Coercive Isomorphic Change: A Case Study of Digital Workspace at Ministry of National Development Planning

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Abstract

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

1. Introduction

1.1 Introduce the Problem

Digital transformation is adopting digital technology to improve processes and services, improve organizational performance, build 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 response to citizen demands (OECD, 2020; Hie, 2019; Ivanschitz & Korn, 2017). Digital technology is expected to produce a new way of working for public organizations that are more integrated to 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 is a digital workspace system that is considered to be able to create an integrated work system, increase efficiency, and effective resource management (Attaran, Attaran, & Kirkland, 2019; Li & Herd, 2017). Place and time flexibility is a primary benefit of digital workspace systems correlated with operational efficiency and resource usage optimization (Veit & Huntgeburth, 2014; Dittes, Richter, Richter, & Smolnik, 2019). Furthermore, the system is a governance platform that helps the integrated data collection process to support the decision-making process in an organization (Weber, 2009; Dittes, Richter, Richter, & Smolnik, 2019).

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

However, studies that reveal under what conditions governments adopt digital technology in response to external pressures and its impact still need to be elaborated (Casterlnovo, 2018). This study is essential, considering that the benefits of new digital technologies are closely related to the level of maturity of 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 is categorized in countries with high maturity rates. One of the essential factors in the high level of digital government maturity is the creation of active interactions between units in an organization, business models, and human resource capacity (Selimovic, Velic, & Krndzija, 2021). Thus, examining the adoption of advanced digital technologies by public organizations that have not aligned with a country's digital government maturity level can explain the rationale and its impact on digital government development.

1.2 Explore Importance of the Problem

This study enriches the digital government literature by analyzing the case of adopting the

integrated digital workspace (IDW) by the Ministry of National Development and Planning (the 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 works outside the office and uses a communication platform that supports data integration. This system is expected to help the MNDP utilize development data in each unit to monitor, evaluate and prepare national development plans annually and for five years. Using the perspective of isomorphism, this article reveals how external pressures determine the adoption of IDW digital technology by the MNDP without considering the government's digital maturity level (Sabani, Deng, & Thai, 2019) and its impact on e-government system development.

1.3 Literature Review

The study of digital transformation by Dunleavy et al. (2006) and Mergel et al. (2019) confirms that there are internal and external driving factors. External factors include organizational environmental pressures (citizen, business sector, and political factors) and technological changes. Meanwhile, internal factors stem from the need to change analog systems to digital regarding managing physical documents and internal organizational processes.

The difference in driving factors has different impacts. The external drive of digital transformation tends to produce short-term effects (outputs), while internal impulses can make long-term impacts. The change will focus on organizational relationships, competencies, and mindsets (Mergel, et al 2019). A literature review, first parsing the literature on digital transformation and digital work and further discussing isomorphism as a reference to understand the influence of external pressures on digital transformation and the adoption of digital work systems.

According to Perkin & Abraham (2017), there are three fundamental things to understanding digital transformation. First, digital transformation generates an impact that cannot be avoided as a boost to environmental dynamics. The result of digital transformation will happen unnoticed, liked or not. The consequence for an organization is to respond to change or lag. Second, digital transformation is more than just the use of technology; but also contains strategies, processes, organizational culture, behaviors, and human resources. Finally, the digital transformation includes a fundamental and comprehensive method of change. The emphasized aspect relates to transforming resources, priorities, and processes.

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

The goal of the transformation object will determine the process leading to the result. It 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). It will have an impact on the results created. Digital transformation in the public sector includes a series of processes. The process is defined as various stages and procedures carried out within the 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 impact that is a long-term effect that contains organizational changes as a whole, including values (Mergel, et al, 2019). That way, 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 of the adoptions of digital technology in digital transformation is digital work (Attaran, et al, 2019). Dittes et al. (2019) divide three forms of digital work based on technology and purpose. First, a digital work system utilizes video conferencing technology and mobile devices. The goal is to enable collaboration anywhere and anytime. Second, digital work social optimizes social media to accelerate the work collaboration process and support 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 developing a flexible and integrated system. This application will also help organizations manage documents and information with 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 will result in a physical reduction in the workspace. Second, the organization must own digital technology, and each individual involved in the system is provided with a form of facility. Technological aspects must include integrating cloud computing, big data, mobile, and search-based applications. And third, a collaboration that departs from the importance of information dissemination in the context of geographical limitations. The collaboration includes information sharing, communication and coordination, and teamwork fully supported by digital technology. These conditions will bring easy, fast, and inexpensive organizational governance (Attaran, et al 2019).

