Volume: 20, No: 6, pp. 353-367 ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online) www.migrationletters.com

Transforming Local Governance: Indonesia's One Data Policy in Mesuji Regency and Semarang City

Adi Suhendra¹, Asrori², Hadi Supratikta³, Rosidah⁴, Ray Septianis Kartika⁵, Catur Wibowo Budi Santoso⁶, Agustinus Hartopo⁷, Heri Wahyudianto⁸, Imansyah Abinda Firdaus⁹

Abstract

This study delves into the pursuit of improving welfare in public services and subnational governance by innovatively implementing unified data systems: Beneficiary Single Data (SAFAAT) in Morowali Regency, Village Single Data in Mesuji Regency, and Semarang Single Data in Semarang City. The SAFAAT program manages data for education, healthcare, and assistance to impoverished communities, aiming to achieve prosperity while considering human civilization. The Village Single Data innovation serves as an online platform for handling direct cash assistance (BLT) from village funds. Semarang Single Data serves as a communication and coordination hub between Central and Regional Agencies, fostering the implementation of unified Indonesian data at the city level. This qualitative research explores these innovations' potential to enhance welfare, streamline fund management, and guide regional development for the betterment of society. The digital evolution in Indonesia poses opportunities and challenges for data-

Keywords: Innovation, Data, Public Service, Regional Government, Policy.

I. INTRODUCTION

This study investigates the pursuit of welfare improvement in public service and subnational governance through the innovative implementation of unified data systems: Beneficiary Single Data (SAFAAT) in Morowali Regency, Village Single Data in Mesuji Regency, and Semarang Single Data in Semarang city. The digital transformation poses opportunities and challenges for the Indonesian Government, particularly in data-driven decision-making. Efforts to enhance government data management with the objective of augmenting data's value as a foundation for policymaking are reflected in Indonesia's National Open Government Action Plan. One of the initiatives within this plan is the Indonesian Single Data (SDI) introduced by Bappenas in 2017 (Rizaldy et al., 2020). The action plan encompasses transparency, data management, public engagement, and service provision. The continuous growth of data from diverse sources has led to data disparities, necessitating precise, open, and interoperable government data management to present

¹ National Research and Innovation Agency of Republic Indonesia

² National Research and Innovation Agency of Republic Indonesia

³ National Research and Innovation Agency of Republic Indonesia

⁴ National Research and Innovation Agency of Republic Indonesia

⁵ National Research and Innovation Agency of Republic Indonesia

⁶ National Research and Innovation Agency of Republic Indonesia

⁷ Regional Development Planning Agency, Papua Province of Republic Indonesia

⁸ Regional Development Planning Agency, Papua Province of Republic Indonesia

⁹ Regional Research Development Planning Agency, Bekasi City, Republic Indonesia

trustworthy, accountable, and current data via the establishment of a government data foundation. The required data encompasses various sectors, including food, energy, infrastructure, maritime affairs, education, health, economy, industry, tourism, and administrative reform (Rizaldy et al., 2020).

The Indonesian government also issued Regulation of President of the Republic of Indonesia No. 39/2019, widely known as the One Data Indonesia regulation, aims to establish a unified and effective approach to national planning, execution, evaluation, and control of development initiatives. This is achieved through meticulous management of accurate, integrated, and easily accessible data. Serving as a robust legal foundation for the implementation of the One Data Indonesia policy, the regulation outlines the essential principles and mechanisms that governmental entities must adhere to in their data management practices.

Issues like poverty, education, and increasing unemployment warrant significant attention, as they can trigger developmental instability. Poverty, a complex concern for well-being, is influenced by interrelated factors such as income levels, unemployment, health, education, access to goods and services, location, geography, gender, and environmental context. Poverty transcends mere economic incapacity, encompassing the failure to uphold basic rights and treating individuals or groups with dignity. Government social assistance programs address poverty; however, a dependence on these programs hampers equitable distribution. Hence, the SAFAAT program in Morowali emerges as a solution, efficiently managing education, health, and impoverished community aid based on the context of human civilization (Regional Innovation Report, Morowali Regency (Rizaldy et al., 2020).

In Mesuji Regency, challenges in village fund and Village Fund BLT distribution stem from limited village administrative resources, inadequate infrastructure, and other constraints causing hindered fund allocation. The synchronization of data between village and Mesuji Regency governments is time-consuming due to distance and constrained human resources. A strategic concern revolves around priority setting, necessitating consistent parameters for village fund allocation. Achieving this strategic goal employs an online method with the Village Single Data innovation (Regional Innovation Report, Mesuji Regency (Rizaldy et al., 2020)

Semarang city faces another challenge: realizing effective integration of planning, implementation, evaluation, and control of development requires accurate, current, integrated, accountable, accessible, and shareable data. Data often resides in various local organizations in differing formats, hindering public and stakeholder access. To rectify this data governance issue, the Semarang city government initiated the Semarang Single Data initiative and Semarang Single Data Portal (Regional Innovation Report, Semarang City,(Rizaldy et al., 2020)

