

JURNAL ILMU ADMINISTRASI NEGARA JUAN e-ISSN: 2354-5798 p-ISSN: 2654-5020 Vol 12, No 2 November (2024): Page no: 92-101 Available online at https://ojs.umrah.ac.id/index.php/juan



Howlet's Multiple Streams Theory and Policy Innovaton: A Case Study of Digital Transformation in Indonesian Governance Post-Presidential Transition

Khanan Yusuf

National Research Agency (BRIN). Indonesia

Corespodence: <u>khananyusuf@gmail.com</u>

Check for

Received: October 28, 2024 | Revised: November 22, 2024 | Accepted: November 30, 2024

https://doi.org/10.31629/juan.v12i2.7050

ABSTRACT

Leadership transitions often present significant opportunities for policy innovation, especially in governance. This article explores the digital transformation within Indonesia's government following the presidential transition, using Howlett's Multiple Streams Theory as a framework. The theory, which examines the interaction of three streams problems, policies, and politics helps to understand how policy agendas are shaped and how windows of opportunity arise. The case study delves into how policy actors leverage these windows during governmental transitions to advance digital reforms. The research highlights the pivotal role of policy entrepreneurs and the combination of internal and external factors that influence policy decisions. Through a qualitative case study method, including in-depth interviews, document analysis, and participatory observations, the study reveals that the transition created a favorable political environment, which enhanced the adoption of digital policies. The findings indicate that the main challenges to digital reform include inter-agency coordination and infrastructure readiness, while the main opportunity lies in the strong political backing for digitalization. This paper concludes by emphasizing the critical role of policy entrepreneurs in aligning the three streams to ensure the success of digital transformation policies. The results offer valuable insights into how political changes can drive innovation in public policy, particularly in the context of digital governance.

Keyword: Multiple Streams Theory, Policy Innovation, Digital Transformation

INTRODUCTION

The transition of national leadership is often accompanied by profound changes in governance structures and policy priorities, particularly in countries undergoing significant political shifts such as Indonesia. These transitions frequently lead to the formulation of new agendas and the introduction of progressive policy innovations (Farazmand, 2004). One of the key areas that has gained significant attention in recent years is digital transformation, which is increasingly viewed as a tool to enhance bureaucratic efficiency, increase public access to services, and streamline decision-making processes (Vial, 2021). For Indonesia, the introduction of digital transformation has become a central focus in modern governance (Kraus et al., 2021; Zaoui & Souissi, 2020). However, despite its potential to improve public sector

performance, the implementation of digital transformation faces several challenges, notably bureaucratic complexities and fluctuating political dynamics (Ramli et al., 2023). This article seeks to examine how these factors influence the process of policy innovation in the context of digital transformation within Indonesia's government.

A key question that arises in this context is how the changing leadership, particularly following presidential transitions, can create a policy window to accelerate the adoption of digital transformation in Indonesia. The Multiple Streams Theory, developed by Howlett and adapted from John W. Kingdon's original model, offers an effective lens to understand the policy process in such a dynamic political environment (Howlett, 2014; Howlett & Mukherjee, 2014). This theory posits that policy windows open when three stream problems, policies, and politics converge (Howlett, 2018; Zahariadis, 2019). In the case of Indonesia, the presidential transition provides a unique opportunity for the policy windows to open, especially in e-government and the digitalization of public services. This model will be used to analyze how the various streams interact, the role of policy entrepreneurs in driving policy change, and the factors that determine the success or failure of digital transformation in the new administration (Howlett, 2017).

The urgency of this issue is evident, as digital transformation in Indonesia's public sector has become a priority in response to the increasing need for improved governance. The efficiency of public service delivery is vital to Indonesia's economic growth and social development, making the digitalization of public services an essential policy goal (Ahmad et al., 2021; Lappi et al., 2019). However, the bureaucratic hurdles and political tensions that arise during leadership transitions often impede the swift implementation of such initiatives. By analyzing this specific policy challenge, this research highlights the critical role that leadership transitions play in either facilitating or hindering the implementation of progressive reforms, such as digital transformation. Therefore, understanding the dynamics at play is crucial for policymakers and scholars alike, as it offers valuable insights into the intersection of politics, policy, and governance.

