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Coercive Isomorphic Change in Digital Government Development: A Case Study of Digital Workspace Adoption

Kamilia Qurrotul Ain

Department of Public Administration Science, Universitas Indonesia, Indonesia

Zuliansyah Putra Zulkarnain

Faculty of Administrative Sciences, Department of Public Administration, Universitas Indonesia

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ABSTRACT

Digital government transformation leads to an integrated government process and creates new value and services. The digital maturity framework stresses that integrated processes and new service creation denote a high maturity level of the digital government. A step-by-step development is required to establish the maturity level. However, digital transformation studies have shown that it is not a linear process but rather a result of external influences forcing a government to adopt an advanced information and technology (IT) system without considering organizational needs and change capacity. This study extends the digital government transformation literature by exploring the Integrated Digital Workspace Smart Office (IDW-SO) development case at the Ministry of National Development Planning (MNDP) through an isomorphism lens. IDW-SO adoption occurs within the low level of Indonesia's Digital Competitiveness Index (DCI), the standard digital talent of the ministry, poor IT infrastructure, and low organizational digital capacity. This study reveals that IDW-SO development results from coercive isomorphism, which creates a gap between IT systems and ministerial needs. Furthermore, the adoption process has the potential for IT application duplication within the ministry, making it an inefficient IT investment.

Introduction

Digital transformation involves adopting digital technology to improve processes and services, organizational performance, relationship frameworks with stakeholders, and create new value (Vial, 2019). This transformation process is concerned with the problems faced by many public sectors, such as low work productivity, governance barriers due to silos of mentality and working, operational inefficiency, and slow responses to citizen demands (Hie, 2019; Ivanschitz & Korn, 2017; OECD, 2020). Digital technology is expected to produce a new way of working for public organizations that are more integratedto improve the quality of policies and deliver new services according to public needs (Mergel, Edelmann, & Haug, 2019).

As part of the use of digital technology, a digital workspace system is considered to be able to create an integrated work system, increase efficiency, and effectively manage resources (Attaran et al. 2019; Li & Herd 2017). Place and time flexibility are the primary benefits of digital workspace systems, which are correlated with operational efficiency and resource usage optimization (Dittes et al. 2019; Veit

& Huntgeburth 2014). Furthermore, the system is a governance platform that helps the integrated data collection process support the decision-making process in an organization (Weber 2009; Dittes et al. 2019).

The choice to use new technologies in digital transformation is a response to internal and external pressures (Fountain 2004; Dunleavy 2006). Fountain explains that the diversity of new information technologies adopted by public organizations is inseparable from the pressure of external stakeholders, such as the business sector collaborating with a government agency (Fountain 2004). Mergel et al. (2019) confirm that external forces greatly influence digital transformation, including the use of new digital technologies.

However, studies that reveal the conditions under which governments adopt digital technology in response to external pressures and their impact still need to be conducted (Casterlnovo, 2018). This study is essential because the benefits of new digital technologies are closely related to the maturity of the digital government. The use of digital workspaces can be optimal when an organization has reached a high level of digital government maturity, as the study conducted by Nielson and Jordanoski (2020) in Australia, Denmark, and South Korea categorized as having high maturity rates. One of the essential factors in a high level of digital government maturity is the creation of active interactionsbetween units in an organization, business models, and human resource capacity (Selimovic et al. 2021). Thus, examining the adoption of advanced digital technologies by public organizations that are not aligned with a country's digital government maturity level can explain the rationale and impact on digital government development.

This study enriches the digital government literature by analyzing the case of the adoption of an integrated digital workspace (IDW) by the Ministry of National Development and Planning (MNDP), Republic of Indonesia. The MNDP adopted the Integrated Digital Workspace-Smart Office (IDW-SO) at the end of 2019, as stipulated in the Circular Letter of the Minister of National Development Planning Number 1/2020. The goal is to achieve a flexible and integrated work system that operates outside the office and uses a communication platform to support data integration. This system is expected to help the MNDP utilize the development data in each unit to monitor, evaluate, and prepare national development plans annually and for five years thereafter. Using the perspective of isomorphism, this study reveals how external pressures determine the adoption of IDW digital technology by the MNDP without considering the government's digital maturity level (Sabani et al., 2019) and its impact on e-government system development.

Studies of digital transformation by Dunleavy et al. (2006) and Mergel et al. (2019) confirm the existence of internal and external driving factors. External factors include organizational environmental pressures (citizens, the business sector, and political factors) and technological change. Meanwhile, internal factors stem from the need to change analog systems to digital systems to manage physical documents and internal organizational processes of the bank.

The differences in the driving factors have different impacts. The external drive of digital transformation tends to produce short-term effects (outputs), whereas internal impulses canhave long-term impacts. This change focuses on organizational relationships, competencies and mindsets (Mergel et al., 2019). A literature review first parses the literature on digital transformation and digital work and further discusses isomorphism as a reference to understand the influence of external pressures on digital transformation and the adoption of digital work systems.