The characteristics of digital workspaces emphasize creating an integrated government system or e-government. In the high maturity level of digital government, adopting digital workspaces can only provide optimal results when an organization or country has reached the stage of transformation (Veit & Huntgeburth, 2014). The transformation stage describes a government system implementing one-stop-government, integrated e-government services, reengineering business processes, and e-democracy. This shows that digital workspace systems are at the stage of transformation or high maturity levels within the framework of

digital government development based on a variable cost, usability, complexity, and integration.

Isomorphism generally describes changes in the organization in response to its external environment. DiMaggio & Powell (1991) explains that an organization will adopt new things by looking at the achievements of other organizations in similar sectors. Such conditions will produce a homogeneous organizational character (Currie, 2012). On the one hand, this condition makes it easier for an organization to follow the 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, the research of Frumkin & Galaskiewicz (2004) shows that institutional isomorphism leads to the creation of a uniform, centralistic, and formal bureaucratic structure due to efforts to adopt other organizational change models considered more successful without considering the context of the organization.

DiMaggio 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. Meanwhile, institutional isomorphism departs from the realm of institutional theory, which reveals the occurrence of 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 relates to one another. Although the three mechanisms are interrelated, the driving factors of each mechanism may be different and can create different results.

Coercive isomorphism results from formal and informal pressure on an organization from another organization that is seen as a role model (DiMaggio & Powell, 1991). Such pressure can be in strength, persuasion, or an invitation to join or follow in the footsteps of a relatively more advanced organization. In this type, such coercive pressure shows the dependence of the 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 needs to strengthen relationships with these stakeholders (Hwang & Choi, 2017). Under certain conditions, organizational change responds to government mandates or political pressures; for example, establishing 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 is also a driver for an organization to imitate. Factors such as a lack of understanding of technology in an organization, the 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 mechanism of isomorphism is referred to as mimetic. Generally, this mimetic mechanism is created when an organization faces complex problems while trying to find a solution is costly and risky. As a result, an organization tends to imitate or model other similar organizations and has successfully addressed a similar problem (Hwang & Choi, 2017). The study conducted by Probert (2021) concluded that the MTE – the England–China Mathematics Teacher exchange program initiated in 2014 –adopted by the UK is a form of mimetic isomorphism. Adoption aims to use a method of teaching mathematics in Shanghai, China, 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. In addition, professionalization aims to develop cognitive foundations and legitimacy as the basis of independence or autonomy of a job (Belle, 2019). At some point, this normative isomorphism is a form of pressure from the development of a profession. Its main objective is to grant legitimacy through 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 a profession. As a result, employees with the same educational background will solve problems with the same method (DiMaggio & Powell, 1991). This action is inseparable from the standardization established and inherent in a profession.

1.4 Coercive Isomorphism Analysis on IDW-SO Adoption

Coercive isomorphism, as described by DiMaggio and Powell (1991), refers to the formal and informal pressures arising from political, regulatory, or social expectations that compel organizations to conform to specific models, structures, or practices. In the case of the MNDP's adoption of the IDW-SO system, these pressures originate from presidential priorities, government regulations, and the expectation that the national planning agency adheres to internationally recognized technology standards. This situation illustrates how external forces can significantly shape organizational strategies, often emphasizing compliance over autonomy.

However, an emphasis on external legitimacy frequently overlooks an organization's internal dynamics and its readiness to effectively implement changes. This disconnect can lead to substantial challenges in adopting and integrating mandated changes (Beckert, 2010; Currie, 2012). For the MNDP, the political and regulatory urgencies driving the adoption of the IDW-SO system have resulted in difficulties in merging this technology with existing workflows. Consequently, the changes tend to be reactive rather than strategic. This approach often leads to inefficiencies, employee resistance, and suboptimal utilization of the new system.