Two main issues have been identified in the deterministic perspective of technology (Woolgar, 2006) Firstly, it is difficult to fully isolate technology from other factors. Factors and elements involved in the process of social change impact the direct causeand-effect relationship between technological capability and specific societal changes. In this regard, Woolgar attempts to consider whether the introduction of mobile technology has led to a more mobile lifestyle in society. Another example of technological determinism thinking is the expectation of increased productivity solely from digital technology itself (Fountain, 2001) or the loss of jobs as a consequence exclusively from the introduction of technology. Secondly, the claim that digital technology determines the direction of society. Changes in digital technology compel us to identify the technological capabilities that influence those changes(Woolgar, 2006)

The study's objective is to depict the government's efforts to enhance public service and local governance through unified data innovations. The research's focus centers on the use of SAFAAT Beneficiary Single Data in Morowali Regency, Village Single Data in Mesuji

Regency, and Semarang Single Data in Semarang city, ensuring accuracy, currency, accessibility, and applicability for both institutions and the public. Several studies have explored information service systems, such as (Zakiyah & Fadiyah, 2020) research on the Family Hope Program (PKH) Implementation in Empowering Beneficiary Families in Bungku Tengah Subdistrict, Morowali Regency. Findings demonstrate improved communication and relevant information dissemination, with room for improvement. Similarly, (Zakiyah & Fadiyah, 2020) investigated Village Counseling and Deliberation for Special Village Fund Beneficiaries, revealing better understanding among fund managers and beneficiaries. However, these studies emphasize empowerment, counseling, and deliberation, while this research emphasizes government efforts in public service enhancement and local governance through unified data innovations. The research's significance is underscored by its examination of child health conditions in Morowali Regency, Mesuji Regency, and Semarang city.

II. RESEARCH METHODS

This research employs a qualitative methodology to investigate the pursuit of welfare enhancement in public service and local governance through the innovative implementation of unified data systems, specifically focusing on the Beneficiary Single Data (SAFAAT) in Morowali Regency, Village Single Data in Mesuji Regency, and Semarang Single Data in Semarang city. Qualitative research methodology is a procedure that generates descriptive data in the form of written or spoken words from individuals and observable behaviors, with an approach centered on context and holistic understanding of individuals (N. K. Denzin & Lincoln, 2006). Utilizing in-depth analysis, qualitative research examines specific issues, relying on non-numerical data collection and analysis, thereby comprehensively understanding unfolding circumstances(Neuman, 2014). Data collection involves sourcing information from diverse outlets, subsequently organized into narratives as per data requirements. The supporting data is drawn from various sources such as reports, journals, books, scholarly articles, and literature reviews, encompassing concepts under investigation(Bryman, 2012; Creswell, 2013). This study is conducted to discern government initiatives aimed at enhancing welfare in public service and subnational governance through innovative unified data systems, specifically spotlighting the Beneficiary Single Data (SAFAAT) in Morowali Regency, Village Single Data in Mesuji Regency, and Semarang Single Data in Semarang city.

III. RESULTS AND DISCUSSION

A. Supporting Regulations One Indonesian Data

The initiative of One Data Indonesia was conceived to bring forth reliable, accountable, and current data to support development implementation and quality governance (Keperawatan et al., 2019). Several challenges revolve around data inconsistencies, data dispersion across various public institutions with limited accessibility, lack of synchronization among data-holding agencies, and non-standardized data (Rizaldy et al., 2020). To achieve honest, efficient, open, and responsible governance, alongside superior public services that bolster Indonesia's digital transformation agenda, efforts to enhance data connectivity across governmental bodies are imperative (Rizaldy et al., 2020).

The Regulation of President of the Republic of Indonesia No. 39/2019, commonly recognized as the One Data Indonesia regulation, strives to create a cohesive and efficient strategy for national planning, implementation, assessment, and management of development endeavors. This piece offers a concise overview of the key elements of the regulation: The first key aspect is the clear and concise definition of One Data Indonesia. The regulation defines it as a comprehensive framework for governmental data governance with the aim of generating accurate, up-to-date, integrated, and accountable

data. These data should be effortlessly accessible and shareable between central and regional institutions, promoting a cohesive approach to data management.

The second significant feature involves the establishment of the Directorate Council for One Data Indonesia. This council assumes a central role in offering guidance, coordinating efforts, and overseeing the implementation of the One Data Indonesia policy. The policies and recommendations originating from the Directorate Council serve as the foundational pillars of effective data management practices. And the third focal point revolves around the role of Data Stewards within the governance framework. Designated governmental bodies functioning as Data Stewards will be responsible for directing, coordinating, and supervising data management efforts. This responsibility spans across both central and regional levels and entails ensuring data compliance with established Data Standards, Metadata, Interoperability Data principles, and the utilization of Reference Codes and Master Data.

A notable addition is the introduction of the Walidata concept, constituting individuals responsible for data management at both central and regional levels. Walidata's responsibilities encompass data collection, verification, and dissemination in alignment with the principles of the One Data Indonesia framework. Furthermore, the regulation formalizes the creation of the One Data Indonesia Forum, which serves as a dedicated communication and coordination platform between Data Stewards and Walidata. This platform operates at both central and regional levels, facilitating seamless collaboration in the domains of planning, data collection, verification, and dissemination.