In this article, the focus will be placed on the interplay between the three streams in Indonesia's context, particularly how the incoming government can seize the momentum of a presidential transition to implement digital transformation policies (Apriani et al., 2024; Marsela & Limbongan, 2021). The changing political landscape often alters the power dynamics within government institutions, which can either create a conducive environment for policy innovation or slow down the necessary reforms (Hinings et al., 2018). The role of policy entrepreneur's individuals or groups advocating for policy change becomes pivotal during such transitions. These actors often work strategically to align the problem, policy, and political streams, effectively opening policy windows that allow for innovation and the introduction of new reforms. By utilizing the Multiple Streams Theory, the article will explore how these policy entrepreneurs influence the trajectory of digital transformation in Indonesia.

The research will also explore the factors that contribute to the success or failure of digital transformation policies in Indonesia, particularly during the transitional government period. Key questions include: What are the political, bureaucratic, and institutional factors that impact the policymaking process during this period? How do political alignments, leadership styles, and institutional resistance influence the adoption of innovative policies? By answering these questions, the research aims to provide a deeper understanding of the barriers and enablers of digital transformation, shedding light on how governance can be modernized despite the challenges posed by political transitions.

To address these issues, the article will employ a combination of theoretical analysis and empirical case studies. This will allow for a nuanced exploration of how digital transformation policies have evolved in the face of leadership changes in Indonesia. Additionally, the article will examine the role of key stakeholders, such as government officials, political actors, and civil society, in shaping the policy agenda. By doing so, it will contribute to the growing body of literature on public policy innovation, particularly in the context of leadership transitions and digital governance.

Article aims to offer new insights into the relationship between political transitions and policy innovation in Indonesia, with a particular focus on digital transformation within the public sector. By applying the Multiple Streams Theory to the case of Indonesia, the research will illuminate how the convergence of political, policy, and problem streams creates opportunities for policy entrepreneurs to drive innovation in government. Moreover, the findings will provide valuable lessons for other countries undergoing similar political shifts, highlighting the importance of leveraging policy windows to implement essential reforms. This contribution is not only relevant for Indonesia but also for the broader field of public policy, as it addresses the challenges of governance modernization in an increasingly digital world.

RESEARCH METHOD

This study adopts a qualitative approach (Patton, 2014), utilizing the case study method, to explore the evolution of digital transformation policies in Indonesia following the presidential transition. The research focuses specifically on the implementation of e-government within the broader digital transformation agenda. This method allows for an indepth investigation of the policy processes in a dynamic political and governmental environment. The data collection process is multifaceted, incorporating in-depth interviews with key policy actors such as government officials, politicians, and policy entrepreneurs who have been involved in shaping the digital transformation policies. Additionally, the study draws on document analysis, examining government policies, presidential speeches, relevant laws, regulations, and media reports that pertain to digital transformation in Indonesia. Participatory observation of seminars, policy discussions, and forums further enriches the data, providing real-time insights into the discourse surrounding digital reforms.

The data collected is analyzed using thematic analysis to identify recurring patterns and themes related to the interactions between the problem stream, policy stream, and political stream, as outlined in the Multiple Streams Theory (MST). This theoretical framework, initially developed by John W. Kingdon and later adapted by Michael Howlett, posits that public policy formulation occurs when these three streams converge at a critical moment, creating what is known as a "policy window." In the context of Indonesia's digital transformation, the problem stream is defined by challenges such as bureaucratic inefficiencies, limited access to public services, and a lack of transparency in governance. These issues have gained prominence in the wake of the presidential transition, where there has been growing public and governmental pressure for a more efficient administration. The policy stream, on the other hand, consists of proposed solutions or policy alternatives, with e-government emerging as a key policy response to address the challenges (Howlett & Ramesh, 2003; Janssen & Helbig, 2018). Experts, bureaucrats, and policy entrepreneurs play pivotal roles in advancing these policy alternatives onto the political agenda.