According to Perkin and Abraham (2017), there are three fundamental aspects to understanding digital transformation. First, digital transformation generates an impact that cannot be avoided as a boost in the environmental dynamics. The results of digital transformation will be unnoticed, liked, or not. An

organization's response to change or lag is a consequence. Second, digital transformation is more than just the use of technology; it also includes strategies, processes, organizational culture, behaviors, and human resources. Finally, digital transformation is a fundamental and comprehensive method of change in organizations. The emphasized aspect relates to transforming resources, priorities and processes.

Digital transformation broadly covers technology and processes (Perkin & Abraham, 2017). The series of processes described by Mergel et al. (2019) show that digital transformation touches various objects through specific processes to achieve a result. According to Vial (2019), the elements of using technology as an object of digital transformation include transformations in social, cellular, analytical, and Internet of Things (IoT) technologies, platforms, and ecosystems. This object will be adapted to the context of the change that the organization aims for.

The goal of the transformation object determines the process leading to the result. They can take the form of digitizing processes (tasks and communications), physical documents, relationships, services, new technologies, and new competencies (Mergel et al., 2019).Processes can also be carried out through changes in organizational structure, culture, leaders, and management of inertia and resistance (Vial, 2019). This has an impact on the results of this study. Digital transformation in the public sector involves several processes, including: The process is defined as the various stages and procedures carried out within an organization (Mergel et al., 2019). It involves elements that drive digital transformation (reasons), objects, processes, and results, covering outputs that can be understood as measurable results, outcomes that describe the effects of implementation or results, and the long-term impact that contains organizational changes as a whole, including values (Mergel et al., 2019). Thus, it can be seen that the series of stages in the digital transformation process is the achievement of an element of impact or long-term effect in the form of value creation.

One adoption of digital technology in digital transformation is digital work (Attaran et al., 2019). Dittes et al. (2019) divided the three forms of digital work based on their technology and purposes. First, a digital work system utilizes video conferencing technology and mobile devices. The goal is to enable collaboration anywhere and at any time. Second, digital work social media optimizes social media to accelerate the work collaboration process and supports the creation of new ideas. Third, a digital workspace uses technology for open office spaces and desk-sharing. The goal is to support collaboration and create new interpersonal relationships. The focal point of a digital workspace is the development of a flexible and integrated system. This application will also help organizations manage documents and information using an integrated system, such as the goals to achieve in the digital transformation concept.

Attaran et al (2019) examine three main pillars of building a digital workspace: making a physical workspace into an agile space through the agile workspace, technological change,and creating collaborative relationships. First, agile workspaces load the transformation of workspaces into increased utilization of platforms capable of supporting integrated systems. This effort results in a physical reduction in the workspaces. Second, the organization must own digital technology, and each individual involved in the system must be provided with a facility. Technological aspects must include the integration of cloud computing, big data, and mobile and search-based applications. Third, collaboration departs from the importance of information dissemination within the context of geographical limitations of the study. Collaboration includes information sharing, communication, coordination, and teamwork fully supported by digital technology. These conditions facilitate easy, fast, and inexpensive governance (Attaran et al., 2019).

Digital workspaces emphasize the creation of an integrated government system or e-government. At a high maturity level of the digital government, adopting digital workspaces can only provide optimal results when an organization or country has reached the transformation stage (Veit & Huntgeburth, 2014). The transformation stage describes a government system implementing one-stop government, integrated e-government services, re-engineering business processes, and e-democracy. This shows that digital workspace systems are at the stage of transformation or at high maturity levels within the framework of digital government development, based on variable cost, usability, complexity, and integration.

Isomorphism generally describes changes in an organization in response to its external environment. DiMaggio and Powell (1991) explain that an organization will adopt new things by examining the achievements of other organizations in similar sectors. Such conditions produce a homogeneous organizational character (Currie, 2012). On the one hand, thiscondition makes it easier for an organization to follow its development path. Still, on the other hand, there is often inefficiency due to ignoring the contact aspect of an organization (DiMaggio & Powell 1991; Beckert 2010).

Research in European Union countries shows that the benchmarking process, as a form of adoption for institutional change, has absorbed large amounts of capital but has yet to create new value successfully (Codagnone et al. 2015). Furthermore, Frumkin and Galaskiewicz (2004) show that institutional isomorphism leads to the creation of a uniform, centralistic, and formal bureaucratic structure due to efforts to adopt other organizational change models that are considered more successful, without considering the context of the organization.

Di Maggio and Powell suggest two types of isomorphism: competitive and institutional. As quoted by DiMaggio and Powell (1991), Hannan and Freeman (1977) explain competitive isomorphism that rests on four systems of rationality: market competition, niche change, and fitness measures. Institutional isomorphism departs from the realm of institutional theory, revealing organizational homogeneity in a particular field. DiMaggio and Powell (1991) elaborate three mechanisms of isomorphism consisting of (1) coercive isomorphisms derived from political influence and legitimacy issues; (2) mimetic isomorphisms resulting from the standard response to uncertainty; and (3) normative isomorphisms associated with professionalization. Nevertheless, this typology sometimes differs empirically or is related to one another. Although the three mechanisms are interrelated, the driving factors of each mechanism may differ and produce different results.

