



# Structuration in implementing Satu Data Indonesia policy in local government

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#### Abstract

Although there is a lot of research on the implementation of data governance policies in Indonesia, there is still little research on the implementation of data governance policies from the aspects of structural and individual dialectic changes. To fill this gap, we analyze the implementation of "Satu Data Indonesia" Policy through the perspective of structuration theory. This study aims to explore and analyze dynamic relationships and interactions between individuals/groups, social structure, power, and individual reflexivity in the implementation process of Satu Data Indonesia Policy. The focus of research is directed at changing practices in the context of the implementation of Satu Data Indonesia Policy. This research design uses Critical Discourse Analysis with data collection techniques using documentation, studies and interviews. The results showed that agency strategies in the distribution of power and resources and reflexivity of actors to new structures influenced the successful implementation of Satu Data Indonesia policy at the local government level. The availability of infrastructure and human resource capabilities have an impact on the difference in success in each local government. In practical terms, the findings of this study can help policymakers to better understand the various dialectical impacts of interactions between policy structures and individuals on the successful implementation of Satu Data Indonesia policy.

#### **Keywords**

Satu Data Indonesia, Policy, Local government

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Introduction

Inspired by Giddens' (1990) work "The Consequences of Modernity" [1] and Kasali's (2017) "Disruption" [2] as well as the growing interest in research on the applications and benefits of information technology for organizations [3][4][5] researchers, academics and policymakers have turned much of their attention to the issue of digital transformation in the implementation of data governance in the public sector. In the last two decades, evidence shows that many governments in various countries have begun to regulate digital transformation policies, implement data governance in the government sector and utilize Big Data which has been proven to contribute to improving system efficiency and effectiveness of government performance [6][7].

Digital transformation provides hope for improving the quality of organizational performance in the public sector. This is driven by open and collaborative innovation processes developed under the umbrella of emerging technologies [8]. In developed countries such as America, China, and Korea, digital transformation has experienced significant development through various initiatives and changes in the implementation of government data governance such as the implementation of E-Government, Open Data, Cyber Security, Data Protection, and service development [6][4][7][9][10][1].

In developing countries such as Indonesia, evidence shows that progress in the same direction is being made to achieve improved governance performance [12]. Despite the many advances and benefits gained from digital transformation in the implementation of data governance in the government sector, various challenges have also emerged accompanying these digital transformation efforts, especially related to infrastructure, transparency and data security [13][14][15].

In Indonesia, although digital transformation policies and efforts to centrally manage government data (One Data) have been determined through Presidential Regulation Number 39 of 2019, in practice it cannot be implemented thoroughly in all agencies and all levels of government. This is caused by various factors, namely HR factors, infrastructure, data problems, leadership and work culture [16][13][17][18]. To integrate data across government agencies, the big challenge faced by the government is to integrate data from 632 "Guardian data" in the Government of the Republic of Indonesia consisting of 84 Ministries/Agencies, 34 Provinces and 514 Regencies / Municipalities with 10,000 Supporting Coaches and Tens of thousands of producer units Data plus the persistence of sectoral egos and concern to share (various uses) data between government agencies also add to the list of challenges in policy implementation [17][15].

The digital transformation of government in the era of the Industrial Revolution 4.0 faced with existing changes will certainly give birth to various dynamics in the practice of governance. Disruption in the era of the industrial revolution 4.0 in its implementation often triggers struggles that not only come from external competitors but also come from internal such as colleagues, organizational elites, and others [2]. Disruption can be interpreted as an innovation that replaces the entire old system in a new way and has the potential to replace old players with new ones [2]. Entirely new systems and methods generated through technological innovation will in turn trigger structural reconstruction. In this context, the phenomenon of struggle that occurs due to disruption (innovation) in the perspective of social change can be translated as a dialectic between structure and agency [19].

From the perspective of structuration theory, the practice of implementing data governance transformation through Satu Data Indonesia policy can be read as actions that lead to the reconstruction of existing and predefined structures (de-routinization),

as they are patterned throughout space and time through routinization. This "deroutinization" will make existing actors or agencies through their reflexivity feel empowered or limited by the new structure created. In the context of changes in the Industrial revolution era 4.0, the new structure created is a structure that is very different from the old structure. This study aims to explore and analyze the dynamic relationships and interactions between structures and agencies in the implementation process of Satu Data Indonesia policy. The focus of research is directed at the practice of change in the framework of the Implementation of Satu Data Indonesia Policy. Research on the implementation of data governance policies in Indonesia has been widely conducted, but there is still little analysis of policy implementation using a structuring perspective, where the focus is not only on agents but also at the same time on dialectical structure. Thus, ontologically (research focus) and epistemologically (theoretical approach), this research is expected to complement the existing void. From this explanation, some of the research questions that will be answered in this study are: How does power work through practice change in the implementation of data governance in Indonesia and What is the agency's strategy in the desired change effort?