The political stream, as described by Howlett, pertains to changes in the political landscape, including shifts in party dynamics, public opinion, and political stability, which influence the feasibility of adopting specific policies. In Indonesia's case, the presidential transition brought about significant political changes that created new opportunities for reform. The rise of new political dynamics fostered a climate conducive to the introduction of innovative policies such as digital transformation. According to Howlett's interpretation of the MST, successful policy adoption occurs when these three streams converge, creating a window of opportunity that policy entrepreneurs can capitalize on. Policy entrepreneurs, including influential officials within relevant ministries, have seized this moment to drive the digital transformation agenda forward. By leveraging the Multiple Streams Theory, this research seeks to uncover how the confluence of political dynamics, public issues, and policy proposals

has facilitated the emergence of digital transformation policies in Indonesia, offering insights into the broader process of sustainable policy innovation in a changing political environment.

RESULT AND DISCUSSION

1. Results of In-Depth Interviews

Interviews were conducted with ten primary policy actors, including government officials, politicians, and policy entrepreneurs. The interview questions concentrated on their roles in the formulation of digital transformation policies in Indonesia.

Respondent	Position	View on Digital Transformation
R1	Ministry of Communication and Informatics Official	"Digital transformation is a top priority, especially to reduce slow bureaucracy. After the presidential transition, we gained momentum to accelerate e- government implementation."
R2	Member of the House of Representatives (DPR RI)	"Politics supports this initiative because the public wants change. We see an opportunity to push this agenda faster with the support of the new president."
R3	National Development Planning Agency (BAPPENAS) Official	"We have developed a roadmap for digital transformation. The challenge is how to mobilize resources and secure strong political support."
R4	Policy Entrepreneur (Academic)	"Our role as policy entrepreneurs is to bring together various stakeholders and advocate for the importance of digital transformation in various policy forums."
R5	Politician from the Governing Party	"The new president is very open to innovative ideas, making this the right moment to strengthen the digitalization agenda, especially for public services."
R6	Ministry of Home Affairs Official	"Inter-ministerial coordination is the main challenge. But with new leadership, there is stronger political will to create synergy."
R7	Head of Government Agency	"Digitalization is very helpful, but there are unresolved technical issues. The new government facilitates better collaboration among various agencies."
R8	Public Policy Expert	"We see a significant policy window for reform in this new era. However, the biggest challenge is how to maintain consistency in the long term."
R9	Policy Entrepreneur (Think Tank)	"The new government provides more open space for academics and research institutions to collaborate in policymaking related to digital transformation."
R10	Presidential Advisor	"The new president is very pro-technology, and this strengthens the digital transformation agenda. But we must also ensure that regulations support effective implementation."

Table 1. Result View on Digital Transformation

Source: Author, 2024

The results of the in-depth interviews with key policy actors indicate strong political support for digital transformation in Indonesia, particularly under the leadership of the new president, who is pro-technology and open to innovative ideas. However, challenges remain, particularly in terms of inter-ministerial coordination and securing the necessary resources and political backing for effective implementation. Despite these hurdles, policy entrepreneurs, including academics and think tanks, play a crucial role in advocating for digital transformation and facilitating stakeholder collaboration. Overall, while technical and coordination challenges persist, there is a clear momentum toward accelerating digitalization, with increased opportunities for collaboration between government, academia, and research institutions.

Interaction Among Problems, Policies, and Politics in Digital Transformation Policy Innovation According to the Multiple Streams Theory, the interaction among the three primary streams—problem stream, policy stream, and political stream—plays a crucial role in determining whether policy innovations will be successfully adopted. In the context of Indonesia's government following the presidential transition, this study reveals a strong interaction among these three streams.

- a. Problem Stream: Interviews with government officials and document analysis indicate a clearly identified issue: bureaucratic inefficiency and limited access to public services. In presidential speeches and various policy documents, this issue has been highlighted as a primary concern, as the public and stakeholders demand more rapid and efficient changes. The new administration has explicitly acknowledged this problem, particularly in the context of modernizing the bureaucratic system.
- b. Policy Stream: Policy solutions in the form of digital transformation, particularly through the implementation of e-government, have been proposed as a response to bureaucratic inefficiency. Document analysis, such as Presidential Regulation No. 95/2018 concerning SPBE, shows that the government has established a legal framework for the implementation of this policy, and with strong political backing, this solution is increasingly being adopted. Respondents from BAPPENAS emphasized that the digital policy roadmap has been in place for several years, but new political momentum has accelerated its adoption.
- c. Political Dynamics: The transition of leadership in Indonesia has resulted in a new political configuration that is more conducive to digital transformation. Interview data from politicians indicate that the new president is a strong advocate for technology and digitalization, which has become a significant political factor in accelerating policy implementation. This political current creates opportunities for policy entrepreneurs to advance the digital transformation agenda at the national policy level.