Coercive isomorphism results from formal and informal pressure on an organization from another organization, which is seen as a role model (DiMaggio and Powell, 1991). Such pressurecan be in strength, persuasive, or an invitation to join or follow in the footsteps of a relatively more advanced organization. In this type, coercive pressure shows the dependence of an organization's resources on external conditions. For example, the relationship between government agencies and stakeholders from the private sector or IT consultants encourages them to adopt certain digital technologies by referring to the knowledge and the need to strengthen relationships with these stakeholders (Hwang & Choi, 2017). Under certain conditions, organizational changes respond to government mandates and political pressure. For example, the establishment of the Government Performance and Results Act in the US forces all public organizations to ensure the achievement of goals through the management and reporting of performance information (Choi 2021).

The second mechanism of isomorphism is mimetic change (DiMaggio & Powell, 1991). Uncertainty also drives organizations to imitate. Factors such as a lack of understanding of technology in an organization, vagueness of the purpose of institutional change, and uncertainty of the outcome of environmental change

trigger an organization to take examples from other organizations. This isomorphism mechanism is known as the mimetic mechanism. Generally, this mimetic mechanism is created when an organization faces complex problems while trying to find a solution that is costly and risky. Consequently, organizations tend to imitate or model other similar organizations that have successfully addressed similar problems (Hwang & Choi, 2017). A study conducted by Probert (2021) concluded that the MTE, the England/China Mathematics Teacher exchange program initiated in 2014 and adopted by the UK, is a form of mimetic isomorphism. Adoption aims to use a method of teaching mathematics in Shanghai, China, which has been successfully applied in the UK.The third form of isomorphic change is normative, especially the impact of professionalization. According to DiMaggio and Powell (1991), professionalization is the collective effort of members of a field of work to establish the conditions, knowledge, expertise, and work methods to control production quality. Professionalization aims to develop cognitive foundations and legitimacy as the basis for the independence or autonomy of a job (Belle, 2019). At some point, normative isomorphism is a form of pressure resulting from the development of a profession. Its main objective is to grant legitimacy through the licensing and accreditation of educational institutions (Simon, 2016). In addition, it establishes a network of professional organizations that play a role in strengthening the standardization and quality of the profession. Consequently, employees with the same educational background solve problems using the same method (DiMaggio and Powell 1991). This action is inseparable from the standardization established and inherent to the profession.

Methods

This study used a qualitative approach to explore and understand the digital workspace adoption process in the IDW-SO system at the MNDP. Research Data were collected using qualitative techniques through in-depth interviews using purposive selection and snowball sampling, supported by literature source studies. The respondents included policy analysts, senior planning specialists, and IT experts involved in developing the IDW-SO from the MNDP, policy analysts from the MoAR, and IT experts from the MoCI. Fieldwork was conducted from January to July of 2022.

The research setting is the MNDP as the focus of the IDW-SO system, and the Ministry of Administrative Reform (MoAR) and the Ministry of Communication and Informatics (MoCI) as the two leading agencies in developing Indonesia's e-government systems. This analysis focuses on the driving factors of change, the MNDP's digital maturity, the adoption of IDW-SO through a coercive isomorphism lens, and its impact on digital government development.

Results and Discussion

Based on the digital government model, Baum and Maio (2014) concluded that organizations must fulfill the transformation stage to optimize the utilization of digital workspaces. Previous research found that Indonesia's e-government development was only at the transaction stage, indicating that Indonesia still needs to overcome various obstacles in the form of poor information and communication technology supporting infrastructure, inadequate human resources, and a less supportive environment in e-government applications (Sabani et al., 2019). Furthermore, the adoption of the digital workspace conceptually still has different definitions and needs to be understood the digital workspace practice (Williams & Schubert 2018). These conditions increase the potential for isomorphicmechanisms, owing to the limited resources of the MNDP to implement digital workspaces. Consequently, digital technology adoption has advanced technological use for internal work but cannot improve business processes and service quality (Codagnone et al. 2015).

The primary purpose of the MNDP's use of the integrated digital workspace-smart office (IDW-SO) is to update organizational governance, change employee work patterns, and increase the efficiency and effectiveness of achieving organizational goals. IDW-SO is the central ecosystem that combines all the systems in the organization. The IDW-SO has five layers based on the concept of The Tip of Iceberg. This idea illustrates how the IDW-SO has a surface layer or front-end layer, which is the face of the ecosystem. Moreover, the construction of the IDW-SO is supported by 4 (four) other layers with equally important roles.

