



## Collaborative Digital Governance in the Management of Value-Based Education

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### Abstract

**Background.** Digital transformation has driven changes in education governance towards a more collaborative, adaptive, and technology-based system.

**Purpose.** The purpose of this study is to analyze the concept of *collaborative digital governance* in the management of value-based education through the *Systematic Literature Review (SLR)* approach.

**Method.** Data was obtained from various scientific articles derived from databases such as Scopus, ScienceDirect, SpringerLink, Emerald Insight, Taylor & Francis, and Google Scholar. The research process followed the PRISMA stages, and the data analysis used content analysis.

**Results.** The results of the study show that *collaborative digital governance* is an educational governance model that integrates multi-stakeholder collaboration with digital technology in the decision-making process and the management of educational services. This approach can increase effectiveness, transparency, and public participation in educational governance. However, its implementation still faces challenges, including digital divides, limited infrastructure, low digital literacy, and ethical and data security issues.

**Conclusion.** Value-based education is an important foundation in maintaining the humanistic dimension of education in the digital era through strengthening moral values, responsibility, and sustainability. Value-based collaborative digital governance can be a strategic approach in creating an inclusive, adaptive, and sustainable education system.

**Keywords:** Collaborative Governance, Digital Governance, Education Management, Value-Based Education.



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### INTRODUCTION

Digital transformation has brought about fundamental changes in public-sector governance, including in education management. The integration of information and communication technology (ICT) in the education system not only has an impact on the learning process but also significantly changes the decision-making mechanism, distribution of resources, and the pattern of interaction between stakeholders. This development gave rise

to the concept of Digital Governance, which emphasizes the use of digital technology to improve the effectiveness, efficiency, transparency, and accountability in the management of public services, including education (Almeida, 2024). In this context, education is no longer seen as a conventional sector but rather as a dynamic ecosystem connected through digital and data-driven platforms.

From the perspective of modern public administration, the traditional hierarchical, top-down approach is increasingly considered inadequate for addressing the complexity of education problems, which are increasingly multidimensional. Challenges such as inequality in access to education, unequal service quality, and technological disruption demand a more adaptive and inclusive approach. Therefore, the concept of *Collaborative Governance* as an alternative paradigm that emphasizes the importance of multi-actor involvement in the public policy formulation and implementation process (Arya Satya Pratama et al., 2023). Collaboration between the government, the private sector, educational institutions, and the community is a key element in creating an education system that is responsive to changes and societal needs (Falaqi et al., 2025).

In the digital age, such collaboration not only occurs physically but is also mediated by digital technologies that enable real-time cross-border interactions. This gave birth to the concept of *Collaborative Digital Governance*, a governance approach that integrates the principle of collaboration with digital technology in the decision-making process and policy implementation. In the context of education, this approach is particularly relevant because digital transformation requires strong coordination between various actors in the education ecosystem, including governments, technology providers, educational institutions, and communities as service users. Studies show that the success of digital transformation in education is highly dependent on the ability of systems to manage cross-sector collaboration, especially in terms of data sharing, system interoperability, and policy synchronization (Ali & Associate Professor, Department of Business Administration, University of Scholars, Dhaka, Bangladesh., 2024).

The implementation of digital governance in education is inseparable from various complex challenges. One of the main challenges is the digital divide, both in terms of access to technology and users' capacity to use it. In addition, there are challenges related to data security and privacy, as well as the potential dominance of certain actors in the digital ecosystem, which can lead to power imbalances. This condition shows that digital

transformation is not only a technical issue but also involves social, political, and ethical dimensions that require serious attention in educational governance (Kuloba, 2021).

In this case, it is important to place the value dimension as the foundation in the management of digital-based education. Approach *Value-based education* emphasizing that education aims not only to transfer knowledge and skills, but also to shape the character, morals, and human values of students. The integration of values in the digital education system is crucial to ensure that the use of technology does not neglect ethical and humanitarian aspects. Without a strong value foundation, digital transformation has the potential to lead to the dehumanization of education, where technology becomes the goal, not the tool to achieve the broader educational goals (Zhang et al., 2022).