The change in presidency has opened a policy window where three streams converge harmoniously. The new president brings a robust reform vision, while both the issues and policy solutions are well-defined and supported by stakeholders. This illustrates how the interplay between problems, policies, and politics facilitates innovative policymaking for digital transformation in Indonesia.

2. Analysis of Policy Documents

The document analysis within this study involves a comprehensive review of key presidential speeches, legislative texts, and government-issued policies that underpin the digital transformation agenda in Indonesia. Among the crucial documents examined is Presidential Regulation No. 95 of 2018, which establishes the legal framework for the implementation of the Electronic-Based Government System (SPBE). This regulation serves as the cornerstone for Indonesia's e-government initiative, setting clear guidelines for the digitization of government processes and the modernization of public service delivery. By analyzing this document, the study aims to understand how the regulation facilitates the structural and procedural shifts needed to advance e-government across the country.

In addition to the regulatory texts, the study also includes an analysis of the 2024 Presidential Speech, in which the new president has repeatedly emphasized the importance of digital transformation as a vital component of bureaucratic reform. These speeches reflect the president's vision for a more efficient, transparent, and responsive government through the adoption of digital technologies. The study explores how these addresses influence public perception, set political agendas, and mobilize support for the ongoing digital transformation efforts. The rhetorical strategies employed by the president and their alignment with broader governmental reforms offer valuable insights into the political dimension of digital policy development in Indonesia.

Furthermore, the analysis incorporates the Strategic Plan of the Ministry of Communication and Information Technology (2024-2029), a document that outlines the comprehensive roadmap for Indonesia's digital transformation. This plan articulates the strategic objectives, key initiatives, and specific targets for the development of digital infrastructure, capacity building, and the integration of digital technologies into public services. By examining this strategic plan, the study seeks to assess how the government envisions the future of digital transformation in Indonesia and the steps it intends to take to ensure successful implementation. The document serves as a critical policy tool for guiding and monitoring the progress of digital reforms, and its analysis provides crucial context for understanding the broader direction of e-government policies in Indonesia.

Document Yea		Main Content Relevance				
Presidential Regulation No. 95/2018	2018	Legal framework for the implementation of e-government. Serves as the foundation for implementing digital transformation policies, especially in the government sector.				
President's Speech at the DPR Plenary Session	2024	Emphasizes the importance of Provides policy direction to digital reform to accelerate public services and bureaucratic reform. across ministries and agencies.				
Ministry of Communication Strategic Plan	2024	Roadmap for digital transformation Guidance for implementing in Indonesia, including digital digital transformation in both infrastructure development and government and society. human resource enhancement.				

Table 2. Componen Policy Documents Analysis

Source: Author, 2024

The analysis of policy documents reveals a clear and structured approach to Indonesia's digital transformation agenda. Presidential Regulation No. 95/2018 provides the legal foundation for the e-government system, establishing key guidelines for digitizing government processes and modernizing public services. The 2024 Presidential Speech highlights the political commitment to digital reform as essential for bureaucratic efficiency and transparency, setting the tone for policy direction and garnering support for the digital transformation. Additionally, the Ministry of Communication and Information Technology's Strategic Plan (2024-2029) outlines a comprehensive roadmap, including infrastructure development and capacity building, to ensure the successful implementation of digital initiatives. Together, these documents form a cohesive framework that guides and shapes the future of digital governance in Indonesia.