The analysis emphasizes the critical need to balance external pressures with internal readiness.

While political and regulatory imperatives are pressing, successful and sustainable digital transformation requires strategic alignment between external demands and the organization's internal capacities, resources, and long-term goals. To achieve this, the MNDP must proactively evaluate its existing infrastructure, enhance internal capabilities, and adopt a phased approach to integrating the IDW-SO system. This strategy will ensure that compliance with external demands translates into meaningful and lasting organizational improvement.

2. Method

The research uses a qualitative approach by exploring and understanding the digital workspace adoption process in the IDW-SO system at the MNDP. The research setting is the MNDP as the focus of the IDW-SO system, and the Ministry of Administrative Reform (the MoAR) and the Ministry of Communication and Informatics (the MoCI) as the two leading agencies in developing Indonesia's e-government system. The 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.

2.1 Participant Characteristics

The informant cover policy analysts, senior planning specialists, and IT experts involved in developing IDW-SO from the MNDP, policy analysts from the MoAR, and IT experts from the MoCI. This research conducted fieldwork from January to July 2022.

2.2 Sampling Procedures

This study uses purposive selection, which is a technique used to obtain data sources and information that are in accordance with research data needs. The study also utilizes snowball sampling. This research conducted with seven informants from the leading agencies in developing Indonesia's e-government system.

2.3 Research Design

The research design built with an inductive logic. The research was conducted to form an understanding of the digital workspace adoption process in the IDW-SO System at the Ministry of National Planning. Understanding will be formed through the process of analyzing the researcher's findings, then refer to the theory. The analysis will explore a series of digital workspace adoption activities as a step of change starting from driving factors to potential impacts that can be generated. The analysis tries to see how the adoption process is carried out and relates it to the theory of isomorphism along with the characteristics of the three forms of isomorphism.
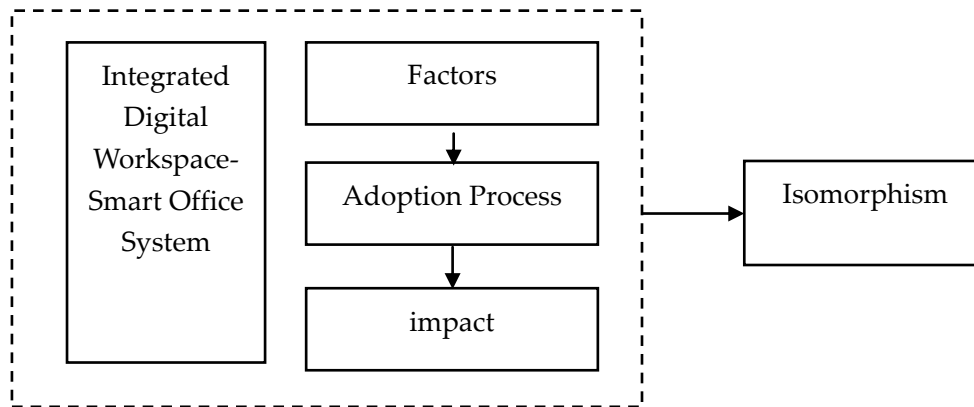
Figure 1. Research Design

3. Results

Based on the digital government model, Baum and Maio in Veit & Huntgeburth (2014) conclude that organizations must fulfill the transformation stage to optimize the utilization of digital workspace. Previous research found that Indonesia's e-government development was only at the transaction stage, denoting that Indonesia still needed 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, Deng, & Thai, 2019). Further, the adoption of the digital workspace conceptually still has different definitions and needs for understanding the digital workspace practice (Williams & Schubert, 2018). These conditions increase the potential for isomorphic mechanisms due to the limited resources of the MNDP to implement digital workspaces. Consequently, digital technology adoption only has advanced technological use for internal works but cannot improve business processes and service quality (Codagnone, Misuraca, Savoldelli, & Villanueva, 2015).

