

# DIGITAL TRANSFORMATION AND PUBLIC VALUE CREATION IN PUBLIC ADMINISTRATION: A SYSTEMATIC LITERATURE REVIEW ON CO-PRODUCTION-BASED GOVERNANCE

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## ABSTRACT

Digital transformation in public administration has become a global imperative to enhance efficiency, transparency, and citizen participation in governance. This study explores how digital transformation and co-production contribute to multidimensional public value creation through a systematic literature review of 35 peer-reviewed articles published between 2020 and 2024. Following the PRISMA 2020 protocol, the research systematically identified, screened, and analyzed relevant studies indexed in Scopus, Web of Science, and ScienceDirect. The analysis, visualized using VOSviewer version 1.6.20, identified four primary public value dimensions: administrative efficiency, citizen engagement, social equity, and economic optimization. Co-production emerges as a crucial mechanism linking digital transformation to these outcomes, though institutional capacity, digital literacy, and governance culture strongly moderate the results. The study highlights that sustainable digital transformation in public administration requires not only technological innovation but also active citizen participation and adaptive governance structures. Theoretically, this work reinforces the Public Value Management framework, while practically, it offers insights for policymakers to design inclusive, transparent, and citizen-centered digital service reforms.

**Keywords:** Digital Transformation, Co-Production, Public Value, Public Administration, Citizen Engagement, Digital Public Services, Systematic Literature Review

## INTRODUCTION

The accelerating digital transformation across public sectors worldwide represents one of the most significant shifts in modern governance. Governments increasingly rely on digital technologies to improve service efficiency, transparency, and citizen participation. The emergence of the Fourth Industrial Revolution (Industry 4.0) and the growing adoption of artificial intelligence (AI), big data analytics, and open government platforms have fundamentally changed the relationship between the state and its citizens. According to the United Nations E-Government Survey (2022), countries with integrated and citizen centered digital governance such as Denmark, South Korea, and Estonia consistently rank among the highest in e-government development. These governments demonstrate that digitalization, when strategically managed, can generate substantial public value by enhancing administrative efficiency, promoting transparency, and deepening civic engagement.

In Indonesia, the national digital transformation agenda is operationalized through the Electronic-Based Government System (Sistem Pemerintahan Berbasis Elektronik / SPBE). This policy aims to integrate public services, streamline bureaucratic processes, and foster inter-agency collaboration. However, despite significant progress, the country continues to face challenges, including low interoperability among government systems, uneven digital literacy levels, and persistent digital

divides between urban and rural areas (Nugroho et al., 2021). These structural constraints underscore the need for adaptive governance frameworks capable of translating technological adoption into tangible public value.

Globally, scholars have identified digital transformation as both an enabler and a challenge for public administration. Early digital governance models, often associated with New Public Management (NPM), emphasized efficiency and performance measurement through market-oriented reforms (Hood & Margetts, 2007). In contrast, more recent approaches, including Public Value Management (PVM) and New Public Governance (NPG), highlight collaboration, trust, and legitimacy as central pillars of digital governance (Osborne, 2010; Benington, 2020). Within this paradigm, co-production the joint design, delivery, and evaluation of public services by citizens and government actors has emerged as a key mechanism for creating and sustaining public value (Brandsen, Steen, & Verschuere, 2018).

Co-production-based digital governance shifts the focus from “service delivery” to “service co-creation.” Citizens are not merely recipients but active partners who contribute ideas, feedback, and resources to improve public services. For instance, digital platforms such as participatory budgeting tools, online consultation forums, and crowdsourcing applications enable citizens to shape policies directly. Studies conducted in Europe (Scupola & Mergel, 2022) and North America (Engen, 2019) demonstrate that digital co-production fosters greater responsiveness, transparency, and innovation in public administration. However, such success is often context-dependent, requiring supportive institutional structures, digital readiness, and a participatory culture.

In developing countries, including Indonesia, co-production within digital transformation remains underexplored. While e-government initiatives have proliferated, the integration of citizen participation into digital policy design and implementation is still limited. Barriers such as hierarchical bureaucratic culture, uneven infrastructure, and low digital inclusion hinder the realization of full co-production potential (Susanto, 2023). Consequently, there is a pressing need to examine how co-production interacts with digital transformation to create multidimensional public value spanning efficiency, equity, engagement, and economic optimization.