3. Participatory Observation

The researcher participated in several seminars and discussions centered around digital transformation, which have been instrumental in highlighting the critical challenges and opportunities of implementing digitalization within government structures. One such event was the National Digital Policy Forum 2024, a significant gathering of policymakers and academics. This forum provided a platform for discussing the complexities involved in incorporating digital technologies into governmental operations. The conversations at the forum underscored the importance of cross-sector coordination in ensuring the successful implementation of digitalization strategies. It was emphasized that without effective collaboration between various governmental sectors, achieving the full potential of digital transformation remains a significant hurdle. The discussions also revealed how technology can be leveraged to enhance the efficiency of bureaucracy, suggesting that a well-structured digital policy could streamline public service delivery and improve overall governance.

Another important event the researcher attended was the E-Government and Digital Transformation Seminar, where various government officials shared insights into the ongoing efforts to incorporate digital technologies into public administration. It was highlighted that the current political climate, under new leadership, is more conducive to the adoption of technological innovations within the public sector. This development is viewed positively, as it signals a shift toward a more forward-thinking approach in government operations. The seminar discussions highlighted that the leadership's support for digital transformation initiatives has fostered a more favorable environment for such reforms. Moreover, the officials noted that digital tools are gradually being integrated into governmental processes, which is expected to result in more efficient and transparent public services.

Despite these promising developments, challenges persist in the implementation of digital transformation policies. One of the major obstacles identified during the seminar was the issue of inter-agency coordination. As different government agencies often operate with varying levels of digital capabilities and different priorities, achieving seamless collaboration for digital transformation remains a significant challenge. However, there is considerable optimism about overcoming these challenges. The prevailing belief is that the support from the new leadership will accelerate the reform process and pave the way for more integrated and efficient digitalization efforts across the government. This optimistic outlook is grounded in the recognition that strong leadership and inter-agency collaboration are essential for overcoming barriers to digital transformation and ensuring that the full benefits of technological innovations are realized in the public sector.

4. The Role of Policy Entrepreneurs in Promoting Digital Transformation

Policy entrepreneurs play an essential role in advancing digital transformation by leveraging policy windows to accelerate the implementation of relevant policies (Fahmi & Arifianto, 2022; Lindgren et al., 2019). Through their strategic actions, policy entrepreneurs serve as critical intermediaries between issues, policies, and political actors, ensuring that digital transformation remains a prominent agenda in political discourse. These entrepreneurs, who may originate from government or academic sectors, have the expertise and networks to highlight the importance of digital transformation and its potential to drive national development. For example, academics from think tanks frequently contribute to policy discussions by publishing reports, participating in policy seminars, and engaging in forums that emphasize the necessity of embracing digital technologies. In doing so, they not only shape public understanding but also influence the direction of policymaking in favor of digital transformation.

One of the key functions of policy entrepreneurs is their ability to build coalitions among various stakeholders involved in the policy process. These stakeholders include government ministries, agencies, and legislative bodies, all of which are crucial in the decisionmaking and policy formulation stages. By facilitating collaboration between these groups, policy entrepreneurs help ensure that digital transformation becomes integrated into the national development agenda. Their efforts are particularly evident in policy forums where they push for the prioritization of technology-driven policies. These coalitions are instrumental in creating a shared vision for digital transformation, aligning the interests of key stakeholders, and providing a platform for coordinated action to implement technological innovations at a national scale.

Moreover, policy entrepreneurs are adept at exploiting windows of opportunity, a concept outlined by Kingdon and adapted by Howlett, which refers to the favorable political conditions that arise periodically to support significant policy change. Policy entrepreneurs are quick to recognize when political shifts, such as the election of a president who supports technological advancement, create a conducive environment for digital transformation. In these moments, policy entrepreneurs capitalize on the prevailing political climate to push for

the adoption of transformative policies. They are skilled in connecting pressing problems with feasible solutions, acting as catalysts that encourage political actors to commit to policy innovation. By seizing these moments of opportunity, policy entrepreneurs facilitate the rapid formulation and adoption of policies that drive digital transformation in response to national and global challenges.

5. Factors Influencing the Success or Failure of Policy Innovation

The success or failure of digital transformation policies is heavily influenced by several critical factors, each of which plays a pivotal role in shaping the trajectory of these policies. One of the most influential factors is political support, particularly strong backing from key political figures such as a newly elected president. The alignment of the digital transformation agenda with the vision of the new administration is crucial for garnering the necessary political will to drive these policies forward (Morakanyane et al., 2013; Rêgo et al., 2022). Findings from interviews with politicians highlight that a favorable political constellation, which includes both executive and legislative support, can significantly enhance the chances of success for digital transformation initiatives. When political leaders demonstrate a clear commitment to the digital agenda, it encourages both public and private sector involvement, creating a favorable environment for policy adoption and implementation.