Through the use of the theoretical framework of Structuration theory in Satu Data Indonesia policy implementation research, researchers can report more deeply on the complex dynamics between policy structure and individual actions in implementing policies. This results in greater opportunities to identify factors influencing the success or failure of policy implementation and provides more valuable insights for future improvements to Satu Data Indonesia Policy.

### **Methods**

This research uses the Qualitative Approach Method. The research design used Critical Discourse Analysis. Data collection techniques use documentation, studies and interviews through Small Group Discussion. We further elaborate on general information obtained from discussions with documentation studies, namely by examining data and information from various secondary sources such as government documents, scientific articles, print information media (magazines, online news), audio-visual information media (YouTube). The technique of determining participants in this study is based on the purpose of the study, namely the people that the research team considers to know information about the research problem. The data analyzed used a critical discourse analysis approach which included three layers of analysis, namely text analysis, discourse practice analysis and social practice analysis [20]. The results of the data analysis are then presented according to the research theme. This study examines the implementation of Satu Data Indonesia (SDI) policies in Indonesia, particularly highlighting their implementation in local governments.

#### **Results and Discussion**

The development of information and communication technology in the era of the Industrial revolution 4.0 has had an impact, one of which is on changes in data governance. Data management can no longer be done with conventional methods because the characteristics of data today have far developed compared to before the era of the industrial revolution 4.0, which was marked by digitalization in almost all fields. The development of data in the digital era needs to be managed and utilized to optimize the implementation of development by all stakeholders, especially the government that has the legal authority to manage and control development in a country.

Digital transformation provides hope for improving the quality of organizational performance in the public sector. This is driven by open and collaborative innovation processes developed under the umbrella of emerging technologies [8]. Nevertheless, various challenges also arose in its development. The use of Big Data by government agencies, for example, is faced with several challenges that arise, namely 1) Data Availability; 2) Standardization of Government Data; 3) Data Privacy; 4) HR competence; 5) Supporting Infrastructure [12]. These challenges also arise in the implementation of one Indonesian data. The difference in resources in terms of quality and quantity contributes to the implementation of the one data policy in Indonesia has not been evenly implemented optimally. The distribution of power in the aspect of resource allocation in the implementation of Satu Data Indonesia policy still shows the gap between local governments and is a challenge that needs to be resolved by central and local governments in Indonesia.

On the other hand, the implementation of open government in the administration of local government in Indonesia before the issuance of the Presidential Regulation on Satu Data Indonesia Policy also noted that one of the factors that caused the condition of differences in the implementation of open government was due to the unavailability of regulations or legal products that overshadowed issues closely related to the implementation of open government such as the National Information Integration System, Electronic-Based Government System, Process and Datafication and Digitalization [21]. The implementation of open government was not supported by the policy tools of the government at that time.

The results of research data collection and analysis show that power works through the dominance of government authority with normative legitimacy (Digital Government Regulation). Currently, the government's policy on Satu Data Indonesia Policy has been issued through Presidential Regulation Number 39 of 2019 [22]. The existence of this regulation provides opportunities for the implementation of open government in Indonesia to be more optimal and minimize the implementation gap between local governments and encourage the use of Big Data in various innovations and wider scales such as public services through e-government or smart city services in Indonesia. Other formal regulations that were born before Presidential Regulation Number 39 of 2019

concerning One Indonesian Data include Presidential Instruction Number 3 of 2003 concerning National Policy and Strategy for E-Government Development and Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government System (SPBE). These rules become the normative basis for making structural changes in data management in Indonesia.

In Presidential Regulation Number 39 of 2019 concerning Satu Data Indonesia Article 1, it is explained that Satu Data Indonesia is a government data governance policy to produce accurate, up-to-date, integrated, and accountable data, as well as easily accessible and shared between central agencies and regional agencies through the fulfillment of Data Standards, Metadata, Data Interoperability and using Reference Codes and Master Data. Article 2 point 1 explains the purpose of this Satu Data Indonesia policy, namely "The Structuring of Satu Data Indonesia is intended to regulate the implementation of data governance produced by Central Agencies and Regional Agencies to support planning, implementation, evaluation and control of development. This Satu Data Indonesia Policy arrangement in accordance with Presidential Regulation Number 39 of 2019 concerning Satu Data Indonesia Article 2 point 2 is intended to provide references and implementation guidelines for Central Agencies and Regional Agencies in the context of implementing data governance to support planning, implementation, evaluation, and control of Development; Realizing the availability of accurate and up-to-date data, integrated and accountable, as well as easily accessible and shared between central agencies and regional agencies as a basis for planning, implementing, evaluating, and controlling development; Encourage data openness and transparency so as to create data-based development planning and policy formulation; and Support national statistical systems of laws and regulations.