The integration between digital technology and values in education also requires a collaborative approach involving a wide range of stakeholders. In this case, *Collaborative Digital Governance* can serve as a conceptual framework that integrates the dimensions of technology, collaboration, and value within a single, unified governance system. Through this approach, various actors can contribute to designing and implementing education policies that are not only technologically innovative but also oriented towards social and humanitarian values. Studies show that multi-actor participation in the digital environment can improve the quality of decision-making as well as strengthen the legitimacy of public policy (Assoc. Prof. T. Khalilov, 2024).

Successful implementation of *Collaborative Digital Governance*. In education, it is also greatly influenced by institutional and human readiness. Organizational capacity to manage change, adaptive leadership, and digital competence of educators and education managers are important factors in determining the success of digital transformation. Several studies show that educational institutions that have good organizational readiness tend to be more successful in implementing digital innovation in a sustainable manner (Rahman, 2022). This shows that digital transformation in education is not only a matter of technology but also of management and leadership.

Although various studies have discussed Digital Governance and Collaborative Governance in the context of education, studies that specifically integrate these concepts from the perspective of value-based education remain relatively limited (Julizar Idris et al., 2024). Most studies tend to address the technology or collaboration aspects separately, without linking them to the value dimension that is at the essence of education itself. In addition, there have

been few studies that systematically map how Collaborative Digital Governance can be implemented in value-oriented educational management. This condition shows a research gap (*Research gap*) that is important to study further (Williams et al., 2024).

This research aims to conduct a Systematic Literature Review (SLR) on the concept of *Collaborative Digital Governance in Value-Based Education Management*. Through the SLR approach, this research is expected to identify, analyze, and synthesize various related research findings to gain a comprehensive understanding of the development of concepts, models, and best practices in the management of value-oriented digital collaboration-based education. In addition, this research is expected to make a theoretical contribution to the development of public administration studies, especially in the field of education governance, and to provide practical implications for policymakers in designing an adaptive, inclusive, and value-based education system in the digital era.

Research on *collaborative governance* and *digital governance* in education has shown significant developments amid the public sector's increasing digital transformation. Previous studies have confirmed that modern education governance is no longer bureaucratic and hierarchical, but rather moves towards a collaborative model that involves governments, educational institutions, the private sector, and society in the decision-making process. The concept of collaborative governance is seen as effective in addressing the complexity of multidimensional educational problems because it strengthens participation, cross-sector coordination, and public policy legitimacy.

On the other hand, the development of *digital governance* in education emphasizes the use of digital technology, data-based systems, artificial intelligence, and digital platforms to increase the effectiveness, efficiency, transparency, and accountability of educational governance. Previous research shows that digital transformation can accelerate the educational administration process, support data-driven decision-making, and strengthen educational services that are more adaptive to society's needs in the era of the Industrial Revolution 4.0 and Society 5.0.

In addition, the study of *value-based education* developed in response to concerns about the dehumanization of education caused by the dominance of technology and a technocratic orientation in the modern education system. Various studies emphasize the importance of integrating moral values, ethics, spirituality, social responsibility, and humanism in the digital education process so that technology continues to function as a tool to support the development

of students' character. Value-based education is seen as capable of maintaining a balance between technological innovation and the humanitarian dimension of education.

The latest developments show efforts to integrate collaborative governance and digital governance into the concept of *collaborative digital governance*. This approach is beginning to be understood as a new governance model that combines multi-stakeholder collaboration with digital technology to create a more participatory, inclusive, and sustainable education system. However, most studies still focus on aspects of technology, administrative efficiency, or partial digital transformation, and have not integrated the value dimension as the main foundation of digital education governance.