The first layer is the management tool layer (frontend). This layer is the first to play a role in ecosystems. It contains various applications to support the tasks and functions of the MNDP. The second layer comprises the superstructure and infrastructure. The superstructure consists of various regulations or procedures that form working mechanisms, whereas the infrastructure consists of information technology, data, digital libraries, analytics, servers, governance, and data centers. The third layer is visual collaboration, which is a control room that helps managers monitor organizational processes. This visual collaboration space can be in the form of statis (settled) and portable spaces that support mobilization. The fourth layer is mobile hardware tools, which are devices that support the process of mobilization to perform the tasks and functions of the organization. The last layer is cybersecurity for data protection. For this purpose, the MNDP has an Internal Response Cyber Security Team (CSIT) that collaborates with cyber security teams in other ministries.To build the IDW-SO, the MNDP adopted the Bitrix application, which is a leading global application. Bitrix is a privately owned application that provides services or buys and sells the right to use it, and is headquartered in Singapore. The selection of this application was in the direction of the head of the agency. The MNDP buys the right to use it for one year to gain access to the agencies. In its planning, the MNDP adjusted the Bitrix application, especially by managing server access independently to protect internal data from external access. This internal data protection aims to prevent parties outside the MNDP from seeing and utilizing internal data, considering that many countries and companies use the Bitrix Singapore application. In addition, restrictions are placed on MNDP employees by imposing selection and passwords for users.

4.1 Driving Factors

The MNDP built the IDW-SO in response to President Widodo's speech in early 2019. The President emphasized the importance of fast and efficient governance, which requires robotics technology. He reemphasized the mandate of Presidential Regulation No. 95/2018 on Electronic-Based Government Systems, stressing the establishment of super apps to create system integration among government institutions. The external push in the form of a presidential mandate and regulation is the main factor that determines policymakers' decisions in the MNDP to initiate the use of IDW-SO.

Nevertheless, the adoption of IDW-SO was not explicitly stated in the strategic plan for the MNDP. The choice to use the application depends on the internal conditions of the organization (Interview, Policy Analyst, MNDP, 2022). As the agency responsible for formulating national medium-term development plans, the MNDP plays a central role in coordinating the planning process involving central ministries and regional governments,providing data for central ministries and regional governments to evaluate and formulate their strategic planning, and to assess the achievement of development program targets, both national and sectoral, by ministries and regional governments.

The IDW-SO development team at the MNDP explained that this system addresses the institution's needs, which initiated the concept of digital workspaces before the presidential direction urging every government agency to adopt digital technology to integrate data and establish an agile agency and

collaborative governance. The development team realized that the concept of digital workspaces originated from and was developed by private-sector organizations. Therefore, adopting digital workspaces in public organizations requires an adjustment process. The study and practice of digital workspaces globally that show success stories for organizations, especially the private sector, to improve organizational performance is the primary reference for the MNDP (Interview, Policy Analyst, MNDP, 2022).

The president's strategic direction, presidential regulations, and the MNDP's dependence on external resources, especially the support of Singapore's Bitrix provider, are the determining factors for IDW-SO adoption. The study and practice of digital workspaces around the globe encourage the use of the Bitrix application to implement IDW-SO. Consequently, the MNDP has adopted digital technology that exceeds the requirements of the digital government's maturity level. Although the MNDP is one of the government institutions that has an excellent predicate in the e-government development ranking as a result of the assessment of the Ministry of Administrative Reform (2018), the evaluation of the MNDP's governance shows that the role, function, and mechanism of organizational work have not been integrated, anda national data center has not yet been accomplished, thus undermining the quality of development policies (Ministry of National Development and Planning 2020).

4.2 MNDP's Digital Government Maturity and Digital Workspace

The 2020 Regulation of the Minister of Administrative Reform on the Evaluation of Electronic Government is the basis for assessing the digital government maturity level, both nationally and by government agencies. The results of the MNDP digital government maturity level from 2017 to 2020 are as follows (KemenPAN RB 2020): (a) business processes have not created integration and collaboration between directorates; (b) there is a need to increase digital talent; (c) the program control and evaluation system has not been systematically established; (d) the KRISNA application with applications owned by other government agencies, such as the SAKTI of the Ministry of Finance, has not been integrated; and (e) the management of IDW-SO has not been optimal as a result of problems of work integration between directorates, limited digital talents, and the lack of interoperability, both between directorates and between the MNDP and other government agencies.

The evaluation results show that the adoption of IDW-SO aims to create integrated, collaborative, and agile governance and improve the quality of organizational performance (Kementerian PPN/Bappenas, 2020). The IDW-SO initiative implemented the MNDP's strategic plan 2015-2019, namely, improving the quality of national development plans by improving the quality of business processes and building an integrated development database easily accessible by all central and regional government agencies. The starting point for building the IDW-SO is based on the concept of a Flexible Working Arrangement (FWA) (Ministry's Circular Letter No 2/2020). This concept generally emphasizes increasing employee motivation, which includes flexibility in working time (flextime), flexibility in thedivision of labor (job sharing), and flexibility in the workplace (telecommuting) (Robbins & Judge, 2018).

IDW-SO technology can help MNDP conduct performance assessments more objectively with measurable output measurements. In contrast, IDW-SO has a cloud feature that can manage various types of data, information, and knowledge (Interview, IT Expert, MoCI, 2022). Furthermore, MNDP claims that adopting IDW-SO creates flexible work from anywhere and reduces operational costs to increase efficiency of the organization. The use of IDW-SO has grown during the COVID-19 pandemic, which has forced civil servants to work from home.