The MNDP's primary purpose of using 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 becomes the central ecosystem that combines all systems in the organization. IDW-SO has five layers by adopting the concept of The Tip of Iceberg. The idea can illustrate how IDW-SO has a surface layer or the front-end layer, which is the face of the ecosystem. Moreover, the construction of IDW-SO is supported by 4 (four) other layers with an equally important role.

The first layer is the management tools layer (front-end). This layer is the first layer that plays a role in the face of the ecosystem. It contains various applications to support the tasks and functions of the MNDP. The second layer is the superstructure and infrastructure. The superstructure consists of various regulations or procedures that form working mechanisms, while the infrastructure consists of information technology, data, digital libraries, analytics, servers, and governance and data centers. The third layer is visual collaboration, a control room to help managers monitor the processes in the organization. This visual collaboration

space can be in the form of statis (settled) and portable that can support mobilization. The fourth layer is mobile hardware tools, a device that supports the process of mobilization in order to carry out the tasks and functions of the organization. The last layer is cyber security 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 IDW-SO, the MNDP adopted the Bitrix application, one of the leading global applications. Bitrix is a privately owned application that provides services or buys and sells rights of use headquartered in Singapore. The selection of the use of this application is a direction from the head of the agency. The MNDP buys the right to use it for one year to have server access to the agency. In its planning, the MNDP adjusted the Bitrix application, especially managing server access independently to protect internal data. This internal data protection aims to prevent parties outside the MNDP from seeing and utilizing internal data, considering that many countries or companies also use the Bitrix Singapore application. In addition, restrictions are also placed on MNDP employees by imposing selection and passwords for its users.

4. Discussion

4.1 Driving Factors

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

Nevertheless, the adoption of IDW-SO is not explicitly stated in a strategic plan for the MNDP. The choice to use the application departs from the internal conditions of the organization (Interview, Policy Analyst, the 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 assessing the achievement of development programs targets, both national and sectoral by ministries, and regional governments.

IDW-SO's development team at the MNDP explained that this system addresses the institution's needs, which has initiated the concept of digital workspaces before the presidential direction urging every government agency to adopt digital technology for integrating data and establishing agile agency and collaborative governance. The development team realized that the concept of digital workspaces originated from and was developed by private sector organizations. For this reason, adopting digital workspaces for 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, the 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 MNDP to use the Bitrix application to implement IDW-SO. Consequently, the MNDP adopts digital technology that exceeds the requirements of the digital government 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 has not been integrated, and a national data center has not yet accomplished; thus, it undermines the quality of development policies (the 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 result of the MNDP digital government maturity level from 2017 to 2020 exhibits as follows (KemenPAN RB, 2020): (a) business processes have not created integration and collaboration between directorates; (b) 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; (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.

Looking at the evaluation results, the adoption of IDW-SO aims to create integrated, collaborative, agile governance and improve the quality of organizational performance (Kementerian PPN/Bappenas, 2020). The IDW-SO initiative implements the MNDP's strategic plan 2015-2019, namely improving the quality of national development plans through 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 IDW-SO departs from the concept of Flexible Working Arrangement (FWA) (Ministry's Circular Letter No 2/2020). This concept generally emphasizes increasing employee work motivation, which includes flexibility in working time (flextime), flexibility in the division of labor (job sharing), and flexibility in the workplace (telecommuting) (Robbins & Judge, 2018).

IDW-SO technology can help the MNDP conducts performance assessments more objectively with measurable output measurements. On the other hand, IDW-SO has a cloud feature that can manage various data, information, and knowledge (Interview, IT Expert, MoCI, 2022). Furthermore, the MNDP claims that adopting IDW-SO creates flexible work from anywhere and reduces operational costs to increase efficiency. The use of IDW-SO has

grown along with the COVID-19 pandemic, which has forced civil servants to work from home.

For these purposes, IDW-SO uses Bitrix digital technology; one advantage is that data protection becomes very important when the working mechanism in the organization has optimally used the flexible work method. Furthermore, this method demands data exchange and information or integration in the MNDP. This data integration is a prerequisite for interoperability (Othman & Razali, 2018). In other words, Bitrix provides a data protection and integration system that supports flexible work mechanisms.