## LITERATURE REVIEW

### The Concept of Collaborative Governance

Collaborative governance is a new paradigm in public administration that emerged in response to the limitations of traditional bureaucratic approaches in solving increasingly complex public problems. In this context, collaborative governance is understood as a public decision-making process and structure that involves various actors across sectors, both government, private, and civil society, to achieve common goals that cannot be achieved individually (Branderhorst & Ruijer, 2025). This approach emphasizes the importance of deliberative, participatory, and consensus-based interactions in public policy management (Vedeld, 2022).

The emergence of collaborative governance is inseparable from the increasing complexity of multidimensional and interrelated public problems. Problems such as climate change, sustainability, and educational transformation require the involvement of various stakeholders because they cannot be solved by any single actor. Therefore, collaborative governance is a relevant approach in dealing with "wicked problems" that require cross-sector coordination and integration of various perspectives (Branderhorst & Ruijer, 2025). In this context, collaboration is not only a strategy but also a structural necessity in the modern governance system.

Collaborative governance also emphasizes the importance of the distribution of power and responsibility among the actors involved. However, in practice, the collaborative process often faces challenges such as power imbalances, a lack of trust among actors, and difficulties reaching consensus. Studies show that actors with greater power tend to have difficulty sharing

roles with other actors, which can hinder the effectiveness of collaboration (Harmáčková et al., 2022). Therefore, the success of collaborative governance is greatly influenced by institutional design, collaborative leadership, and the ability to build trust and effective communication between the parties involved.

From a sustainability-based governance perspective, collaborative governance also plays an important role in creating an inclusive and adaptive governance system. This approach allows for social learning and collective capacity building in responding to environmental and social changes (Alenezi, 2023). In addition, in the context of education and organization, collaborative governance encourages the formation of a sustainable participatory process, where values such as responsibility, participation, and long-term commitment are integral to governance (Otieno et al., 2020).

Thus, collaborative governance can be understood as an approach that emphasizes multi-stakeholder collaboration, shared decision-making, and the integration of diverse resources and knowledge to solve public problems. This approach not only increases policy effectiveness but also strengthens legitimacy and sustainability in the implementation of public policies, including in the increasingly complex and dynamic education sector.

#### Digital Governance in Education

Digital governance in education is a governance approach that emphasizes the use of digital technology in decision-making, resource management, and the implementation of educational services. In this context, technology not only serves as a tool but also becomes an integral part of the governance system that shapes the way educational institutions are organized and run. Digital governance enables transformation in education management through the integration of digital platforms, data systems, and algorithms that influence educational policies and practices (Adelakun, 2022).

Alongside technological developments, digital governance is increasingly playing an important role in improving the effectiveness and efficiency of the education system. The use of digital technology enables data-driven decision-making, more transparent resource management, and innovation in the learning process. In addition, digital governance also encourages the creation of an education system that is more adaptive to global changes, including in facing the challenges of technological disruption and 21st-century skills needs (Decheng Zhang & Jinxin Chen, 2024).

However, implementing digital governance in education is inseparable from various challenges. One of the main issues is the digital divide, which leads to unequal access to technology across regions. In addition, there are issues related to data security, privacy, and the potential misuse of technology in educational management. This shows that digital governance is not only related to technical aspects, but also involves the dimensions of ethics, regulation, and social justice in education (Giang et al., 2021). Digital governance in education also requires cross-sector collaboration in its management. The government, educational institutions, technology providers, and the public need to work together in building an inclusive and sustainable digital ecosystem. Studies show that the success of digital transformation in the public sector, including education, is highly dependent on the ability of these actors to build synergy and effective coordination (Andi Kambau, 2024).

From a sustainability perspective, digital governance also supports the development of a long-term-oriented education system. The integration of digital technology can strengthen institutions' capacity to respond to environmental and social changes, while improving the quality of educational services. Therefore, digital governance in education is not only understood as a technological innovation, but as a strategic approach in creating adaptive, inclusive, and sustainable educational governance in the digital era (Ajoudanian & Aboutalebi, 2025).