Lastly, a Coordinator for the One Data Indonesia Forum is appointed at the central level, responsible for overseeing coordination and communication throughout the various stages of data management. This includes planning, collection, verification, and dissemination of data. The Coordinator holds the authority to seek guidance from the Directorate Council in effectively addressing emerging challenges. In conjunction, the Minister of National Development Planning/Head of National Development Planning Agency Regulation No. 18/2020 provides an intricate guide to the operational framework of the One Data Indonesia organizer at the central level. This document delves into the procedural execution of the One Data Indonesia policy, detailing the specific roles and responsibilities of governmental institutions actively engaged in the process. Together, these two regulations collaboratively construct a robust framework that harmonizes the management of governmental data in Indonesia. The overarching goal is to achieve seamless coherence, precision, and accessible data, ultimately enhancing the efficacy of the national planning and development processes.



Figure 3.1. SDI Conditions in the Future according to (Rizaldy et al., 2020).

Information dissemination via the One Data Indonesia Portal and other channels adheres to prevailing legal regulations and trends in science and technology. Accessible in an open format, the available data is easily retrievable for anyone through the Integrated Data System (SDI). High-quality data holds the potential to serve as an informational cornerstone for policy design, oversight, and assessment. By the end of 2020, the SDI portal (data.go.id) was linked with 43 Agency Data Portals, encompassing a total dataset of 41,708 and an accumulation of 58,155 files. Generated data must adhere to the principles of the Integrated Data System (SDI), as follows: Firstly, a single data standard referring to data foundations and methodological regulations from conceptualization, definition, categorization, measurement, to units. Secondly, a single metadata serving as structured information to elucidate the data's content and origin, thus facilitating its search, use, and re-management. Thirdly, data interoperability, denoting data's capability to be exchanged or shared between interacting systems. Furthermore, there exists a reference code or master data, an identification symbol for data, and data representing objects in governmental business processes, predefined for utilization (Rizaldy et al., 2020).



Figure 3.2. One Data Indonesia Portal (https://data.go.id)

Establishing public confidence in the implementation of public services is a crucial step in responding to the expectations and demands of the community to enhance the quality of public services. Enhancing the quality and ensuring the provision of public services align with the content of the Republic of Indonesia Law Number 25 of 2009 concerning Public Services, which stipulates that the state is responsible for providing services to all citizens and residents to fulfill the rights and basic needs as mandated by the 1945 Constitution of the Republic of Indonesia. Article 1 states that public services encompass actions or a series of actions to fulfill service needs in accordance with legal provisions for every citizen and resident related to goods, services, or administrative services provided by public service providers. The implementation of public services is a vital step in responding to the aspirations and needs of the community to enhance the quality of public services. The state is responsible for providing services to all citizens and residents to fulfill the rights and basic needs mandated by the 1945 Constitution of the Republic of Indonesia. Public services encompass actions or a series of actions aimed at meeting service needs in accordance with legal provisions, provided to every citizen and resident related to goods, services, or administrative services provided by public service institutions. Furthermore, based on the Presidential Regulation of the Republic of Indonesia Number 39 of 2019 concerning One Data Indonesia, it is stated that One Data Indonesia is an approach to managing government data with the aim of producing accurate, current, integrated, and accountable data. Moreover, efforts are made to ensure that the data is easily accessible and can be used collectively by Central Agencies and Local Agencies through the application of data standards, metadata, data interoperability, and the use of reference codes and master data. One Data Indonesia is aimed at directing

the management of data generated by Central Agencies and Local Agencies to support the processes of planning, implementation, evaluation, and control of development.

B. One Data Public Service Innovation and Governance

The Innovation of One Data for Beneficiary Management (SAFAAT) is a program that manages data on education, health, and impoverished communities, operating based on human civilization's context to achieve welfare in Morowali Regency. The initiator of SAFAAT is the Head of the Regional Social Services Office of Morowali Regency. The result of the SAFAAT innovation is the availability of a one-data program for beneficiaries that enhances community welfare in education, health, and impoverished aspects. To disseminate the innovation, collaboration is carried out with the Regional Communication and Information Office of Morowali Regency to publish news about the SAFAAT concept through the official website of the Morowali Regency Government, www.morowalikab.go.id, and social media platforms like YouTube, Facebook, and WhatsApp. The implementation of SAFAAT involves socialization. The Social Services Office determines the SAFAAT recipient locations, selects districts and subdistricts/villages, designates assistance, selects potential recipients, verifies and compiles the recipients' list. Replacement of SAFAAT recipients occurs if they don't meet the criteria or have passed away. The benefit obtained from the SAFAAT innovation is the reduction of the burden on underprivileged individuals or families in education and health aspects by utilizing SAFAAT. For beneficiaries, their degree of neediness is considered, and recipients include those unable to be rehabilitated and students from economically disadvantaged families.