From a theoretical standpoint, this study builds upon the Public Value Management (PVM) framework, which posits that governments create value not only through efficiency but also by fostering legitimacy, trust, and social well-being (Moore, 1995). PVM argues that digital transformation should be evaluated based on its capacity to enhance these broader dimensions rather than purely on performance metrics. The intersection of digital governance and co-production thus provides fertile ground for rethinking how technology-driven reforms can lead to meaningful, citizen-oriented public outcomes.

Despite increasing attention in academic and policy discourse, the literature on digital transformation and public value creation remains fragmented. Several studies have explored either digital transformation’s technological implications or co-production’s participatory aspects, but few have systematically analyzed how these two interact to produce measurable public value outcomes. Moreover, there is a geographical imbalance in existing research most studies originate from high-income economies, while empirical evidence from emerging countries remains scarce. This knowledge gap limits the generalizability of theoretical frameworks and risks marginalizing diverse governance contexts in the global South.

This study addresses these gaps through a systematic literature review (SLR) of 35 peer-reviewed international journal articles published between 2020 and 2024. Using the PRISMA 2020 protocol (Page et al., 2021) and bibliometric analysis via VOSviewer 1.6.20, this research identifies dominant themes, conceptual linkages, and empirical trends within the field. The analysis aims to answer the following research questions:

1. How does digital transformation contribute to public value creation in public administration?
2. What role does co-production play in mediating or enhancing these outcomes?
3. What contextual factors enable or constrain digital transformation's effectiveness in creating public value?

By systematically synthesizing the latest scholarship, this study contributes to both theory and practice. Theoretically, it advances the discourse on digital-era governance by integrating co-production into the conceptual understanding of public value management. Practically, it provides actionable insights for policymakers and public managers seeking to implement inclusive and adaptive digital transformation strategies. Ultimately, the study underscores that the success of digital governance depends not merely on technological sophistication but on institutional reform, citizen empowerment, and collaborative governance mechanisms.

## **MATERIALS AND METHODS**

### **Research Design**

This study adopts a Systematic Literature Review (SLR) approach combined with bibliometric analysis to examine how digital transformation and co-production contribute to public value creation in public administration. The SLR method is particularly suitable for synthesizing diverse research findings, identifying conceptual linkages, and revealing knowledge gaps in a structured and transparent manner (Snyder, 2019). The approach follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines (Page et al., 2021), ensuring methodological rigor through clearly defined stages: identification, screening, eligibility, and inclusion.

The qualitative descriptive design complements the bibliometric component by enabling interpretive analysis of themes and conceptual patterns. While bibliometrics reveal macro-level trends, thematic synthesis provides in-depth insights into how co-production mechanisms and digital transformation interact to produce public value. This mixed approach enhances both the analytical depth and reliability of the findings.

### **Data Sources and Search Strategy**

Data for this review were drawn from three major academic databases: Scopus, Web of Science (WoS), and ScienceDirect, chosen for their comprehensive indexing of high-impact journals in public administration, information systems, and governance studies. The search focused on publications between 2020 and 2024, capturing the most recent post-pandemic developments in digital governance a period characterized by accelerated digitalization and public sector innovation.

The search strings combined keywords and Boolean operators as follows:

("digital transformation" OR "digital governance" OR "e-government") AND ("public value" OR "public value creation") AND ("co-production" OR "co-creation") AND ("public administration").

To ensure inclusiveness, synonyms and related terms (e.g., “citizen participation,” “digital public services,” and “digital inclusion”) were also tested. Only peer-reviewed journal articles written in English and accessible in full-text form were considered. Conference papers, book chapters, and grey literature were excluded to maintain quality consistency and scholarly reliability.

### **Inclusion and Exclusion Criteria**

The inclusion criteria were defined as follows:

1. The article must address at least one of the following concepts: digital transformation, co-production, or public value.
2. It must present empirical, conceptual, or theoretical insights relevant to public administration.
3. It must be published in a peer-reviewed journal indexed in Scopus (Q1–Q2) or Web of Science.
4. The publication year must fall between January 2020 and April 2024.
5. The article must be available in English and full text. Exclusion criteria included:
  - Studies focusing solely on private sector digitalization;
  - Articles unrelated to governance or public administration;
  - Duplicates across databases;
  - Non-peer-reviewed sources or opinion pieces.

Following these criteria, the selection process yielded 35 eligible articles after screening 150 initial records.

### **PRISMA PROTOCOL APPLICATION**

The SLR process adhered strictly to the PRISMA 2020 framework, which comprises four main stages:

1. Identification: An initial pool of 150 publications was retrieved using the defined keywords across databases.
2. Screening: Titles and abstracts were reviewed to remove duplicates and irrelevant studies, narrowing the sample to 70 articles.
3. Eligibility: Full-text articles were assessed against the inclusion and exclusion criteria, resulting in 40 eligible papers.
4. Inclusion: After cross-checking for conceptual relevance and methodological quality, 35 studies were finalized for analysis.