### **Integration: Collaborative Digital Governance**

Integration between *Collaborative Governance* and *Digital Governance* gave birth to a new approach known as *Collaborative Digital Governance*, a governance model that combines multi-stakeholder collaboration with digital technology in the public decision-making process. This approach emerged in response to the increasing complexity of public issues that not only require cross-sectoral coordination, but also the support of digital systems that are able to integrate data, actors, and processes efficiently (Dai et al., 2025).

In this context, digital technology serves as an enabler, expanding the space for collaboration among the government, the private sector, and society. Digital platforms enable real-time information exchange, transparency of policy processes, and broader public participation in governance. This strengthens collaborative governance practices, which were previously often constrained by limited communication and coordination between actors (Alamäki & Korpela, 2021a). Thus, digital integration not only improves efficiency but also

deepens the quality of collaboration in governance. However, the integration does not necessarily go without challenges. One of the main issues is the digital capacity gap among actors, especially in developing countries. Inequalities in access to technology, differences in digital literacy levels, and limited infrastructure are obstacles to realizing inclusive digital collaboration (Vedeld, 2022). In addition, social and cultural factors affect the effectiveness of digital collaboration, including trust between actors and readiness to share information openly.

On the other hand, institutional and regulatory aspects also play an important role in supporting the integration of collaborative digital governance. The success of implementing this model is highly dependent on a clear policy framework, effective coordination mechanisms, and leadership that can bridge the interests of various parties. Studies show that organizations that have adaptive capacity and flexible governance systems tend to be more successful in integrating digital technologies into collaborative practices (Yopi et al., 2025).

In addition, the development of data-driven systems and artificial intelligence opens new opportunities to strengthen collaborative digital governance. The collective use of data enables more accurate and responsive decision-making that meets people's needs. However, it also poses ethical challenges related to privacy, data security, and algorithmic accountability that must be carefully managed (Krause, 2022). Thus, the integration of collaborative digital governance can be understood as a strategic approach to create more inclusive, transparent, and adaptive public governance in the digital era. This approach not only relies on technology but also demands inter-stakeholder synergy, institutional readiness, and a strong value foundation in its management.

### **Education Management from the Perspective of Public Administration**

The management of education from a public administration perspective is part of the state's efforts to provide quality, inclusive, and sustainable public services to the community. In this context, education is not only understood as a learning process, but also as a public service system that requires effective governance, regulation, coordination, and supervision. Public administration plays a role in ensuring that education policies can be implemented optimally through resource management, institutional strengthening, and improving the quality of educational services (Fahmi & Aswirna, 2021).

The development of digital technology has brought significant changes to the management of education, especially in governance and service delivery. Technology

integration allows educational institutions to develop more efficient, transparent, and data-based management systems. The digitalization of education administration also encourages changes in the work patterns of the education bureaucracy from a manual system to a more adaptive digital system that better meets the needs of the community (Dai et al., 2025). In this case, public administration must adapt to the dynamics of digital transformation so that education services remain relevant in the technological era. In addition, the management of modern education also emphasizes the importance of collaboration between stakeholders. The government is no longer the only dominant actor in the implementation of education; rather, it collaborates with educational institutions, the private sector, communities, and the community. This collaborative approach is important because education problems are increasingly complex and require cross-sectoral solutions (Hidayat et al., 2025). From a public administration perspective, the collaboration reflects a paradigm shift in governance from hierarchical to participatory and networked (*Network Governance*).

On the other hand, education management is also closely related to the sustainability aspect (*Sustainability*). Good education governance must create a system that is adaptive to long-term social, economic, and technological changes. Approach *Sustainability Governance*, emphasizing the importance of strengthening organizational capacity, institutional culture, and leadership that is able to direct educational transformation in a sustainable manner (Otieno et al., 2020). This shows that public administration not only focuses on bureaucratic efficiency but also on the sustainability of the education system in the future. In the context of digital-based education, public administration also faces challenges related to gaps in access to technology, digital literacy, and human resource readiness. Inequality in digital infrastructure between regions can lead to unequal quality of education services. Therefore, the government has a strategic role in ensuring equitable access to technology and increasing the digital capacity of educators and educational institutions (Rahman, 2024). In addition, adaptive regulations and policies are needed to ensure data security, ethical use of technology, and the protection of students' rights in the digital ecosystem.