The Innovation of One Data for Village is a digital (online) platform for managing direct cash assistance (BLT) from village funds in Mesuji Regency. The outcome of the One Data for Village innovation is that the management of Village Fund BLT, from planning to realization, runs smoothly online and is user-friendly. Online services like email and WhatsApp groups are available for remote users, while face-to-face services remain accessible. The effectiveness of distributing village funds and Village Fund BLT is enhanced by creating a shared storage medium (virtual share storage) accessible to villages and stakeholders. Village Fund disbursement data and Village Fund BLT pass through separate folders for each village, with access limited to the respective village. The district office checks the distribution data and provides corrections for uploaded documents. In the district-level One Data access, village assignments and assistant village assignments are placed in corresponding folders according to administrative regions and assistance. After data verification, the District PMD Team executes disbursement procedures. All Village Fund and Village Fund BLT disbursement requirements are downloaded to each village's data folder. A thorough examination of all uploaded documents is conducted before the subsequent processing. Disbursement data of Village Fund and Village Fund BLT are uploaded into the "om spam" application managed by the Ministry of Finance. Requests for Village Fund and Village Fund BLT are generated using the "om spam" application, and the process is monitored by the State Treasury Office (KPPN). Corrections are made in the "om spam" application if there are notifications from KPPN. The benefit of this innovation lies in providing guidance and ease for village governments to deliver optimal village fund disbursement documents.

The Innovation of Semarang One Data serves as a communication and coordination hub for Central Agencies and Local Agencies for implementing One Data Indonesia at the Semarang City level, acting as a medium for shared data at the regional level accessible through information and communication technology. The result of the Semarang One Data innovation is the availability of guidelines for regional development implementation, including planning, implementation, control, monitoring, evaluation, and reporting, all based on accurate data. Semarang One Data is accurate, up-to-date, integrated, accountable, easily accessible, and shareable among Central Agencies and Local Agencies through adherence to Data Standards, Metadata, Data Interoperability,

and the use of Reference Codes and Master Data. The usage process of Semarang One Data involves several steps: Firstly, data producers gather data in line with the principles of One Data Indonesia, including a list of data and priority data, data period, and data update or release time. Secondly, collected data is submitted to the data controller (Walidata) and subsequently approved by the head of the local agency.

Thirdly, if the submitted data does not align with the principles of One Data Indonesia, Walidata returns the data to the data producers for corrections based on inspection results. Fourthly, the outcomes of data inspection and priority data are discussed and agreed upon in the Semarang City-level One Data forum, then documented in an inspection record. Fifthly, data dissemination is carried out by Walidata following legally established agreements through the One Data portal and other media, adhering to legal regulations and technological advancements. The benefits derived from Semarang One Data include integration into a single platform for easy access and management. Various stakeholders, including the public, government, and other interested parties, can search for and access relevant data. The development of Semarang One Data (data.semarangkota.go.id) adds a One Data Processing step implemented by Walidata, an entity in charge of statistical government affairs, including data verification and validation using scholarly methodology. These data can assist in planning, development, and decision-making across various domains such as infrastructure, transportation, environment, health, education, and others. Moreover, it fosters collaboration among government, academia, society, and the private sector. By openly sharing data, multiple parties can conduct further analysis, identify issues, and innovate to enhance the quality of life in Semarang.

C. Future Development of Digital Innovation

In the context of innovation, the implementation of One Data Indonesia involves several key components. There exists a Governing Council at the central government level, comprising Data Managers and Data Guardians at both central and regional tiers, alongside Supporting Local Data Guardians. Moreover, a One Data Forum has been established to reach consensus on the list of data and priority datasets. In the process of formulating the data inventory, local agencies refer to central institutions. Consequently, regional-level One Data implementation must ensure the accuracy of disseminated data before submission to the data guardians. Data governance within Ministries/Agencies/Local Governments should align with priority indicators set in the National Medium-Term Development Plan (RPJMN), Sustainable Development Goals (SDGs), and immediate data requirements. Amidst the pandemic, generated data must conform to data standards, possess metadata, and be disseminated through verified official portals.

Presently, collaborations have been established with SDGs to accumulate SDGs data and metadata, One Map collaboration with the Geospatial Information Agency (BIG), and partnerships with the Municipality of Medan. Over the past year, One Data Indonesia has achieved notable progress. The SDI portal has been integrated with 43 agency data portals, encompassing 41,708 datasets and 58,115 files. Nonetheless, challenges persist in the One Data Indonesia implementation. The existence of numerous standalone applications poses difficulties in integration. Additionally, expertise in data-related matters in Indonesia remains inadequate, and reluctance among agencies to share data prevails due to sectoral interests.

The National Development Planning Agency of Indonesia presents discourse concerning the Implementation of One Data Indonesia for Quality Statistical Data. Government transparency yields several benefits: (1) fostering transparency and public trust, (2) enhancing public participation, (3) fortifying an autonomous data repository, (4) nurturing innovation, and (5) stimulating effective and efficient governmental services. Pertaining to transparency, statistical data and metadata are accessible through the Central Bureau of Statistics website (www.bps.go.id). The Allstats BPS facilitates statistical access via smartphone applications. The Crop Area Sampling Framework (KSA) estimation also serves data users effectively. The online implementation of the 2020 Population Census showcases significant participation from 51.36 million Indonesian citizens in the nation's statistics.

There are three categories of statistics: Basic Statistics orchestrated by BPS to serve broad purposes, encompassing governmental and public, cross-sectoral, national, and macroscopic contexts; Sectoral Statistics managed by Ministries/Agencies/Local Governments to address specific institutional needs in governance and development; and Special Statistics held by individuals/society to cater to specific needs in business, education, socio-cultural domains, and other societal aspects. BPS cannot furnish data down to individual identities due to the data's macroscopic and aggregated nature.