Each stage was documented in a PRISMA flow diagram to ensure transparency and reproducibility. The final dataset was exported to Microsoft Excel for coding and to VOSviewer version 1.6.20 for bibliometric visualization.

### **Data Extraction and Coding**

A data extraction matrix was developed to systematically record key attributes from each study, including author(s), year, journal, country, research method, and core findings. Thematic variables

such as “administrative efficiency,” “citizen engagement,” “social equity,” and “economic optimization” were coded deductively based on the Public Value Management (PVM) framework (Benington, 2020; Moore, 1995). Additional themes such as “institutional capacity,” “digital literacy,” and “governance culture” were identified inductively from emerging patterns across studies.

Each article was independently reviewed by two researchers to ensure consistency. Coding discrepancies were resolved through peer debriefing sessions and consensus-building discussions. The inter-coder reliability coefficient (Cohen’s Kappa) was calculated at 0.82, indicating strong agreement and coding reliability.

### **Bibliometric Analysis with VOSviewer**

Bibliometric mapping was performed using VOSviewer 1.6.20, a widely recognized software tool for visualizing bibliometric networks (Van Eck & Waltman, 2021). The analysis focused on keyword co-occurrence, author collaboration, and citation networks to identify clusters of interrelated concepts. A minimum occurrence threshold of five keywords was set to ensure robustness in thematic clustering.

The visualization generated three dominant clusters:

1. Digital transformation and efficiency centered around terms like “e-government,” “automation,” and “innovation.”
2. Co-production and participation featuring “citizen engagement,” “collaboration,” and “transparency.”
3. Public value and governance reform highlighting “trust,” “legitimacy,” and “accountability.”

These clusters served as a conceptual foundation for qualitative synthesis in the Results and Discussion section.

### **Validity, Reliability, and Research Ethics**

To ensure the credibility of findings, multiple validation strategies were implemented:

- Triangulation: combining SLR and bibliometric analysis to strengthen interpretation.
- Peer review: results and coding decisions were discussed among the six-member research team to minimize individual bias.
- Transparency: all inclusion criteria, coding procedures, and bibliometric parameters were documented for replication.

Since this study relies exclusively on secondary data (published articles), no ethical clearance was required. However, ethical research principles such as accurate citation, data integrity, and acknowledgment of intellectual property were strictly observed throughout the process.

### **Analytical Framework**

This study integrates insights from the Public Value Management (PVM) theory (Moore, 1995; Benington, 2020) with the Digital Co-Production Framework (Brandsen et al., 2018). The analytical model posits that digital transformation (as an independent variable) enhances public value creation through co-production mechanisms, while institutional capacity and digital literacy act as moderating

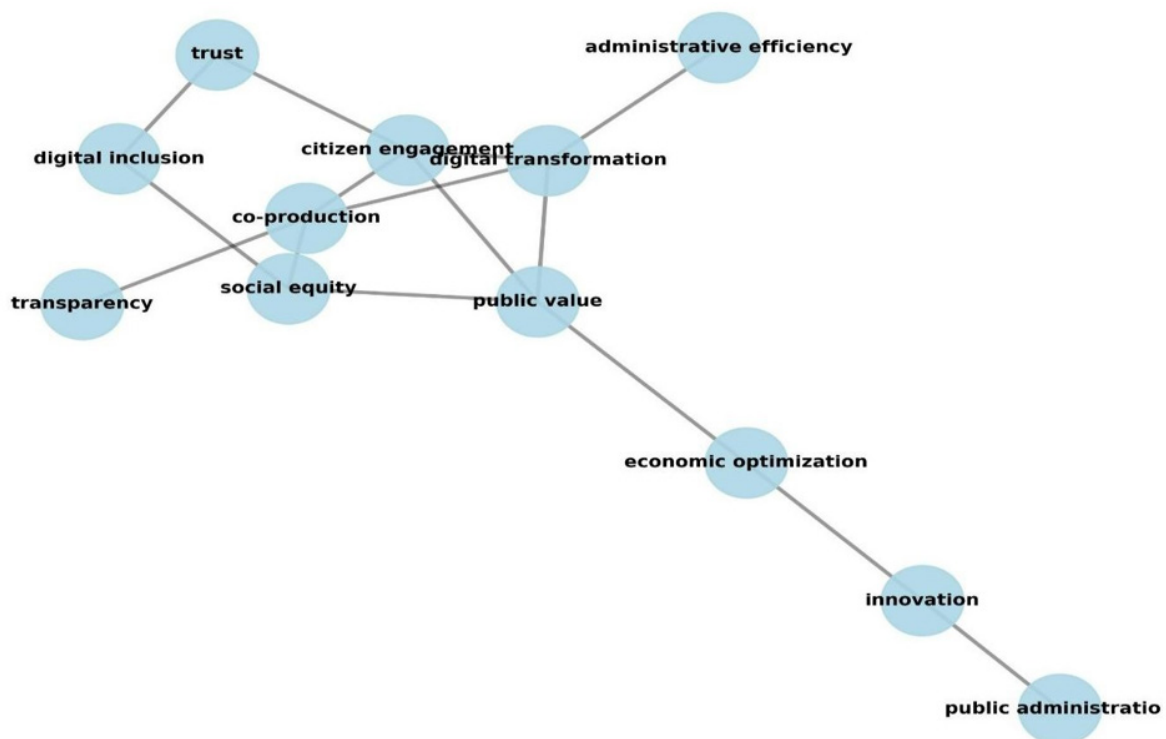
factors. The conceptual model links technological, institutional, and participatory dimensions of governance, serving as a guide for thematic synthesis in the following section.