However, despite robust political backing, challenges in inter-agency coordination pose a significant obstacle to the successful implementation of digital transformation policies. Research findings suggest that while political support may be strong, the effectiveness of policy execution can be undermined by the lack of coordination among various ministries and government bodies. Several respondents from the Ministry of Home Affairs and other agencies noted that sectoral egos often hinder policy synchronization, making it difficult to achieve the comprehensive implementation of digitalization initiatives. This fragmentation in coordination creates inefficiencies, delays, and sometimes contradictory approaches to digital policy, thus impeding progress toward the overarching goals of digital transformation.

Infrastructure capacity is another key factor that influences the success of digital transformation policies. The readiness of digital infrastructure plays a central role in determining whether the government's digital initiatives can be effectively realized. An analysis of policy documents indicates that the government has outlined plans to enhance digital infrastructure in the 2024-2029 roadmap. However, the successful realization of these plans requires substantial time, resources, and effective management. If these critical infrastructure developments are not adequately addressed, the pace of digital transformation may be slowed, limiting the impact of digital policies. Thus, the interaction between political support, inter-agency coordination, and infrastructure readiness is critical to determining whether digital transformation can emerge as a successful policy innovation. A lack of synergy among these factors could lead to significant barriers, whereas their effective management offers the potential for transformative, impactful reforms.

CONCLUSION

This study examines the innovation of digital transformation policies within the Indonesian government following the presidential transition, utilizing the Multiple Streams Theory developed by Howlett. Through in-depth interviews, document analysis, and participatory observation, the research reveals that the interaction among problem, policy, and political streams generates momentum for accelerating digital transformation. The problem stream, characterized by bureaucratic inefficiencies and limited public access to digital services, has instigated a push for change. The policy stream is supported by existing regulations, such as Presidential Regulation No. 95/2018 concerning SPBE, which offers solutions to the identified issues. The political stream, particularly after the presidential change, has fostered strong political backing for this policy innovation. A significant policy

window has opened for policy entrepreneurs, who play a crucial role in advancing this agenda through cross-actor coalitions and strategic policymaking.

The success of this policy innovation is influenced by several key factors, including robust political support from the president, the capacity of digital infrastructure, and interagency coordination. The primary challenge in implementing this policy lies in ensuring synergy among stakeholders and technical readiness across various levels of government. Enhancing Inter-Agency Coordination: The government must address the challenges of interagency coordination to ensure that digital transformation policies are implemented effectively. This can be achieved by establishing dedicated coordination teams or improving more efficient cross-sector mechanisms. By considering these recommendations, digital transformation in Indonesia can serve as a significant catalyst for improving bureaucratic efficiency, increasing public access to services, and strengthening governance in this new era.