One implementation of One Data Indonesia involves the utilization of Reference Codes, such as the Indonesian Standard Classification of Field of Work (KLBI), employed by the OSS for business licenses, and the Village and Sub-District Master File (MFD) used in sampling. Furthermore, the presentation of SDGs indicators adheres to the four principles of One Data. BPS also publishes Statistical Indonesia (SI) and Regional Data (DDA), annual publications encompassing data generated by BPS and other agencies. Through the provision of Spatial Data and the Framework Database for Sub-Districts and Villages, BPS upholds updated data on administrative areas to ensure data uniformity. In essence, environmental data can be managed effectively in light of swift changes in sub-district or village regions.

Within the innovation context, the government has issued legislation mandating the strengthening of the national system for research, development, and application of science and technology. This empowers both central and regional governments to enhance the capacity of science and technology to bolster the nation's competitiveness and self-reliance in the global arena. The regulation of innovation within regional governance is mandated by governmental decrees, delineating that regional innovation encompasses various forms of renewal within local governance. Aligned with the aforementioned objectives, decentralization or regional autonomy has furnished opportunities for local governments to fortify public services geared towards the common interest. Emerging innovations have been facilitated by the advent of fiber optic infrastructure and internet facilities. Through this infrastructure, local governments and communities are enabled to exchange information and cultivate a network society.

In Castells' perspective the network society constitutes an era of information in which society orchestrates the production and distribution of information, superseding the paradigm of the industrial era that primarily revolved around energy production and distribution. Castells outlines the network society through six key features associated with global social transformation, including informatization, the network society, global economy, workforce transformation, global cities, and cyberculture.

However, (Fitzpatrick, 2005) offers a different stance from Castells in the discourse surrounding digital inclusion and exclusion within the network society. Fitzpatrick posits that the ideological framework remains relevant and employs this framework to delineate three regimes of information welfare: liberal, conservative, and social democratic. She illustrates that while characterizing the UK solely as liberal might be overly simplistic, significant aspects of market liberalism are evident, especially within the prevailing socio-economic inequality. Fitzpatrick concludes that, despite the allure of technological advancement as an easy and modern solution, it might actually steer society away from the interactive (and egalitarian) solidarity required within the network society.

The explanation of the network society is intrinsically tied to the role of digital innovation. Digital innovation entails the utilization of digital technology within the innovation process or the resultant innovations (Nambisan et al., 2017). Yet, the opportunity to innovate through digitizing products and offering digital services presents

challenges for organizations (Henfridsson et al., 2014; Svahn, Mathiassen, & Lindgren, 2017). Distinct from the traditional value chain structure that typifies traditional industries, value creation in digital innovation occurs through distributed control and dynamic processes within a networked environment (Boland Jr, Lyytinen, & Yoo, 2007; Westergren & Holmström, 2012). At the core of digital innovation lies digitalization, referring to the transformation of analog information into digital formats (Tilson, Lyytinen, & Sorensen, 2010; Yoo et al., 2012).

D. New Institutions and the One Data Indonesia Framework

An organization that integrates technology, structure, and market changes to sustain the existence and development of the company is referred to as innovation. Innovation is defined as a novel idea that is applied to initiate or enhance a product, process, or service (Pearce & Robbins, 1994). Innovation arises from training and learning, combined with and commercialization. While innovation possesses four discoverv distinct characteristics. Firstly, it exhibits specificity or uniqueness, signifying that an innovation possesses distinct attributes in terms of ideas, programs, arrangements, systems, including potential expected outcomes. Secondly, it encompasses an element of novelty, meaning that an innovation must display characteristics of a work and intellectual creation that holds a degree of originality and novelty. Thirdly, innovation programs are executed through planned initiatives, indicating that an innovation undergoes a process that is not rushed. Rather, innovative activities are well-prepared with clear and pre-planned programs. Fourthly, the introduced innovation carries a purpose, implying that the innovation program undertaken must have a desired direction, encompassing the trajectory and strategies to achieve that goal.

Traditionally, innovation has often been portrayed as a distinct, linear, and sequential innovation process with well-structured, differentiated, and clearly ordered phases. The innovation process comprises idea generation, advocacy & screening, experimentation, commercialization, implementation, and diffusion (Fichman et al., 2014), distinguishing between discovery, development, diffusion, and impact. According to (Rogers dan Shoemaker., 1971) diffusion is the process through which discoveries are spread among individuals who are members of a social system. The Diffusion of Innovation Theory emphasizes the role of opinion leaders in influencing societal attitudes and behaviors, suggesting that mass media wield significant influence in disseminating novel discoveries. Defines diffusion as the process by which an innovation is communicated through certain channels over time among members of a social system. Innovations, as new ideas, practices, or objects, are perceived as novel to individuals (Rogers, 1995).