However, optimizing the use of Bitrix digital technology has experienced challenges due to factors: first, the MNDP policy to require 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 the office 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 due to flexible work methods (Attaran, Attaran, & Kirkland, 2019).

Meanwhile, there are differences in perceptions between decision makers in each directorate in the MNDP regarding data and information disclosure, especially the classification of data that is open both for internal organizational purposes and other public organizations. Each directorate still has the authority to determine data and information that is confidential and open to sharing with other parties (Interview, the MNDP, June 17, 2022).

Data integration is challenging and even impossible to achieve (Interview, an IT Expert, the MoCI, 2022). IDW-SO serves as a digital platform to integrate the needs and objectives of many information systems owned by various directorates in the MNDP, which covers nine areas of government affairs. Each directorate manages and stores its development data independently rather than in the data center. This way of working shows that business processes involving all directorates have yet to be collaborative, contrary to the fundamental requirements for adopting IDW-SO digital technology (Interview, a Policy Analyst, the 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 working (Interview, an Academic, Padjajaran University, 2022). As a result, digital technology has not yet built interoperability, which is one of the advantages of implementing the IDW-SO. Thus, adopting such digital technologies no longer correlates with efficiency, instead generating new costs, that is, to finance the operation and maintenance of IDW-SO technology.

Following the digital maturity framework, it can be concluded that the Indonesian government has just reached the transaction stage (the Ministry of National Development and Planning, 2022). An academic assessed that the MNDP needed more time to develop the digital workspace concept (Interview, an Academic, Padajajaran University, 2022). The crucial issue is the human resource capacity to build and operate the system. In line with the

academic assessment, a policy analyst from the MoAR pinpoints the case to the Collaboration Planning and Budget Performance Information system developed by the MNDP known as KRISNA. This e-planning, budgeting, and performance system have not worked properly due to the digital competency gap between the MNDP and other government agencies.

Looking at the MNDP e-government practice, one can be analyzed that: (a) generally, information technology is still at the level of e-mail interaction. This research found that the information submitted on the official website was inconsistent, especially regarding agency email addresses. For example, the address on the official website ishumas.bappenas@gmail.com but on the WhatsApp account is humas@bappenas.go.id (Kementerian PPN/Bappenas, 2021); (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 of the MNDP acknowledged that the administrative flow was still paper-based before the IDW-SO (Interview, Secretary to 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, Edelmann, & Haug, 2019). To date, the main benefits of adopting IDW-SO have been the change from analog to electronic administration processes and the increased expertise of employees to operate IDW-SO applications. With this change, IDW-SO has yet to lead to the integration of 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, in practice, the technology is widely used by private organizations that have succeeded in improving their performance; the MNDP does not make using IDW-SO in the private sector a reference. According to DIC, the adoption results from a policy learning process that combines needs, experiences, and new digital technologies (Interview, an 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 the fulfillment of regulations on developing electronic-based government systems or forms of coercive isomorphism. On the one hand, this change can accelerate the MNDP in 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, a Senior Planning Specialist, the MNDP, 2022). Further, the operational costs of Bitrix digital technology are not directly proportional to the benefits of the 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 IDW-SO impacts its use for all directorates of the MNDP. Each directorate must meet Bitrix systems and standards to connect with the IDW-SO ecosystem. However, these efforts reap risks and potentially need to improve on the second and third tiers of IDW-SO. The second layer, namely superstructure and infrastructure. The superstructure contains regulations and procedures for mechanics for the work of individuals and collaborative units. A condition that until now is still an obstacle to realizing it. This condition relates to infrastructure containing information technology, data, digital libraries, analytics, servers, and governance and data centers. The MNDP realizes that the infrastructure aspect still needs to show the integration of various data and information between directorates (Interview, a Senior Planning Specialist, the 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.

Meanwhile, the third layer, virtual collaboration, will only be optimal when a collaborative work mechanism has been established between directorates. When this condition has 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 seeing the entire process in the organization. As a result, the optimum benefit of IDW-SO is to build an electronic administrative flow.