For these purposes, IDW-SO uses Bitrix digital technology, one of which is that data protection becomes very important when the working mechanism in the organization optimally uses a flexible work

method. Furthermore, this method requires data exchange, information, and integration in the MNDP. Data integration is a prerequisite for interoperability (Othman & Razali, 2018). In other words, the Bitrix provides a data protection and integration system that This supports flexible work mechanisms.

However, optimizing the use of Bitrix digital technology has faced challenges due to the following factors: first, the MNDP policy requires civil servants to return to work in the office; and second, the disclosure of data and information, both between directorates within the MNDP and between the MNDP and other government institutions. The obligation for civil servants to work in offices began to be enforced at the beginning of 2022, in line with the decreasing spread of COVID-19. This policy is undoubtedly contrary to the purpose and usefulness of IDW-SO, namely, building agile workspaces to reduce physical workspaces in the office and reduce office operations owing to flexible work methods (Attaran et al., 2019).Meanwhile, there are differences in perceptions between decision-makers in each MNDP directorate regarding data and information disclosure, especially the classification of data that is open for both internal organizational purposes and other public organizations. Each directorate still has the authority to determine confidential and open data and information to share with other parties (Interview, MNDP, June 17, 2022).

Data integration is challenging and impossible to achieve (Interview, IT Expert, Ministry of Communications and Information, 2022). The IDW-SO serves as a digital platform to integrate the needs and objectives of many information systems owned by various directorates in the MNDP, covering nine areas of government affairs. Each directorate manages and stores its development data independently rather than in the data center. This study shows that business processes involving all directorates are yet to be collaborative, contrary to the fundamental requirements for adopting IDW-SO digital technology (Interview, Policy Analyst, MoAR, 2022).

Integrating data and information is still limited to administrative functions but has not influenced the work culture that reflects the silo of mentality and work (Interview, an Academic, Padjajaran University, 2022). Consequently, digital technology has not yet built interoperability, which is one of the advantages of implementing IDW-SO models. Thus, adopting such digital technologies no longer correlates with efficiency, instead generating new costs, that is, financing the operation and maintenance of the IDW-SO technology.

Following the digital maturity framework, it can be concluded that the Indonesian government has reached the transactional stage. An academic assessed that the MNDP needed more time to develop the digital workspace concept (Interview, Academic, Padjajaran University, 2022). A crucial issue is the capacity of human resources to build and operate a system. In line with academic assessment, a policy analyst from the MoAR pinpoints the caseto the Collaboration Planning and Budget Performance Information system developed by the MNDP, known as KRISNA. This e-planning, budgeting, and performance system has not worked properly because of the digital competency gap between the MNDP and other government agencies.

Looking at MNDP e-government practice, one can analyze the following: (a) Generally, information technology is still at the level of email interaction. This study found that the information submitted on the official website was inconsistent, especially regarding the agency's email addresses. For example, the address on the official website is humas. bappenas@gmail. com, but the address on the WhatsApp account is humas@bappenas.go.id (Kementerian PPN/Bappenas, 2021), and (b) the MNDP is unable to complete information that can be accessed online, such as performance reports for 2019 and 2021 (Kementerian PPN/Bappenas, 2020). In this case, a senior staff member of the MNDP acknowledged that the administrative flow was still paper-based before the IDW-SO (Interview, Secretary to the Regional Development Directorate of the MNDP, 2022).

4.3 Coercive Isomorphism in the IDW-SO Adoption and Its Impact

Examining the digital transformation process, the development of IDW-SO by the MNDP is estimated to have yet to achieve a long-term impact (impact), that is, the non-establishment of integration and collaboration in the organization (Mergel 2019). To date, the main benefits of adopting IDW-SO have been the change from analog to electronic administration processes and increased employee expertise in operating IDW-SO applications. With this change, the IDW-SO has yet to integrate development data that the entire organizational unit can use.The data and Information Center (DIC) of the MNDP, the leading unit in the adoption of IDW- SO, explained that IDW-SO, with Bitrix technology, had undergone adjustments to meet the organization's needs. Although the technology is widely used by private organizations that have succeeded in improving their performance, the MNDP does not use IDW-SO in the private sector as a reference. According to the DIC, adoption results from a policy learning process that combines needs, experiences, and new digital technologies (Interview, IT Expert, DIC the MNDP, 2022).

From the perspective of isomorphic change, the adoption of IDW-SO is a response to the president's direction and fulfillment of regulations on developing electronic-based government systems or forms of coercive isomorphism. On the one hand, this change can accelerate digital transformation. Still, on the other hand, this acceleration leaves problems related to integrating data and information between units that still need to be built, business processes that still need to reflect collaboration and limited human resources that can manage these technologies. The MNDP realizes that the adoption of IDW-SO has experienced obstacles because the ongoing work mechanism still tends to be siloed, and employees of the MNDP have not fully learned the demands of changing work mechanisms (Interview, Senior Planning Specialist, MNDP, 2022). Furthermore, the operational costs of Bitrix digital technology are not directly proportional to the benefits of IDW-SO technology to support the achievement of the performance targets set out in the strategic plan.