## RESULTS AND DISCUSSION

### Overview of the Systematic Review Results

The systematic review of 35 peer-reviewed articles published between 2020 and 2024 reveals that digital transformation in public administration contributes to four dominant dimensions of public value:

1. Administrative efficiency,
2. Citizen engagement,
3. Social equity, and
4. Economic optimization.



**Figure 1.** Keyword Co-occurrence Network

Source: Bibliometric analysis using VOSviewer based on 35 Scopus-indexed studies (2020– 2024).

Each dimension reflects a specific area where digital transformation reshapes how public institutions operate, interact with citizens, and deliver services. Across the literature, co- production consistently emerges as a key mediating mechanism connecting technological adoption with value creation. However, the effectiveness of this linkage depends heavily on contextual variables particularly institutional capacity, governance culture, and the level of digital literacy within the population.

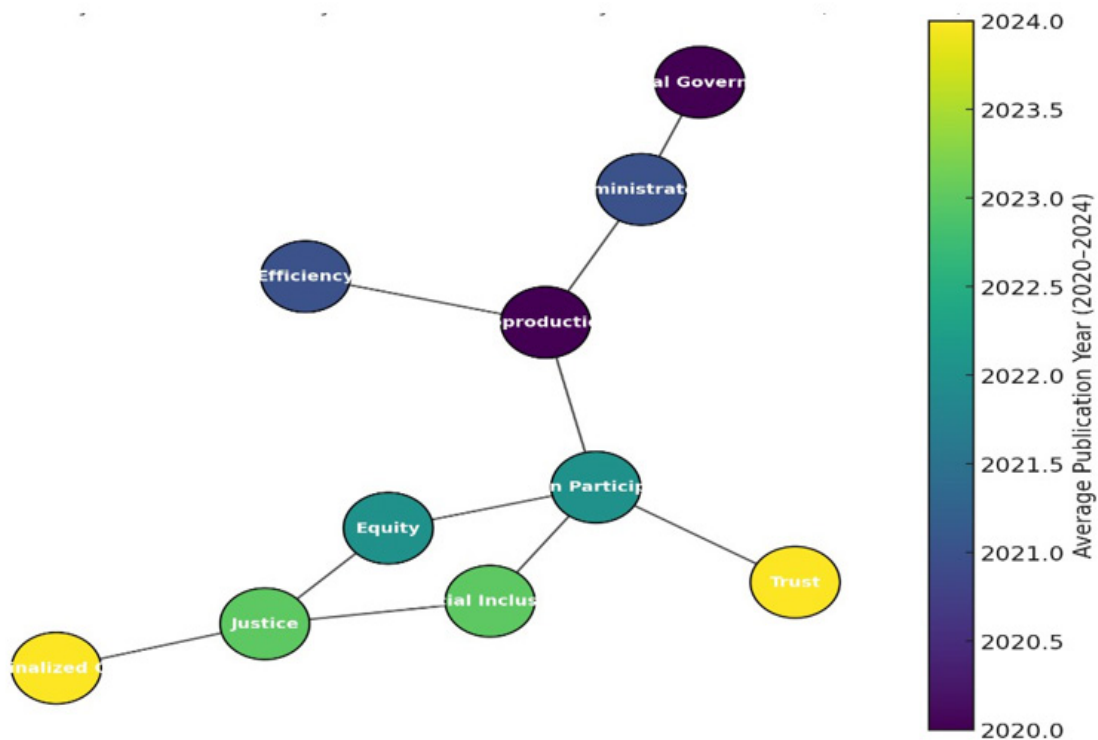
The bibliometric visualization using VOSviewer 1.6.20 confirmed this thematic clustering. Three interconnected clusters appeared:

- The *red cluster* emphasized “digital transformation–efficiency–innovation”,
- The *green cluster* highlighted “co-production–citizen participation–transparency”,
- The *blue cluster* focused on “public value–trust–accountability.”