Through various official regulations made by the government, various efforts to realize digital transformation are carried out by the government from the national level to the regional level. At the local government level, interviews with research participants who are implementers of Satu Data Indonesia policy in one of the Regional Governments revealed that the implementation of Satu Data Indonesia policy began in 2020, as stated below:

".. Starting in 2019 sir. I signed in in June 2019. Then at the end of the year, December 2019 we have conducted socialization to regional officials, at the end of the year, sir, about one Indonesian data at the regional level with speakers from the Central Statistics Agency (BPS) Province and District. We are the data guardian, then BPS as the data supervisor and the Regional Development Planning Agency as the data planner. This is only up to the OPD level. When we want to go to 2020, we want to get down to the subdistrict and village level, that's a refocusing budget. So besides that, we can't crowd, sir, now it's a pandemic, finally in 2020 the socialization of one Indonesian data to the regional level has been carried out." (interview on November 09, 2021).

The discourse of Globalization and Digitalization in the public sector encourages every government towards digital governance, including Indonesia. The Government of Indonesia accelerates digital transformation in the government sector through the implementation of e-government and the implementation of SDI for all government institutions. From the results of a review of various research data sources, the government's strategy to transform data governance in government is through a) Regulation; b) Resource Allocation which includes budget allocation, infrastructure development, improving the quality of apparatus resources; c) Centralized data management; and 4) Dissemination of government digital transformation discourse through various forums and media.

From a Structuration Perspective, data governance transformations can be read as actions that lead to changes to existing and predefined structures, as they are patterned across time and space through routinization. These changes make existing actors constrained or empowered by the new structures created. In the context of changes in the Industrial revolution era 4.0, the new structure created is a structure that is very different from the old structure. This new world order is also called uber civilization [2]. Some markers that distinguish this uber civilization from the old world lie in 5 (five) points as explained by Kasali (2017), including: 1) patterns of change in time and speed of change, namely from time series and linear to real time and exponential (accelerating from day to day); 2) economic patterns (ownership), namely from the ownership economy own ownership to sharing economy; 3) service patterns, namely from queue-based services (on the lane economy) to synchronized services, can be obtained when desired (on demand); 4) supply-demand pattern, i.e. from a single pattern to a network pattern; 5) Opponent/competitor pattern, i.e. the opponent is clearly an invisible opponent [2].

Such radical changes certainly provide a new context for actors/agencies. The new structure will be interpreted as empowering or limiting. For those who feel limited will make the relationship between structure and agency a stressful relationship and encourage resistance of those actors. From this point, we can understand the explanation of conflict due to interference described by Kasali (2017). The description of the conflict is put forward by Kasali (2017) as follows:

"The real enemy of disruption is outside, namely other companies or other nations. But instead of fighting outside, you might face your own comrades who are inside. Brothers will clash with younger brothers, employees will clash with management, juniors against seniors, clerks and managers between each other's parts, parents against new ones, and many countries will face their own people" [2].

The conflict that occurs, in the lens of structuration theory, is understood as a logical consequence of the tension between structure and agency. Resistance is the reaction of actors that clash with new structures created through innovation. In this phase, "deroutinization" is the practice of applying innovation and in turn will form an established new order if it is carried out continuously with the same patterns and activities

throughout space and time. The existence of this new system is then interpreted as a threat to the basic sense of security by some actors, both internal and external (competitors) who feel limited. This kind of thing applies in various fields, types or levels of organizations including government.

In the implementation of Satu Data Indonesia policy, tensions between structures and agencies also occur. The old socio-cultural practice of data management where each institution has its own way and version, then de-routinization with data management in accordance with Satu Data Indonesia policy has triggered resistance from agents, namely in the form of sectoral egos between government agencies. This sectoral ego arises because it relates to the existence, ideology and interests of each institution.

From this event, an important thing that needs to be observed by an agency/organization when going to innovate is the calculation of compensation for the sense of security for the actors for the presence of a new order. It is undeniable that this is something that is almost impossible when making radical changes. However, the provision of a sense of security is sought to be given to all actors so that the possibility of innovation can be accepted. This effort can be done by continuous socialization with various approaches and providing a comprehensive explanation of the innovations applied.

## Conclusion

The results showed that agency strategies in the distribution of power and resources and reflexivity of actors to new structures influenced the successful implementation of Satu Data Indonesia policy at the local government level. The availability of infrastructure and human resource capabilities have an impact on the difference in success in each local government. In practical terms, the findings of this study can help policymakers to better understand the various dialectical impacts of interactions between policy structures and individuals on the successful implementation of Satu Data Indonesia policy.

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