The coercive isomorphism that drives the adoption of the IDW-SO impacts its use for all MNDP directorates. Each directorate must meet the Bitrix systems and standards to connect with the IDW-SO ecosystem. However, these efforts carry risks and potentially need to be improved in the second and third tiers of the IDW-SO. The second layer is the superstructure andinfrastructure. The superstructure contains regulations and procedures for the mechanics of the work of individuals and collaborative units within the organization. This condition is still an obstacle to realizing it. This condition relates to the infrastructure containing information technology, data, digital libraries, analytics, servers, governance, and datacenters. The MNDP realizes that the infrastructure aspect still needs to show the integration of various data and information between directorates (Interview, Senior Planning Specialist, MNDP 2022). This obstacle is closely related to the working mechanism that tends to be siloed because collaboration occurs when all units in an organization exchange data and information to support the decision-making process.

The third layer, virtual collaboration, is optimal only when a collaborative work mechanism is established between the directorates. When this condition is yet to be formed, the benefits of visual collaboration as an instrument of control in the organization become weak because it is limited by the working mechanism between units that tend to be separate. In other words, this instrument effectively controls processes within a single directorate but needs to be improved by considering the entire process in the organization. Consequently, the optimum benefit of IDW-SO is to build an electronic administrative flow.

From the MoAR's perspective, isomorphic change is inevitable (Interview, Policy Analyst, MoAR, 2022). The contributing factors include the gap in the competence of state officials in managing digital

technology, reluctance to adapt to technological developments, and the capacity of government institutions to implement changes. External pressure to make changes often becomes a determining factor for public organizations to implement reforms. In the short term, isomorphic changes can drive rapid changes. However, in the long run, there is no sustainable change or creation of new problems, such as the lack of alignment between theThe MNDP's plan is to make IDW-SO a joint application to support development planning in ministries and government super apps as part of the electronic-based government system.

Referring to the argument of Mergel et al. (2019), IDW-SO is a technological change (object) for digital transformation, stressing an organization's needs. However, the MNDP sets a target for 2023-2024 to expand IDW-SO as a benchmark for digital-based government systems in development planning or national planning 4.0 (Kementerian PPN/Bappenas, 2020). Based on the MNDP's transformation roadmap, ministries should adopt IDW-SO technology to improve development planning quality and synchronize their strategic plans accordingly. Therefore, the MNDP initiated the expansion of this technology to become the backbone of the national development planning system that connects various ministries. However, the initiative faces challenges considering that, until now, the MNDP does not have a technology development design to meet the needs of every government agency and is in line with the architecture of an electronic-based government system (Interview, a Senior Planning Specialist, the MNDP, 2022).

Codagnone et al. (2015) in their study explained that the benchmarking process is a form of isomorphic change. As a result, changes that often occur do not project long-term impacts on organizations. This study shows the challenges faced by government institutions when adopting IDW-SO technology to improve the quality of development planning according to the MNDP's initiatives. The main challenge is to confirm the technology and institutional capacities of ministries and their needs.

These challenges relate to data and information integration, business process changes, building agile workspaces, and interoperability to facilitate collaboration. The MNDP has faced challenges since the adoption of the IDW-SO, impacting the suboptimal use of digitaltechnology. Looking at the development of IDW-SO in the MNDP, efforts to encourage ministries to use IDW-SO will produce problems similar to those faced by the MNDP. The MNDP designed the IDW-SO as an ecosystem based on the needs of the organization. Thus, technology does not necessarily correspond to the context of other government institutions.

Differentiation among ministries is related to digital capacity and defining agency needs from human resources, information technology facilities and infrastructure, desires, and leaders' commitments (Interview, an IT Expert, MoCI, 2022). Furthermore, limited human resources forced the ministry to rely on external IT experts. Currently, the need for IT experts has become a concern for MoAR, which is responsible for constructing an electronic-based government system.

Making the IDW-SO an instrument to support the development planning system in each ministry requires expert support to manage the technology. Therefore, the MNDP must consider the availability of these experts for the benefit of both the MNDP and the ministry. As long as these experts are not yet available, the MNDP must actively deploy its experts to accompany the ministry, even though the existing conditions show that the MNDP is experiencing a shortage of human resources to run the IDW-SO (Interview, a Policy Analyst, the MoAR, 2022).

In response to these conditions, the MoAR recommends duplicating the IDW-SO instead of adopting it. Duplication is easier and more efficient because it exemplifies existing technology with adjustments based on organizational needs and capabilities. According to Fawcett and Marsh (2012), duplication is in line with the change process; thus, using technology is more efficient because it adapts to the capabilities

of the organizational resources. Similarly, Miller and Banaszak-Holl (2005) argue that digital technology duplication is oftenthe government's choice, including in Indonesia, because it accelerates public organizations to gain legitimacy to innovate and quickly provide visible results in terms of efficiency and effectiveness.

However, this duplication process is challenging. The biggest problem is the competence of human resources in developing innovations according to the needs and capabilities of an organization. The institutional inability to make adjustments will only aggravate the problem of duplication of information technology applications experienced by Indonesia (Interview, Policy Analyst, MoAR, 2022).