Furthermore, education management from a public administration perspective also requires a data-driven decision-making system (data-driven decision-making). The use of data allows the government and educational institutions to evaluate policies more accurately and responsively to the needs of the community. Analytical technology and educational information systems are important instruments in supporting the effectiveness of modern education

governance (T. Khalilov et al., 2024). Education management from the perspective of public administration can be understood as an educational service governance process that involves aspects of regulation, collaboration, technology, and sustainability to create an inclusive, adaptive, and quality education system in the digital era.

#### Value-Based Education

*Value-Based Education* is an educational approach that places moral, ethical, spiritual, and humanitarian values as the primary foundation of the learning process and the management of education. This approach is not only oriented towards mastering cognitive aspects, but also on the formation of students' character, attitudes, and behaviors in social life. In the context of modern education, value-based education is seen as a response to the increasing challenges of moral degradation, individualism, and the negative impact of technological developments that can reduce the humanistic dimension in education (Susilo et al., 2026).

In its implementation, value-based education emphasizes the importance of integrating values in the curriculum, school culture, and daily learning process. Values are not only taught theoretically, but internalized through participatory, reflective, and contextual educational practices. Studies show that the *Value Technical Clarification* (VCT) based on local wisdom is able to improve the character of students through a learning process that is more meaningful and relevant to their social life (Harmáčková et al., 2022). Furthermore, value-based education is also closely related to the formation of a humanistic educational organizational culture. Values such as empathy, care, responsibility, and respect for others are integral to educational governance. In the context of Islamic education, value-based education management is even positioned as an institutional governance mechanism that is able to build trust, psychological security, and social involvement of students in a sustainable manner (Alamäki & Korpela, 2021).

In the digital era, strengthening value-based education is increasingly important because technological transformation has the potential to shift education's orientation toward a technocratic, academic-achievement-centered focus. Therefore, the integration of technology in education needs to be balanced with the strengthening of social, religious, and cultural values so that the educational process remains humanitarian in orientation. Research shows that learning based on local culture and values can increase collaboration, engagement, and understanding of students in the learning process (Nabila et al., 2025).

In addition, value-based education plays a role in improving students' psychological well-being. Humanistic approach in education has been proven to improve *Student well-being* through more positive interpersonal relationships and a supportive learning environment (Siregar & Wahyuni, 2022). Thus, value-based education not only functions as a pedagogical approach but also as an ethical foundation in creating a humanistic, inclusive, and sustainable education system in the digital era.

## METHODS

This study uses the Systematic Literature Review (SLR) approach to examine the concept of *Collaborative Digital Governance in Value-Based Education Management*. The SLR approach was chosen because it can provide a systematic, structured, and comprehensive synthesis of literature on studies relevant to the topic. In addition, this method allows researchers to identify the development of concepts, research patterns, and research *gaps* in the field of public administration and digital-based education management. The research process refers to the *stages of Preferred Reporting Items for Systematic Reviews and Meta-Analyses* (PRISMA), which include identification, *screening*, *eligibility*, and inclusion of articles. Data collection was carried out by searching scientific articles in several academic databases, including Scopus, ScienceDirect, SpringerLink, Taylor & Francis, Emerald Insight, MDPI, ERIC, and Google Scholar. The selection of such databases is based on the credibility of the source and its relevance to the research theme. Article searches were conducted using keywords such as *collaborative governance*, *digital governance*, *education governance*, *value-based education*, and *public administration*. In addition, Boolean operators such as "AND" and "OR" are used to expand search results and retrieve articles that align with the research focus.