From the MoAR's point of view, isomorphic change becomes inevitable (Interview, Policy Analyst, the MoAR, 2022). The contributing factors are 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 make changes. The external pressure to make changes often becomes the determining factor for a public organization to implement reforms. In the short term, isomorphic change can quickly drive change. However, in the long run, there is no sustainable change and creating new problems, such as the lack of alignment between the MNDP's plan to make IDW-SO a joint application to support development planning in ministries and the 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 the 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 ministries' strategic plans. For this reason, the MNDP initiated the expansion of this technology to become the backbone of the national development planning system that connects ministries. However, the initiative faces challenges considering that until now, the MNDP does not have the 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 a benchmarking process is a form of isomorphic change. As a result, changes that occur often do not project long-term impacts for the organization. This study shows the challenges government institutions face when adopting IDW-SO technology to improve the quality of development planning according to the MNDP's initiatives. The main challenge is confirming the technology and the institutional capacities of ministries and their needs that differ from one another.

These challenges relate to data and information integration, business process change, building agile workspaces, and interoperability to build collaboration. The MNDP has faced challenges since the adoption of IDW-SO, impacting the suboptimal use of digital technology. By looking at the development of IDW-SO in the MNDP, efforts to encourage ministries to use IDW-SO will produce relatively similar problems faced by the MNDP. The MNDP designed IDW-SO as an ecosystem based on the needs of its organization. Thus, the 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, the 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 The MoAR, which is responsible for constructing an electronic-based government system architecture.

Making IDW-SO an instrument to support the development planning system in each ministry requires the support of experts who can manage the technology. For this reason, the MNDP needs to consider the availability of these experts, both for the benefit of 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 IDW-SO (Interview, a Policy Analyst, the MoAR, 2022).

In response to these conditions, the MoAR recommends duplicating IDW-SO instead of adopting it. Duplication is easier and more efficient because it only exemplifies existing technology with adjustments based on organizational needs and capabilities. According to Fawcett & Marsh (2012), duplication is in line with the change process; thus, using technology is more efficient because it adapts to the capabilities of organizational resources. Similarly, Miller & Banaszak-Holl (2005) argues that digital technology duplication is often the government's choice, including in Indonesia, because it accelerates public organizations to gain legitimacy to innovate and provide quickly visible results in terms of efficiency and effectiveness.

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

Research by Kupi & McBride (2021) reveals that one of the success factors of digital government development is understanding and agreement 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 the MoAR, the MoCI, and other ministries as users of digital technology. The purpose of the collaboration is to redesign and duplicate IDW-SO that is compatible with the needs and capacities of government institutions as users. Conversely, developing IDW-SO for other ministries without considering their institutional capacity and conditions can result in repeated isomorphism, that is, the adoption of IDW-SO by the ministry based on regulatory impulses that must be met.

Further, Kupi & 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, an illustration of the development of IDW-SO by the MNDP, which is relatively fast to create integrated governance as directed by the president. The case of the MNDP marks coercive isomorphism in the adoption of IDW-SO; thus, the impact is not only on the under-optimization of IDW-SO utilization but 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 also creates new complexities in developing the Indonesian digital government. The MoAR and the 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, a Policy Analyst, the MoAR, 2022). The MoAR projections state that the construction of the super apps took approximately four years, while at the same time, the MNDP is developing IDW-SO.

The biggest challenge is to build a digital workspace to increase efficiency quickly. At the same time, 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).

5. Conclusion

This article enriches the study of digital government transformation by revealing the influence of exogenous factors and their impact on digital government development. Many studies show that external factors accelerate organizations and countries adopting the latest digital technologies. While creating new digital technologies is a lengthy and costly process, adopting digital technology is considered more efficient and faster. In the process, a country or public organization adjusts information and communication technology to answer the organization's needs.

However, the 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. On the contrary, it generates new problems that create suboptimal uses of IDW-SO and risks to the 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 the political urging, in this case, presidential directives, compliance with regulations, government regulations on electronic-based government systems, and the support IT companies that have a global reputation because their products have reaped success in various public and private organizations. The external pressure, on the one hand, accelerated the MNDP to realize national planning 4.0 but, on the other hand, 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.

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