Together, these clusters illustrate how academic discussions have evolved toward integrating technological and participatory perspectives within digital governance. This shift signifies a growing acknowledgment that digital transformation is not purely a technical reform but a socio-institutional transformation involving shared governance and collective value creation.

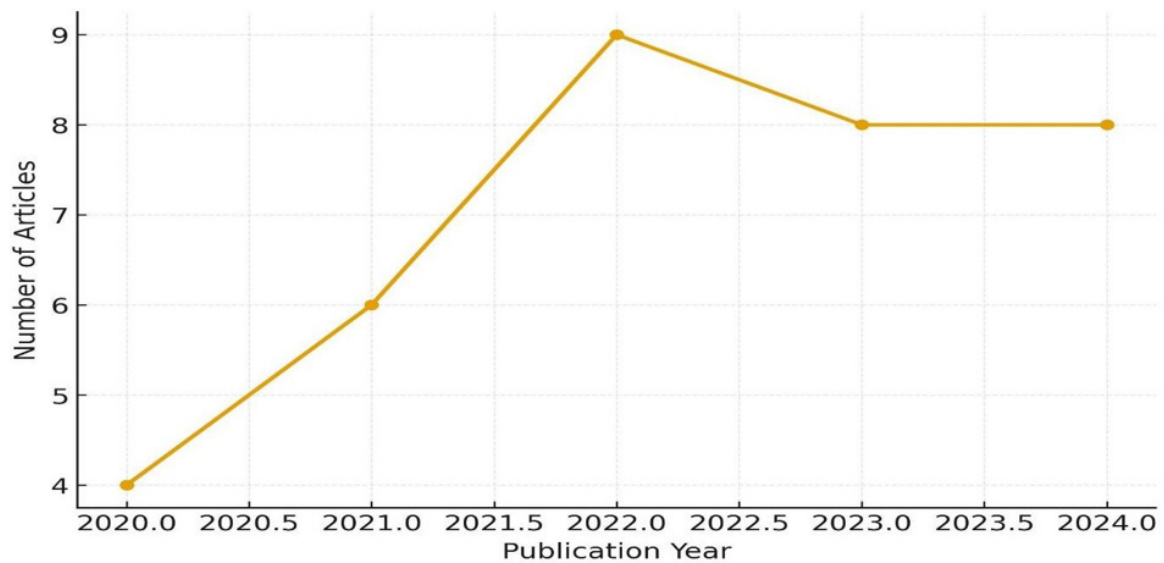
### Thematic Density and Publication Distribution

The **thematic density map** (Figure 2) demonstrates that *citizen engagement* and *co-production* are the densest nodes, indicating that participatory governance dominates the discourse on digital transformation. Meanwhile, *administrative efficiency* and *innovation* remain core but mature research themes, suggesting a shift toward more value-oriented governance paradigms.



**Figure 2.** Density Visualization of Core Keywords Based on VOSviewer Analysis  
 Source: Bibliometric analysis using VOSviewer based on 35 Scopus-indexed studies (2020– 2024).

A bibliometric analysis of the reviewed articles indicates growing academic interest in digital governance post-COVID-19, reflecting governments’ reliance on technology for crisis resilience. The publication trend (Figure 3) shows a sharp increase in 2022, followed by a stable output through 2024.



**Figure 3.** Publication Trend on Digital Transformation and Public Value (2020–2024)  
 Source: Author’s compilation based on Scopus and Web of Science datasets.

### Thematic Summary of Reviewed Literature

The synthesis of four major public value dimensions is summarized below.