Digital technology exhibits three fundamental characteristics that reshape the essence of innovation. Firstly, upon being transformed into digital format, information can be stored, altered, transmitted, and traced by any digital device, irrespective of its content. Secondly, digital information can be edited through reprogramming, enabling digital solutions to be easily modified post-implementation, through interactions with external systems (Kallinikos et al. 2013). Thirdly, the inherent self-referential nature of digital technology underscores its crucial role in generating other digital technologies. This underscores that digital technology serves as both an outcome and a foundation for the development of digital innovation, implying the potential for high scalability, low entry barriers, and the promotion of participatory and democratic innovation (Yoo et al., 2010).



Figure 3.3. Characteristics of Digital Innovation

(Reference: https://link.springer.com)

The outcomes of digital innovation are characterized by convergence and generativity. Convergence means that digital technology combines previously separate components. The flexible nature of digital technology enables the modular integration of components into the digital technology platform. Institutions can take various forms, ranging from implicit qualities like values or beliefs about how one treats others, to explicit practices or rules. Institutions can also manifest as agreements and understandings among business partners, employees, and superiors, extending to regulations issued by the government. The process of change typically evolves incrementally, shaped by pre-existing institutions. According to (Roen, 2011), Institutional Theory's core idea is the formation of organizations due to the pressures of institutional environments, leading to institutionalization. The underlying premise of Institutional Theory is the formation of organizations due to the pressures of institutional environments, resulting in institutionalization. An idea or concept within an institutional environment shapes language and symbols that explain the organization's existence and are accepted as norms within the organizational context.

The sustainability of an organization occurs within a broad organizational scope where each organization mutually influences the forms of others through a process of adoption or institutionalization (Donaldson, 1995). According to (DiMaggio & Powell, 1983) Institutional Theory is a theory that explains the phenomenon of organizational change tendencies toward homogeneity. The process of homogenization is referred to as isomorphism. Isomorphism is a phenomenon where formal organizations become similar to their environment. This occurs due to technical and exchange-related interdependencies, or indeed structural reasons, where the organization reflects a socially formed reality. In a social event, an organization is influenced by specific factors, typically social institutions, to accept, incorporate, and subsequently apply certain foreign characteristics according to its functions. The presence of institutional isomorphism further enhances the recognition of organizational homogenization within the new social environment or legitimacy (Meyer dan Rowan, 1977).

One form of institutional theory, as outlined by (DiMaggio & Powell, 1983), includes the following: Firstly, Coercive isomorphism, which is an adjustment process towards similarity through "coercion". Coercive isomorphism represents external pressures imposed by the government, regulations, organizations, or other institutions to adopt a structure or system of interdependence that encompasses organizational functions. Coercive isomorphism is induced by the government, regulations, or institutions that provide resources for system adoption. Secondly, Mimetic isomorphism involves the pressure to imitate or replicate the activities, systems, or structures of other organizations (Ashworth et al., 2009), Mimetic isomorphism emerges due to uncertainty; therefore,

organizations strive to imitate others that are more successful in the same field to mitigate uncertainties faced by an organization (March & Olsen, 1983). Thirdly, as stated by (DiMaggio & Powell, 1983), Normative Isomorphism is the process by which organizations face pressures from group norms to adopt specific institutional practices due to professional demands. Professionalization involves all efforts made by members of an organization to define their working conditions and methods, control "the production of producers," and establish cognitive foundations and legitimacy for their work. A component of normative isomorphism is culture. Each level of culture naturally exerts influence over other levels of culture. A strong and positive organizational culture significantly impacts behavior and the performance effectiveness of a company.

The concept of isomorphism arises from the notion that organizations compete for legitimacy and political power. Therefore, organizations must adopt socially validated structures, methods, technologies, and techniques. This leads to the formation of new institutions or multidimensional social structures, also known as new institutionalism, which are constructed from symbolic elements, social activities, and material resources. The most significant role of institutions lies in their capacity to enforce actions through policies or rules. According to (Burns & Scapens, 2000), the process of institutionalization is cumulative and repetitive, encompassing stages of enacting, encoding, and reproducing. The organizational change process resulting from institutionalization is exemplified in the research conducted by (Hasselbladh & Kalinikos, 2000) where the process of institutionalization occurs in three stages: ideals, discourses, and techniques of control.



Figure 3.4. Stages of Institutionalization Process Change (Hasselbladh & Kalinikos, 2000)

The concept of new institutionalism, according to (Nee & Ingram, 2001) involves an integration of social relations and institutions that serve as guidelines, subsequently becoming regulators within the formal elements of institutional structures and the non-formal social organization of networks and norms. These facilitate, motivate, and determine the economic behaviors of community members. The concept of the existence of new institutions is supported by three pillars: Regulative, Normative, and Cultural-Cognitive. The regulative aspect of institutions emphasizes limitations or prohibitions on human behavior through rule-making. The normative pillar focuses on normative rules that provide provisions or guidelines, assess obligations within the dimension of social life. The cultural-cognitive approach centers on shared conceptions that constitute the nature of social reality through a framework of meaning.

Based on Presidential Regulation No. 95/2018 concerning the Electronic-Based Government System (SPBE), it serves as the foundation for implementing a governance system that is honest, efficient, open, accountable, as well as excellent and reliable public services, to support Indonesia's digital transformation mission. This is achieved through efforts to enhance data connectivity among various government institutions (Thomas,

2020). The existence of data management within the government aims to create accurate, up-to-date, and accountable data concerning its accuracy. Furthermore, this data should be easily accessible and shareable. In cases related to data about poverty levels, typically, data distribution and statistics regarding poverty rates are discussed. One Data Indonesia is an attempt to integrate and coordinate cross-sector and cross-government agency data in Indonesia, aiming to optimize data usage in decision-making, planning, execution, evaluation, and control of development programs.