Research inclusion criteria include: (1) scientific articles that discuss collaborative governance, digital governance, education management, or value-based education; (2) articles published in the range of 2020–2025; (3) available in *full-text* form; and (4) in Indonesian or English. Meanwhile, articles that are irrelevant, duplicate, or lack clarity of research methodology are excluded from the analysis process. The data was analyzed using *content analysis techniques* to identify the main themes, concepts, and findings of each article. Furthermore, the results of the analysis were compiled descriptively and thematically to obtain a comprehensive understanding of the implementation of collaborative digital governance in the management of value-based education in the era of digital transformation.

## DISCUSSION

The results of the literature review indicate that the transformation of educational governance is moving towards a more collaborative, digital, and value-based model. These changes are not only influenced by technological developments, but also by the increasing complexity of educational problems that can no longer be solved through conventional bureaucratic approaches. In this context, education has undergone a paradigm shift from a hierarchical administrative system to a governance model that emphasizes multi-actor collaboration, digital technology integration, and strengthening the ethical dimension in its management process.

Studies show that *collaborative governance* emerged as a response to the limitations of traditional governance models that tend to be centralistic and less adaptive to change. In the education sector, this approach no longer places the government as a single actor in decision-making, but as a facilitator working with educational institutions, the private sector, communities, and society. These findings show that the complexity of educational problems, such as service quality gaps, curriculum transformation, and 21st-century competency demands, requires a participatory, integrative cross-sectoral approach. Thus, collaborative governance is not only understood as an administrative strategy but also as a structural necessity in modern educational governance.

On the other hand, the development of digital technology has accelerated the transformation of educational governance. A literature review shows that digital governance allows for fundamental changes in decision-making processes, data management, and educational services. Digital technology enables the creation of a data-driven governance education system that is more transparent, efficient, and responsive to community needs. In this context, digital platforms, educational information systems, and analytics technology are the main instruments in supporting the effectiveness of education governance.

However, the results of the study also show that the digitalization of education does not fully result in inclusive governance. Digital transformation has the potential to give rise to new forms of inequality, particularly in access to technology, digital literacy, and institutional capacity. The infrastructure gap between regions leads to uneven implementation of digital governance. In addition, the dominance of actors with greater technological resources has the potential to create power imbalances in the governance process. These findings show that

digital governance is not just a matter of technological innovation, but also closely related to issues of social justice, resource distribution, and institutional capacity.

The integration between collaborative governance and digital governance gave birth to the concept of *collaborative digital governance* as a new governance model in education. Based on the analysis, digital technology functions as an enabler, expanding the space for collaboration among actors through real-time information exchange, increased transparency, and strengthened public participation. In this model, collaboration is no longer limited by physical space and conventional bureaucratic structures but develops through a digital ecosystem that enables faster and more flexible coordination. Nevertheless, the success of collaborative digital governance depends heavily on institutional readiness and human resource capacity. Studies show that low digital literacy, weak coordination between institutions, and suboptimal regulations on data security and privacy are the main obstacles to implementing collaborative digital governance. In other words, digital transformation without strengthening institutional capacity can actually increase fragmentation in education governance.

Furthermore, the results of the study show that strengthening the value dimension is a very important aspect of managing digital education. The transformation of education that is overly oriented toward technological efficiency has the potential to shift the essence of education from a humanizing process. In this context, *value-based education* serves as an ethical foundation, ensuring that the use of technology remains oriented towards the formation of students' character, morals, and social responsibility. Values such as empathy, participation, inclusivity, and sustainability are important elements in supporting the governance of humanistic education.

*Collaborative digital governance* in value-based education management is a governance model that integrates multi-actor collaboration, digital transformation, and value strengthening as an interconnected unit. This model is not only oriented towards the effectiveness and efficiency of educational services, but also towards the development of an inclusive, adaptive, participatory, and sustainable education system in the era of digital transformation. Thus, the success of educational governance in the future is not only determined by technological sophistication but also by the ability to foster strong collaboration and maintain the human dimension in the educational process.