**Table 1.** Dimensions of Public Value in Digital Transformation

Dimension	Key Focus	Main Findings from Literature	Representative Sources
<b>Administrative Efficiency</b>	Automation, interoperability, data analytics	Digital platforms streamline bureaucratic processes, enhance accountability, and reduce administrative costs.	Dunleavy & Margetts (2021); Scupola & Mergel (2022)
<b>Citizen Engagement</b>	Co-production, collaboration, participatory governance	Citizen participation increases legitimacy, trust, and responsiveness.	Brandsen et al. (2018); Andreassen (2019)
<b>Social Equity</b>	Inclusion, accessibility, fairness	Equity-driven design ensures digital inclusion and mitigates inequality.	Meijer & Grimmelikhuisen (2021); Loeffler & Bovaird (2016)
<b>Economic Optimization</b>	Innovation, fiscal efficiency, open data	ICT reforms reduce costs and foster innovation ecosystems.	Cordella & Paletti (2019); Bommert (2010)

Source: Authors’ synthesis based on the systematic review of peer-reviewed journal articles indexed in Scopus (2020–2024)

### Administrative Efficiency: Automation and Integration as Catalysts of Value

Administrative efficiency remains the most frequently cited outcome of digital transformation in public administration. Numerous studies emphasize that digital platforms, automation, and data-

driven decision-making significantly improve service speed, accuracy, and accountability. For instance, Dunleavy and Margetts (2021) highlight that digital-era governance streamlines bureaucratic workflows by replacing redundant manual procedures with interoperable digital systems. Similarly, Gil-Garcia (2012) found that integrated digital systems enhance information flow, reduce transaction costs, and minimize administrative delays.

Empirical evidence from European and Asian governments demonstrates that e-government platforms contribute to measurable efficiency gains. In Denmark, the transition to a fully digital citizen-service model reduced administrative overhead by 25% while maintaining high citizen satisfaction (Scupola & Mergel, 2022). In Indonesia, however, similar initiatives under the SPBE policy have yielded mixed results due to fragmented data infrastructures and uneven inter-agency coordination (Nugroho et al., 2021).

These disparities highlight that technological readiness alone does not guarantee efficiency. Institutional alignment, interdepartmental interoperability, and human resource adaptation are crucial. Without these, digital tools may replicate analog inefficiencies in digital form. Therefore, administrative efficiency through digital transformation should be viewed as a multi-layered process, dependent on governance structures and organizational culture.

### **Citizen Engagement: Co-Production as the Cornerstone of Digital Governance**

Citizen engagement constitutes the second major dimension of public value identified in the review. Digital transformation has expanded opportunities for interaction between government and citizens, enabling more inclusive, participatory, and transparent governance processes. Co-production, as a participatory mechanism, allows citizens to actively contribute ideas, feedback, and expertise in designing and evaluating public services (Linders, 2012; Brandsen et al., 2018).

Several studies illustrate that digital co-production enhances the legitimacy and responsiveness of government decisions. For example, Andreassen (2019) argues that shared digital platforms serve as “public spaces of collaboration,” fostering mutual trust between citizens and government agencies. Likewise, Mergel (2013) found that governments leveraging social media platforms for open innovation gain access to citizen insights that traditional bureaucratic models cannot capture.

In Denmark and South Korea, co-productive digital initiatives such as participatory budgeting and open data co-creation have demonstrated that active citizen participation leads to more trusted and user-centered services (Scupola & Mergel, 2022). Conversely, in developing contexts such as Southeast Asia, citizen engagement faces cultural and infrastructural challenges. Limited digital literacy, low trust in government, and fear of political retaliation discourage citizens from active participation (Susanto, 2023).

This finding reinforces that digital engagement is not only a technological process but also a social contract. Governments must invest in participatory literacy, communication transparency, and feedback mechanisms to institutionalize co-production as a norm rather than an exception. Hence, successful digital governance requires shifting from “one-way service delivery” to “two way co-creation,” where citizens are equal stakeholders in governance.

## **Social Equity: Bridging the Digital Divide for Inclusive Value Creation**

A recurring theme across the reviewed studies is the uneven distribution of digital transformation benefits. While advanced economies enjoy high levels of connectivity and citizen participation, developing regions face persistent digital divides gaps in access, skills, and institutional inclusion (Van Dijck et al., 2018). As a result, the social equity dimension of public value often lags behind efficiency gains.

Scholars like Meijer and Grimmelikhuijsen (2021) caution that excessive or poorly contextualized digital transparency can unintentionally exclude citizens who lack digital competence. For instance, open data initiatives may enhance accountability for digitally literate groups while alienating those without sufficient access or understanding. Similarly, Loeffler and Bovaird (2016) emphasize that co-production can inadvertently amplify inequalities if participation mechanisms privilege educated or urban citizens.