Both regulations strengthen the national structure in efforts to implement an electronicbased government system and the utilization of integrated government data. The designation of Priority Data and the action plan for One Data Indonesia for the ongoing year shall be established no later than the first month of that year. Data dissemination is conducted through the One Data Indonesia Portal and other channels in accordance with legal requirements and advancements in science and technology (Kemensetneg, 2019). By utilizing the central One Data Indonesia portal (tier 1), institutions (tier 2), provincial levels (tier 2), and district/city levels (tier 3), it is expected that this data will be available in an open format and easily accessible to anyone. High-quality data has the potential to serve as the foundation for designing, monitoring, and evaluating policies. Thus, close collaboration among relevant stakeholders becomes paramount (Islami, 2021).

Through the One Data Indonesia Concept, the government is expected to conduct further analysis, such as spatial analysis of poverty data. The government is also anticipated to integrate statistical, spatial, and national financial data such as the State Budget (APBN) and Regional Budget (APBD). This will result in accurate data and facilitate the government's management. The new institution acts as a link between various sectors and government agencies to integrate existing data and ensure its effective utilization in supporting various aspects of development and decision-making at the national level. Integrating data from different sectors and government agencies enables its effective and integrated utilization in decision-making and development planning. Focusing on One Data Indonesia can harness digital innovation to accelerate and enhance efforts toward integrated and effective data management. Digital innovation aids in realizing the vision of better data collection, management, and utilization to support development and decision-making in Indonesia.

IV. CONCLUSION

The digital evolution presents opportunities and challenges for the Indonesian Government, especially in data-driven decision-making. The enhancement of government data management to elevate data value as a foundation for decisions is reflected in the National Open Government Action Plan, including through the One Data Indonesia initiative. Issues like poverty, education, and unemployment require attention as they could hinder development. The understanding of poverty has evolved from merely economic aspects to encompass failure in meeting fundamental rights and equitable treatment. Although the government has provided social assistance programs, excessive reliance on these programs can hinder equal distribution. In Mesuji Regency, challenges in disbursing Village Funds and Village Fund BLT arise due to limited village administrative resources and other hindrances that slow down data synchronization between village governments and the Mesuji Regency Government. Meanwhile, in Semarang City, data integration in planning, implementation, evaluation, and development control is lacking. Hence, to achieve welfare through public service and local governance by leveraging the innovation of single data provision, such as SAFAAT in Morowali Regency, Village One Data in Mesuji Regency, and Semarang One Data in Semarang City. This ensures accurate and accessible data sources for both agencies and the public. Focusing on the concept of One Data Indonesia and maximizing the utilization of existing digital innovations can accelerate and strengthen efforts towards integrated

and efficient data management. The digital innovations play a crucial role in realizing the vision of collecting, managing, and utilizing data more effectively to support development processes and decision-making in Indonesia. It is anticipated that with the implementation of One Data Indonesia, the government can conduct more in-depth analyses, including spatial analysis of poverty rates. Additionally, the government is also expected to integrate statistical, spatial, and financial data such as the State Budget (APBN) and Regional Budgets (APBD) to generate more accurate information and facilitate comprehensive data management.

V. ACKNOWLEDGMENT

The researcher extends boundless gratitude to the Ministry of Home Affairs of the Republic of Indonesia, government officials at the local level, the community, various communities, and all those who have contributed to the writing of this journal, enabling this research to be conducted to the fullest extent possible.

References

- Ashworth, R., Boyne, G., & Delbridge, R. (2009). Escape from the iron cage? Organizational change and isomorphic pressures in the public sector. Journal of public administration research and theory, 19(1), 165-187. https://doi.org/10.1093/jopart/mum038
- Boland Jr, R. J., Lyytinen, K., & Yoo, Y. (2007). Wakes of innovation in project networks: The case of digital 3-D representations in architecture, engineering, and construction. Organization science, 18(4), 631-647. https://doi.org/10.1287/orsc.1070.0304
- Bryman, A. (2012). Social Research Methods (Fourth Edi). Oxford University Press.
- Burns, J., & Scapens, R. W. (2000). Conceptualizing management accounting change: an institutional framework. Management accounting research, 11(1), 3-25. https://doi.org/10.1006/mare.1999.0119
- Creswell, J. W. (2013). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. In Research design Qualitative quantitative and mixed methods approaches (Fourth). Sage Publications. https://doi.org/10.1007/s13398-014-0173-7.2
- Denzin, N. K., & Lincoln, Y. S. (2006). The Sage Handbook of Qualitative Research, 2nd ed. Edited by. In and Y. S. L. N. K. Denzin (Ed.), Library (Vol. 28, Issue August). https://doi.org/10.1016/j.lisr.2006.05.004
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited institutional isomorphism and collective rationality in organizational fields. In Economics Meets Sociology in Strategic Management (pp. 143-166): Emerald Group Publishing Limited https://doi.org/10.2307/2095101
- Donaldson, L. (2008). The conflict between contingency and institutional theories of organizational design. Designing organizations: 21st century approaches, 3-20. https://doi.org/10.1007/978-0-387-77776-4_1
- Fichman, R. G., Dos Santos, B. L., & Zheng, Z. (2014). Digital Innovation as a Fundamental and Powerful Concept in the Information Systems Curriculum. MIS Quarterly, 38(2), 329-343. https://doi.org/10.25300/MISQ/2014/38.2.01
- Fountain, J. E. (2001). Building the Virtual State: Information Technology and Institutional Change. Brookings Institution Press.
- Hasselbladh, H., & Kallinikos, J. (2000). The project of rationalization: a critique and reappraisal of neo-institutionalism in organization studies. Organization studies, 21(4), 697-720. https://doi.org/10.1177/0170840600214002
- Henfridsson, O., Mathiassen, L., & Svahn, F. (2014). Managing technological change in the digital age: the role of architectural frames. Journal of Information Technology, 29, 27-43. https://doi.org/10.1057/jit.2013.30