Although research on *collaborative governance*, *digital governance*, and *value-based education* has advanced substantially, significant research gaps remain.

1. Separation of Conceptual Studies.

Most previous research has addressed *collaborative and digital governance separately, without integrating them into a comprehensive education governance framework*. In fact, digital education transformation requires synergy between multi-actor collaboration and digital systems simultaneously.

2. Lack of Value-Based Education Perspective.

Previous research has tended to focus on technological efficiency, the digitization of services, and educational administration innovation, while the dimensions of values, morals, ethics, and humanism receive less attention in the digital education governance model. As a result, many studies have not explained how technology can be integrated with human values in educational governance.

3. Limitations of Integrative Studies in Education and Public Administration.

There have not been many studies that specifically examine *collaborative digital governance* from the perspective of public administration of value-based education. Previous studies have been more oriented towards the technical aspects of digital transformation than the development of an inclusive, participatory, and social-value-based education governance model.

4. Lack of systematic synthesis of literature.

To date, there is limited research that uses the Systematic Literature Review (SLR) approach to comprehensively map the development of concepts, challenges, opportunities, and implementation models of collaborative digital governance in the management of value-based education.

The novelty of this research lies in the effort to develop the concept of Collaborative Digital Governance in Value-Based Education Management through the integration of three main dimensions, namely:

1. Integration of Collaborative Governance and Digital Governance.

This research not only discusses collaborative governance and digital transformation in part, but also integrates the two within a single conceptual framework of adaptive and participatory educational governance.

2. Value-Based Education Approach as the Foundation of Digital Governance.

The main novelty of this research is the placement of *value-based education* as an ethical foundation in digital education governance. This research emphasizes that the

success of digital transformation of education is not only supported by technology, but must also be oriented towards moral values, humanism, social responsibility, and sustainability.

3. Humanistic Education Governance Model in the Digital Era.

This research offers a new perspective that *collaborative digital governance* is not only a model of educational bureaucratic efficiency but a strategic approach to building an inclusive, participatory, adaptive, and humanistic education system in the era of digital transformation.

4. Synthesis of SLR-Based Systematic Literature.

This research presents a systematic synthesis of literature using the PRISMA approach and *content analysis* to map the relationship between collaboration, digital technology, and value-based education in one modern education governance model

## CONCLUSION

This research shows that the transformation of educational governance in the digital era has encouraged the emergence of the collaborative digital governance paradigm as a new approach to educational management. This approach integrates multi-stakeholder collaboration with digital technology in decision-making, service management, and the implementation of education policy. In this context, the government no longer plays the role of a single actor but rather serves as a facilitator who works with educational institutions, the private sector, communities, and the community to build an education system that is more adaptive and responsive to change.

Digital governance offers a great opportunity to improve the effectiveness, efficiency, transparency, and quality of educational services through data-driven systems and digital technology. However, digital transformation in education also presents challenges, including technology access gaps, low digital literacy, limited infrastructure, and ethical and data security issues. This condition shows that the success of digital governance is not only determined by technological sophistication, but also by the readiness of institutions, regulations, and the capacity of human resources. This study found that the integration of values in educational governance is an important aspect in addressing the risk of dehumanization posed by the dominance of technology in education.

The *value-based education* approach serves as an ethical foundation, ensuring that digital transformation remains oriented towards the formation of students' character, morals, and human values. Values such as empathy, responsibility, participation, inclusivity, and sustainability are strategic elements in supporting the success of collaborative digital governance. *Collaborative digital governance* in value-based education management can be understood as an education governance model that is not only oriented towards technological innovation and bureaucratic efficiency, but also towards strengthening collaboration, system sustainability, and the humanistic dimension of education. This model has the potential to serve as a strategic approach to creating an inclusive, participatory, adaptive, and sustainable education system in the era of digital transformation. This research also opens up opportunities for further studies related to the development of a more contextual collaborative digital governance implementation model at various levels and educational environments.

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