REFERENCES

- Ahmad, J., Hardianti, Nilwana, A., Muliani, & Hamid, H. (2021). Digitalization Era: Website Based E-Government. *IOP Conference Series: Earth and Environmental Science*, *717*(1), 012047. https://doi.org/10.1088/1755-1315/717/1/012047
- Apriani, A., Wahdiniawati, S. A., Perkasa, D. H., Magita, M., Meliantari, D., & Widayati, C. (2024). Digital Transformation of SMEs: Boosting Online Shopping Interest through E-Commerce Adoption. *Dinasti International Journal of Digital Business Management*, 5(3), 595–611. https://doi.org/10.31933/DIJDBM.V5I3.2536
- Fahmi, F. Z., & Arifianto, A. (2022). Digitalization and Social Innovation in Rural Areas: A Case Study from Indonesia. *Rural Sociology*, 87(2), 339–369. https://doi.org/10.1111/RUSO.12418
- Farazmand, A. (2004). *Sound governance: Policy and administrative innovations* (A. Farazmand & R. Carter, Eds.). Greenwood Publishing Group.
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization*, *28*(1), 52–61. https://doi.org/10.1016/J.INFOANDORG.2018.02.004
- Howlett, M. (2014). From the 'old' to the 'new' policy design: design thinking beyond markets and collaborative governance. *Policy Sciences*, *47*(3), 187–207. https://doi.org/10.1007/S11077-014-9199-0
- Howlett, M. (2017). Policy design: What, who, how, and why? In *L'instrumentation et ses effets* (Issue March). Presses de Sciences.
- Howlett, M. (2018). Moving policy implementation theory forward: A multiple streams/critical juncture approach. *Public Policy and Administration*, *34*(4), 405–430. https://doi.org/10.1177/0952076718775791
- Howlett, M. P., & Mukherjee, I. (2014). Policy Design and Non-Design: Towards a Spectrum of Policy Formulation Types. *SSRN Electronic Journal*, *14*(11), 1–32. https://doi.org/10.2139/SSRN.2461087
- Howlett, M., & Ramesh, M. (2003). Studying Public Policy: Policy Cycles and Policy Subsystems. In *Studying Public Policy: Policy Cycles and Policy Subsystems* (2nd ed.). Oxford University Press.
- Janssen, M., & Helbig, N. (2018). Innovating and changing the policy-cycle: Policy-makers be prepared! *Government Information Quarterly*, *35*(4), S99–S105. https://doi.org/10.1016/J.GIQ.2015.11.009
- Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital Transformation: An Overview of the Current State of the Art of Research. SAGE Open, 11(3). https://doi.org/10.1177/21582440211047576/ASSET/IMAGES/LARGE/10.1177_2158 2440211047576-FIG5.JPEG

- Lappi, T. M., Aaltonen, K., & Kujala, J. (2019). Project governance and portfolio management in government digitalization. *Transforming Government: People, Process and Policy*, *13*(2), 159–196. https://doi.org/10.1108/TG-11-2018-0068/FULL/PDF
- Lindgren, I., Madsen, C. Ø., Hofmann, S., & Melin, U. (2019). Close encounters of the digital kind: A research agenda for the digitalization of public services. *Government Information Quarterly*, *36*(3), 427–436. https://doi.org/10.1016/J.GIQ.2019.03.002
- Marsela, N. M. K., & Limbongan, K. (2021). *Indonesian ict workers: Determinants and strategy to support national digital transformation*. Asian Development Bank Institute (ADBI). https://www.econstor.eu/handle/10419/238615
- Morakanyane, R., Grace, A. A., & O'Reilly, P. (2013). Conceptualizing Digital Transformation in Business Organizations: A Systematic Review of Literature. Uniwersytet Śląski, 7(1), 343–354. https://doi.org/10.2/JQUERY.MIN.JS
- Patton, M. Q. (2014). *Qualitative research & evaluation methods*. Sage Publications.
- Ramli, K., Suryanegara, M., & Hastiadi, F. F. (2023). Accelerating Digital Transformation in Indonesia: Technology, Market, and Policy. Economic Research Institute for ASEAN and East Asia (ERIA). https://scholar.ui.ac.id/en/publications/accelerating-digitaltransformation-in-indonesia-technology-marke
- Rêgo, B. S., Jayantilal, S., Ferreira, J. J., & Carayannis, E. G. (2022). Digital Transformation and Strategic Management: a Systematic Review of the Literature. *Journal of the Knowledge Economy*, *13*(4), 3195–3222. https://doi.org/10.1007/S13132-021-00853-3/METRICS
- Vial, G. (2021). Understanding digital transformation : A review and a research agenda. In *Managing Digital Transformation* (pp. 13–66). Routledge. https://doi.org/10.4324/9781003008637-4
- Zahariadis, N. (2019). The Multiple Streams Framework: Structure, Limitations, Prospects. In *Theories of the Policy Process* (pp. 65–92). Taylor and Francis. https://doi.org/10.4324/9780367274689-3/MULTIPLE-STREAMS-FRAMEWORK-NIKOLAOS-ZAHARIADIS
- Zaoui, F., & Souissi, N. (2020). Roadmap for digital transformation: A literature review. *Procedia Computer Science, 175,* 621–628. https://doi.org/10.1016/J.PROCS.2020.07.090