- Islami, M. J. (2021). Implementasi Satu Data Indonesia: Tantangan dan Critical Success Factors (CSFs). Jurnal Komunika: Jurnal Komunikasi, Media Dan Informatika, 10(1), 13-23. https://doi.org/10.31504/komunika.v10i1.3750
- Kallinikos, J., Hasselbladh, H., & Marton, A. (2013). Governing social practice. Theory and Society, 42(4), 395–421. doi:10.1007/s11186-013-9195-y
- Kemensetneg. Peraturan Presiden No.39 Tahun 2019 Tentang Satu Data Indonesia (2019). Indonesia.
- Keperawatan, P. S., Dian, A. K., Studi, P., Keperawatan, I., & Keperawatan, P. S. (2019). © 2019 Jurnal Keperawatan.
- March, J. G., & Olsen, J. P. (1983). The new institutionalism: Organizational factors in political life. American political science review, 78(3), 734-749. https://doi.org/10.2307/1961840
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American journal of sociology, 83(2), 340-363.https://doi.org/10.1086/226550
- Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital Innovation Management: Reinventing Innovation Management Research in a Digital World. MIS Quarterly, 41(1), 223–238. https://doi.org/10.1287/orsc.1070.0304
- Neuman, W. L. (2014). Social Research Methods: Qualitative and Quantitative Approaches (Seventh Ed). Pearson Education Limited.
- Nee, Victor and Ingram, Paul. (2001). The New Institutionalism In Sociology. California: Stanford University Press.
- Rizaldy, I., Rusdiana, E., & Ahmad, G. A. (2020). Pengelolaan Keuangan Desa Dalam Mengurangi Tindak Pidana. Jurnal Hukum Volume 7 Nomor 1, 7.
- Pearce, J. A., & Robbins, D. K. (1994). Retrenchment remains the foundation of business turnaround. Strategic Management Journal, 15(5), 407-417. https://doi.org/10.1002/smj.4250150507
- Robbins, S. P., & Coulter, M. (2010). Manajemen Edisi Kesepuluh Jilid I. Jakarta: Erlangga.
- Roen, F. (2011). Teori dan Perilaku Organisasi: Teori Institusional (Institutional Theory)
- Rogers, E. M. (1995). Diffusion of Innovations: Modifications of a Model for Telecommunications. Die Diffusion von Innovationen in Der Telekommunikation, 25-38. https://doi.org/10.1007/978-3-642-79868-9_2
- Rogers, E. M., & Shoemaker, F. F. (1971). Communication of Innovations; A Cross-Cultural Approach.
- Svahn, F., Mathiassen, L., Lindgren, R., & Kane, G. C. (2017). Mastering the digital innovation challenge. MIT Sloan Management Review, 58(3), 14.
- Tilson, D., Lyytinen, K., & Sørensen, C. (2010). Research commentary—Digital infrastructures: The missing IS research agenda. Information systems research, 21(4), 748-759. https://doi.org/10.1287/isre.1100.0318
- Thomas, E. (2020). Satu Data Indonesia: Menuju Big Data Pemerintah. Jakarta: FGD Kesiapan Big Data Pemerintah
- Westergren, U. H., & Holmström, J. (2012). Exploring preconditions for open innovation: Value networks in industrial firms. Information and Organization, 22(4), 209-226. https://doi.org/10.1016/j.infoandorg.2012.05.001
- Woolgar, S. (2006). Perspectives on technology and society. In: Restivo Science, Technology and Society: An Encyclopedia. Oxford University Press.
- Yoo, Y., Boland, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for innovation in the digitized world. Organization Science, 23(5), 1398–1408. https://doi.org/10.1287/orsc.1120.0771

- Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). Research Commentary—The New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research. Information Systems Research, 21(4), 724–735. doi:10.1287/isre.1100.0322
- Zakiyah, U., & Fadiyah, D. (2020). Inovasi Pelayanan Transportasi Publik Ramah Penyandang Disabilitas di DKI Jakarta. Administratio : Jurnal Ilmiah Administrasi Publik Dan Pembangunan, 11(1), 29–36. https://doi.org/10.23960/administratio.v11i1.102