Addressing these disparities requires a multidimensional equity strategy, combining technological inclusion with social policy interventions. This includes:

- Expanding rural broadband and public internet access;
- Embedding digital literacy programs into community education;
- Designing accessible user interfaces for diverse populations (including elderly and disabled citizens);
- Ensuring gender equity in digital participation.

Governments must therefore move beyond digital infrastructure provision toward inclusive digital citizenship a model where everyone can access, understand, and contribute to digital governance processes. When executed effectively, this ensures that digital transformation not only improves service efficiency but also strengthens social cohesion and democratic legitimacy.

## **Economic Optimization: Efficiency Meets Innovation**

The fourth public value dimension emerging from the review is economic optimization, which reflects the capacity of digital governance to reduce costs, attract investment, and stimulate innovation ecosystems. Studies such as Cordella and Paletti (2019) argue that information and communication technologies (ICTs) shift the public sector's logic from manufacturing (output-oriented) to service (outcome-oriented) operations, enabling governments to deliver "more for less."

For instance, the use of digital procurement systems and blockchain-based record management in Singapore's GovTech initiatives has reduced corruption risk while improving fiscal transparency. Similarly, the European Union's Digital Strategy (2022) estimated that interoperable digital public services could generate up to €300 billion in annual savings across member states through reduced administrative burdens and improved cross-border service delivery.

In Indonesia, digital fiscal reforms such as the Online Monitoring of Taxation System (OMTS) and e-Procurement have begun to yield measurable economic benefits. However, the lack of integrated databases and real-time analytics limits the potential for large-scale optimization (Nugroho et al., 2021). These findings suggest that economic optimization is achievable only when digital transformation aligns with performance measurement, innovation incentives, and regulatory flexibility.

Beyond cost efficiency, digital transformation fosters innovation-driven value creation. Open government data, for example, enables private developers and social entrepreneurs to create public solutions, thereby multiplying economic and social benefits. This “collaborative innovation” model (Bommert, 2010) redefines the role of government as an enabler of ecosystems rather than a monopolistic service provider.

**Table 2.** Thematic Distribution of Reviewed Articles (2020–2024)

Region	Articles (n)	Dominant Themes	Examples of Countries Studied
Europe (OECD)	14	Co-production, transparency, innovation	Denmark, UK, Finland, Netherlands
Asia (Developing)	10	Inclusion, readiness, digital literacy	Indonesia, Malaysia, India
North America	6	Open data, trust, AI in public services	USA, Canada
Global/Comparative	5	Public value frameworks and governance models	OECD, UN DESA

Source: Authors’ compilation based on bibliometric data extracted from Scopus and Web of Science databases (2020–2024)

### Theoretical Implications: Public Value Management in the Digital Era

The findings of this study reaffirm the theoretical shift from New Public Management (NPM) to Public Value Management (PVM). While NPM emphasizes efficiency and market mechanisms, PVM focuses on legitimacy, trust, and co-creation as foundational pillars of governance (Moore, 1995; Benington, 2020). Within this paradigm, digital transformation functions as a platform rather than a tool a means for collaboration between government, citizens, and private actors.

Co-production acts as the linchpin in this framework, transforming hierarchical governance into networked governance. Through digital platforms, governments move from command- and-control systems toward distributed models of accountability and value creation. This evolution aligns with Osborne’s (2010) concept of *New Public Governance*, where public outcomes emerge from interaction among multiple stakeholders rather than unilateral state action.

The study also contributes to refining PVM by integrating technological affordances into the framework. Digital technologies expand the government’s capacity to co-create value but also introduce ethical challenges, such as data privacy, algorithmic bias, and digital exclusion. Therefore, the future of PVM must address how to govern technology ethically while preserving public trust and equity.

### Practical Implications: Toward Inclusive and Sustainable Digital Governance

From a practical standpoint, the synthesis of literature offers several key implications for policymakers and practitioners:

1. Institutional Readiness:

Digital transformation must be anchored in organizational reform. Governments should redesign workflows, restructure agencies, and cultivate leadership capable of managing cross-sectoral innovation.

2. Citizen-Centered Design:

Public services should be co-created through participatory mechanisms such as user testing, crowdsourced policy feedback, and digital consultation platforms. This ensures that services meet real citizen needs rather than bureaucratic assumptions.

3. Digital Literacy and Inclusion:

National digital strategies should integrate community-based training to improve citizens' ability to participate effectively in e-governance. Literacy is not limited to technical skills but extends to understanding data rights, privacy, and civic responsibility.

