustainability in Organizational Behavior. *Sustainability*, 16(15), 1–18.
- Mart, R., Ochoa-brust, A., Rivera, S., Vanessa, G. F., Ostos, R., Brito, H., F, A., & Mena, L. J. (2023). Role of Digital Transformation for Achieving Sustainability: Mediated Role of Stakeholders, Key Capabilities, and Technology. *Sustainability*.
- Martínez-López, F. J., Merigó, J. M., Gázquez-Abad, J. C., & Ruiz-Real, J. L. (2020). Industrial marketing management: Bibliometric overview since its foundation. *Industrial Marketing Management*, 84(July 2019), 19–38. <https://doi.org/10.1016/j.indmarman.2019.07.014>
- Meijer, A., & Bekkers, V. (2015). A metatheory of e-government: Creating some order in a fragmented research field. *Government Information Quarterly*, 32(3), 237–245. <https://doi.org/10.1016/j.giq.2015.04.006>
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. <https://doi.org/10.1016/j.giq.2019.06.002>
- Mishra, N., Bharti, T., Tiwari, A. K., & Pfajfar, G. (2024). Public and scholarly interest in social robots: An investigation through Google Trends, bibliometric analysis, and systematic literature review. *Technological Forecasting and Social Change*, 206, 1–23. <https://doi.org/10.1016/j.techfore.2024.123578>
- Mu, R., Haershan, M., & Wu, P. (2022). Technological Forecasting & Social Change What organizational conditions, in combination, drive technology enactment in government-led smart city projects? *Technological Forecasting & Social Change*, 174, 121220. <https://doi.org/10.1016/j.techfore.2021.121220>
- Paul, J., Lim, W. M., O’Cass, A., Hao, A. W., & Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, April 2022. <https://doi.org/10.1111/ijcs.12695>
- Putri, S. A., Winoto, Y., & Rohanda, R. (2023). Pemetaan penelitian information retrieval system menggunakan VOSviewer. *Informatio: Journal of Library and Information Science*, 3(2), 93. <https://doi.org/10.24198/inf.v3i2.46646>
- Reis, J., Amorim, M., Melão, N., & Matos, P. (2018). *Digital Transformation: A Literature Review and Guidelines for Future Research BT - Trends and Advances in Information Systems and Technologies* (Á. Rocha, H. Adeli, L. P. Reis, & S. Costanzo (eds.); pp. 411–421). Springer International Publishing.

- Sarwar, M. I., & Abbas, Q. (2023). Digital Transformation of Public Sector Governance With IT Service Management — A Pilot Study. *IEEE Access*, 11(January), 6490–6512. <https://doi.org/10.1109/ACCESS.2023.3237550>
- Tate, M., Bongiovanni, I., Kowalkiewicz, M., & Townson, P. (2018). Managing the “Fuzzy front end” of open digital service innovation in the public sector: A methodology. *International Journal of Information Management*, 39, 186–198. <https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2017.11.008>
- Terlizzi, A. (2021). The digitalization of the public sector: A systematic literature review. *Rivista Italiana Di Politiche Pubbliche*, 131(1), 5–38. <https://doi.org/10.1483/100372>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), 118–144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- Xanthopoulou, P., Antoniadis, I., & Saprikis, V. (2024). Digital reforms in the Greek public sector: using block chain technologies and social media for open governance. *International Review on Public and Nonprofit Marketing*, 21(3), 757–787. <https://doi.org/10.1007/s12208-024-00402-z>
- Zaman, M., Puryear, N., Abdelwahed, S., & Zohrabi, N. (2024). *smart cities A Review of IoT-Based Smart City Development and Management*. 39, 1462–1501.
- Zuiderwijk, A., Chen, Y. C., & Salem, F. (2021). Implications of the use of artificial intelligence in public governance: A systematic literature review and a research agenda. *Government Information Quarterly*, 38(3), 101577. <https://doi.org/10.1016/j.giq.2021.101577>

This pages intentionally be emptied