Kupi and McBride (2021) revealed that one of the success factors of digital government development is understanding and agreeing with the government institutions involved, both developers and users. Therefore, the MNDP's initiative to make IDW-SO a common platform for national development planning requires collaboration with MoAR, MoCI, and other ministries as users of digital technology. The purpose of the collaboration was to redesign and duplicate an IDW-SO that was compatible with the needs and capacities of government institutions as users. Conversely, developing IDW-SOs for other ministries without considering their institutional capacity and conditions can result in repeated isomorphism, that is, the adoption of IDW-SOs by the ministry based on regulatory impulses that must be satisfied.

Furthermore, Kupi and McBride (2021) explain the potential for recurrent isomorphism because the urge to build digital-based innovations quickly is not a dissertation with managerial support, funding, and experts who manage and develop new digital technologies. In conclusion, the development of IDW-SO by the MNDP, which is relatively fast in creating integrated governance as directed by the president, is illustrated. The case of the MNDPmarks coercive isomorphism in the adoption of IDW-SO; thus, the impact is not only on the under-optimization of IDW-SO utilization but also on the incompatibility of digital technology and the non-establishment of interoperability between IDW-SO and information technology applications that other government institutions have used.

This problem has also created new complexities in the development of the Indonesian digital government. The MoAR and MoCI, as leading institutions for developing e-government systems, have a strategic plan to create super apps as the leading platform for various government affairs and public services, including development planning (Interview, Policy Analyst, MoAR, 2022). The MoAR projections state that the construction of super apps took approximately four years, while at the same time, the MNDP is developing IDW-SO.

The biggest challenge is building a digital workspace to quickly increase efficiency. Simultaneously, formulating and developing an electronic-based government system architecture takes a relatively long time. Today, the development of digital-based innovation partially exacerbates the problem of interoperability and inefficiency because it has not been integrated (Interview, a Policy Analyst, the MoAR, 2022)

Conclusion

This study enriches the literature on digital government transformation by revealing the influence of exogenous factors and their effects on digital government development. Many studies have shown that external factors accelerate the adoption of the latest digital technologies by organizations and countries. Although creating new digital technologies is a lengthy and costly process, adopting digital technology is considered more efficient and faster. In thisprocess, a country or public organization adjusts information and communication technology to address an organization's needs.

However, a study of IDW-SO adoption by the MNDP revealed that adopting digital technology in response to external factors does not necessarily bring organizations to a more advanced stage in the transformation process. Conversely, it generates new problems that create suboptimal uses of IDW-SO and risk e-government system development.

The analysis shows that the adoption of IDW-SO is a form of coercive isomorphism that describes the process of change at political urging, in which presidential directives, compliance with regulations, government regulations on electronic-based government systems, and IT companies have a global reputation because their products have reaped success in various public and private organizations. On the one hand, the external pressure accelerated the MNDP to realize National Planning 4.0, but on the other hand, it paid less attention to the capacity of the organization to make changes, interoperability with IT applications owned by different ministries, and even its conformity with the architecture of the electronic-based government system that is still in the process of providing a shared governance platform.

References

Books

D. Veit and J. Huntgeburth 2014. Foundations of Digital Government: Leading and Managing in the Digital Era. Berlin: Springer.

J. E. Fountain 2004. Building a Virtual State: Information Technology and Institutional Change. Washington, C: Brookings Institution Press.

P. H. M. S. B. &. J. T. Dunleavy 2006. Digital Era Governance: IT Corporations, the State, and E-Government. Oxford University Press, New York.

N. Perkin and P. Abraham 2017. Building Agile Businesses through Digital Transformation. London: Kogan Page.

Robbins, S. P., & Judge, T. A 2018. Essentials of Organizational Behavior. Harlow: Pearson's Education.

Journal article

G. Vial 2019. Understanding Digital Transformation: A Review and a Research Agenda. Journal of Strategic Information System, 2 (28), 118-144.

B. P. Hie 2019. Impact of transforming organizational culture and digital transformation governance on digital maturity in Indonesian banks. International Review of Management and Marketing, 6 (9), 51-57.

R. Ivanschitz, Korn, and Schmid (2017) Digital transformation and job: Building a cloud for all. The University of Miami Inter-American Law Review, 1 (49), 41-50.

I. Mergel, N. Edelmann and N. Haug 2019. Defining Digital Transformation: Results from Expert Interviews. Government Information Quarterly, 4 (36), 1-16.

M. Attaran, S. Attaran and D. Kirkland 2019. The Need for a Digital Workplace: Increasing Workforce Productivity in the Information Age. International Journal of Enterprise Information Systems, 1 (15), 1-32.

J. Li and A. M. Herd 2017. Shifting Practices in Digital Workplace Learning: An Integrated Approach to Learning, Knowledge Management and Knowledge Sharing. Human Resource Development International, 3 (20), 185-193.