4. Ethical and Regulatory Frameworks:

Policymakers must establish clear ethical standards for data management, artificial intelligence (AI) use, and algorithmic transparency to safeguard citizen trust.

5. Performance Evaluation Beyond Efficiency:

Digital transformation outcomes should be evaluated not only through quantitative metrics (speed, cost, output) but also through qualitative indicators such as trust, legitimacy, and social inclusion.

By adopting these principles, governments can move toward sustainable digital governance that creates long-term public value rather than short-term administrative gains.

## Limitations and Future Research Directions

While this study provides a comprehensive synthesis, certain limitations remain. First, the reliance on English-language sources may exclude relevant research published in other languages, particularly from non-English-speaking developing countries. Second, most analyzed studies were conceptual or descriptive; few employed quantitative or experimental methods, limiting the ability to test causality. Third, bibliometric mapping primarily captured journal-based scholarship, potentially overlooking practitioner-oriented publications and policy documents.

Future research should therefore pursue mixed-method approaches combining large-scale surveys, case studies, and experimental designs to validate theoretical propositions empirically. Moreover, comparative studies across Global South contexts such as Indonesia, the Philippines, and Kenya could deepen understanding of how socio-political environments influence digital co-production and value creation.

Finally, integrating emerging technologies such as AI, blockchain, and the Internet of Things (IoT) into public value frameworks represents a promising avenue for future inquiry. As digital governance evolves, public administration scholarship must adapt its theories and methodologies to capture the dynamic interplay between technology, participation, and value creation.

## CONCLUSION

This study provides a comprehensive synthesis of the most recent international scholarship on the intersection between digital transformation, co-production, and public value creation in public administration. By systematically reviewing 35 peer-reviewed articles published between 2020 and 2024 and applying the PRISMA 2020 protocol supported by VOSviewer bibliometric analysis, the

research identifies four interrelated dimensions through which digital transformation enhances public value: administrative efficiency, citizen engagement, social equity, and economic optimization.

The findings demonstrate that digital transformation has evolved beyond its initial conception as a mere technological modernization process. Instead, it now represents a multidimensional governance paradigm where citizen participation and institutional adaptability are as crucial as infrastructure and digital tools. Co-production emerges as the central mechanism through which governments can translate digital innovation into tangible, equitable, and sustainable public value outcomes. When citizens are actively engaged in the design, implementation, and evaluation of digital services, public trust, responsiveness, and legitimacy increase significantly.

Theoretically, this research reinforces the Public Value Management (PVM) framework as a relevant and adaptive model for digital era governance. PVM shifts the focus from the efficiency-driven logic of New Public Management (NPM) toward a collaborative, participatory, and trust-based approach. Within this framework, digital transformation becomes an enabler of value co-creation rather than a technocratic end in itself. The review further refines PVM by emphasizing the need to integrate ethical digital governance including data privacy, algorithmic fairness, and digital inclusion into future models of public value creation.

Practically, the study offers several actionable insights for policymakers, administrators, and system designers. First, successful digital transformation requires institutional reform—not merely technological upgrades. Governments must align digital initiatives with organizational restructuring, human capital development, and inter-agency interoperability. Second, citizen co-production should be institutionalized through participatory design, open consultation, and transparent feedback mechanisms. This helps ensure that digital services reflect public needs and foster collective ownership. Third, digital literacy and inclusion programs are vital to bridge access and skill gaps, especially in developing contexts like Indonesia. Without such efforts, digital reforms risk reinforcing existing inequalities rather than reducing them.

From a strategic perspective, the study recommends that national and local governments adopt integrated digital governance frameworks that balance efficiency with equity, and innovation with accountability. Digital transformation policies must be designed holistically connecting technological infrastructure, regulatory frameworks, and participatory governance practices. Governments that manage to harmonize these elements are more likely to achieve enduring and inclusive public value.

Nevertheless, this study acknowledges several limitations. The analysis is primarily conceptual, relying on secondary data from published literature. Future research should employ empirical methods such as cross-national surveys, case studies, and participatory action research to validate and contextualize these findings. Moreover, as emerging technologies like artificial intelligence, blockchain, and the Internet of Things become integral to public service systems, new frameworks are needed to assess their ethical, legal, and social implications for public value creation.

In conclusion, digital transformation in public administration should not be perceived merely as a technical shift, but as a transformative governance reform that redefines the relationship between government and citizens. Sustainable public value emerges when technological innovation is accompanied by inclusive participation, institutional reform, and ethical accountability. As governments navigate the complexities of the digital era, co-production provides a powerful pathway toward governance that is not only efficient, but also democratic, equitable, and trusted.

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