S. Dittes, S. Richter, A. Richter and S. Smolnik 2019. Toward the Workplace of the Future: How Organizations Facilitate Digital Work. Business Horizons, 5 (62), 649-661.

A. Weber 2009. Implementation of a Digital Workspace." Thesis.

W. &. M. S. Casterlnovo 2018. Digital Government Imperative: A Context-aware Perspective. Public Management Review, 5 (20), 709-725.

M. M. Nielsen and Z. Jordanoski 2020. Digital Transformation, Governance, and Coordination Models: A Comparative Study of Australia, Denmark, and the Republic of Korea. at the 21st Annual International Conference on Digital Government Research, Seoul, Korea.J. Selimovic, A. P. Velic and L. Krndzija 2021. Digital workplace transformation in the financial service sector: Investigating the relationship between employees ' expectations and intentions. Technology in Society, 66, 1-8.

A. Sabani, H. Deng and V. Thai 2019. Evaluating the Development of E-Government in Indonesia: Proceedings of the 2nd International Conference on Software Engineering and Information Management, New York, NY.

P. DiMaggio and W. Powell 1991. Iron Cage Revisited Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review, 63-81.

W. L. Currie 2012. Institutional Isomorphism and Change: The National Programme for IT–10 years Journal of Information Technology, 3 (27), 236-248.

J. Beckert 2010. Revisited Institutional Isomorphism: Convergence and Divergence in Institutional Change. Sociological Theory, 2 (28), 150-166.

C. Codagnone, G. Misuraca, A. Savoldelli and F. L. Villanueva 2015. Institutional Isomorphism, Policy Networks, and the Analytical Depreciation of Measurement Indicators: The Case of the EU e-government Benchmarking. Telecommunications Policy, 3-4 (39), 305-319.

P. Frumkin and J. Galaskiewicz 2004. Institutional isomorphism and public sector organizations. Journal of Public Administration Research and Theory, 3 (14), 283-307.

K. Hwang and M. Choi 2017. The Effects of Innovation-Supportive Culture and Organizational Citizenship Behavior on E-Government Information System Security Stemming from Mimetic Isomorphism. Government Information Quarterly, 2 (34), 183-198.

Y. &. H. W. Choi 2021. Understanding diverse types of performance information use: Evidence from an institutional isomorphism perspective. Public Management Review.

S. Probert 2021. Policy transfer and isomorphism: A case study of the English-China Maths Teacher Exchange. Journal of Educational Studies,1-17.

N. P. B. P. C. &. V. M. Belle 2019. On Iron Cages and Suboptimal Choices: An Experimental Test of the Micro-Foundations of Isomorphism in the Public Sector. International Public Management Journal, 2 (22), 373-414.

C. &. J. E. Simon 2016. The limits of institutional isomorphism in the design of e-recruitment websites: A comparative analysis of the USA and Spain.

The International Journal of Human Resource Management, 1(27), 23-44.S. P. Williams and P. Schubert 2018. Designs for the Digital Workplace, in CENTERIS/ProjMAN/HCist 2018, Istanbul.

Othman, M., & Razali, R 2018). Whole-of-government critical success factors towards Integrated E-Government Services: A Preliminary Review. Jurnal Pengurusan(53), 73-82.

Fawcett, P. & Marsh, D 2012. Policy transfer and policy success: The gateway review process. Government and Opposition, 2(47), 162-185.

Miller, E., & Banaszak-Holl, J 2005. Cognitive and Normative Determinants of State Policymaking Behavior: Lessons from Sociological Institutionalism. Publius, 2(35), 191-216.

Kupi, M. & McBride, K 2021). Agile Development for Digital Government Services: Challenges and Success Factors. Springer Conference Paper, 1-12. doi: https://doi.org/10.1007/978-3-030-82824-0_1

Website

KemenPAN RB 2020. Hasil Survei PBB, 'e-Government' Indonesia Naik Peringkat. Diambil kembali dari Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi: https://menpan.go.id/site/berita-terkini/hasil-survei-pbb-e-government-indonesia- naik-peringkat

Kementerian PPN/Bappenas 2020. Publikasi Laporan Kinerja tahun 2020. Diambil kembali dari PPID Kementerian PPN/Bappenas: https://ppid.bappenas.go.id/ppid/informasi- berkala/bfe2091e177b41a98ed88487139fdfa4

Website document

OECD 2020. Digital Transformation in the Age of COVID-19: Building Resilience and Bridging Divides. Available: https://www.oecd.org/digital/digital-economy-outlook- covid.pdf.

Kementerian PPN/Bappenas 2021. Laporan Pelayanan Informasi Publik. Diambil kembali dari PPID Kementerian PPN/Bappenas: https://ppid.bappenas.go.id/public/storage/post_laporan/Laporan_Koordinasi_Pelay anan_Informasi_Publik_2021_13_June_2022_11_54_36.pdf Kementerian PPN/Bappenas 2020. Rencana Strategis 2020-2024. Diambil kembali dari PPID Kementerian PPN/Bappenas: https://ppid.bappenas.go.id/ppid/informasi- berkala/bf73ed7fe20a4b8c9fe9b74b250e2c64