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Indonesian mental revolution movement as a key-drive for accelerating the quality of public services: from idea to implementation

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Abstract

This research aims to find out the implementation of a mental revolution that encourages the acceleration of innovation and digitalization of public services through the implementation of e-government to build a clean, effective, democratic and trusted government. The research design uses descriptive qualitative research by analyzing policy documents. This article examines the evolution of public service innovation policies in Indonesia related to the mental revolution initiative. The documents reviewed are laws, government regulations, ministerial regulations, and policy documents related to public service innovation and transformation, as well as e-government from January 2014 to May 2024. The results showed that since the launch of the National Movement for Mental Revolution, through the Indonesia Serves program, there has been an acceleration of the process of developing public service digitization innovations. This initiative encourages the acceleration of changes in the quality of public services by accelerating changes in the mindset, attitudes, and behavior of state civil apparatus to produce service innovations that improve the quality of public services. The acceleration of innovation development through e-government and public service digitalization can be realized with budget support, human resource readiness, sustainable policy commitment, and strong leadership in supporting the sustainability of holistic public service innovation.

Keywords: *mental revolution, innovation, public service, acceleration*

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Introduction

The internet has significantly influenced information technology policy, increasing political agendas, including e-government efforts. However, service innovation faces challenges due to the low number of users, government innovation, special officers, and public ignorance. The public values e-government. Key Performance Indicators have six pillars: increasing public services, administrative efficiency, open government capabilities, ethical behavior, trust, and social values and welfare (Nababan & Darwanto, 2015; Twizeyimana & Andersson, 2019). Information and Communications Technology enhances technology diffusion and economic activity, but inefficient methods and marginal products hinder growth. Countries should compare their environmental conditions, taking into account GDP growth, institutions, skills, and innovation capabilities. High-income countries should design an ICT development strategy and boost inputs to maximize ICT impact (H. Nam et al., 2022). To reach the entire community, digital technology, and innovation must be utilized to provide transparent,

fast, personalized, and sustainable services. Therefore, effective government requires high-quality public services (Mashuri & Adam, 2019; Desy, Reed, & Wolanskyj, 2017). The progress of digital technology continues, and it is increasingly being used in everyday life. As a result, digital forms of governmental services are essential, and Indonesian citizens must use e-government services. Many countries have succeeded in adopting the earliest stages of e-government, but many others have failed.

Public service innovation is divided into six types: mission, policy, management, partner, service, and citizen, based on two dimensions: 'innovation emphasis' and 'innovation locus', stressing their public value and collaborative character (Chen et al., 2019). The importance of creative agents in reading contexts, driving change and finding multi-interest solutions to societal problems. Political ingenuity is a conceptual link to understanding leadership capabilities for public value (Hartley et al., 2019). Public administration often ignores technological change, presenting new challenges for public leadership (Andrews, 2018). Realizing leading-edge innovation within the public sector requires a blend of transformational and collaborative leadership styles (Ricard et al., 2017). Public service innovation, introduced through an organization's stakeholder interface, needs examination of its specific relationships within the ecosystem, allowing innovations to emerge within organizational borders and among other organizations.

E-government and e-governance are critical to digital transformation, improving citizen-government ties through ICT efficiency, openness, and accountability. However, social, political, and economic factors limit their full potential (West, 2007). ICT technologies can promote transparency and reduce corruption through short-term actions like transparency measures, readiness criteria, and reusing systems, offering long-term strategic objective attainment (Bertot et al., 2010). Estonia's e-Estonia system, which is among the most advanced in the world, allows citizens to access all government services online, increasing efficiency and transparency. Strong digital infrastructure, a comprehensive legislative framework, and a strong focus on cybersecurity are all important considerations. The introduction of e-Residency and X-Road has simplified public services and promoted innovation (Margetts & Dunleavy, 2013; Kalvet, 2012). South Korea's Government 3.0 strategy, promoting open data, citizen participation, and innovative public services, has improved transparency and efficiency in the public sector. This approach emphasizes the integration of ICTs into governance frameworks, enhancing service delivery and public engagement (S. Kim & Lee, 2012; T. Nam, 2012). Innovation in the public sector is frequently tied to reform initiatives such as New Public Management, electronic government, and the shift from government to governance, which aim to improve the quality of public services and problem-solving capabilities (De Vries et al., 2016).

At that time, Indonesia faced serious development challenges, including a large number of poor people, low quality of education, uncertain social conditions, an underdeveloped economy, political and security instability, weakening of the mentality of leaders, misuse of state assets in all institutions, and the disparity between the destitute and the wealthy. Many countries, like Indonesia, have made improving the quality of public services their top priority. Most public institutions have identified the root problems that cause difficulties in their public services. Therefore, the Indonesian government must prioritize the most important problems and propose detailed solutions. Every government organization must have a process for assessing results objectively (Utomo & Noormega, 2020). Social influence and level of trust significantly influence individuals in developing countries to utilize e-government services (Susanto

& Aljoza, 2015). Indonesia is concentrating on digitization to boost public service efficiency. However, there is a difference between expectations and actuality. Infrastructure restrictions, limited digital literacy, data security issues, inadequate legislation and policy, and a lack of human resource capabilities in the public sector are all significant gaps. Further analysis is required to bridge this gap. The growth of information technology enables efficient data management, increasing government efficiency, transparency, and accountability. E-government fosters trust by increasing direct connections between government offices and the public, thereby making information accessible. The e-government model indicates that most local governments have adopted it at the expected basic level, but there are more barriers to its adoption than expected, depending on government size and application type.

There is a digital divide in e-government adoption across the European Union. While young people are more likely to accept new technology, elderly groups are more likely to use e-government services (Botrić & Božić, 2021). Electronic government facilities must adapt content to foster strong citizen relations, promoting long-term use and sustainable behavior. Technology integration and sustainable motives measure connection quality (Hariguna et al., 2021). E-Government also improves the efficiency, speed, transparency, accountability, and effectiveness of government functions, etc. (Sánchez-Torres & Miles, 2017). Barriers to e-government development, such as digital literacy and internet penetration. The government invests in strategies to remove these barriers. However, e-government project failures still occur, ranging from partial failure to abandonment due to unmet business needs and user satisfaction (Anthopoulos et al., 2016). E-governance is an ICT-enabled revolution in government administration with Web 4.0 technologies guiding the future development of e-governance, highlighting its potential impact on knowledge structures and its future impact (Bindu et al., 2019).

Individuals in developing nations make decisions to use e-government services based on their perceived ease of use and benefits. These factors include energy, time, and money savings, web navigation, and the capacity to be used from anywhere and at any time. Trust and social influence have a crucial impact (Susanto & Aljoza, 2015). Economic conditions, education level, and government efficacy all have a significant impact on e-government performance (C.-K. Kim, 2007). Public sector innovation is influenced by internal and external forces, and managers should change mindsets, reduce protectionism, and develop a national innovation framework (Agolla & Lill, 2013). Complex innovations encounter additional challenges to deployment. Multiple sources of ideas and a decentralized workplace foster creativity, which increases the possibility of adopting complex inventions. This implies that there is policy and management interest in promoting complicated innovation (Torugsa & Arundel, 2016). The constructivist approach to policy analysis focuses on diverse e-government implementation strategies, addressing challenges posed by socio-economic and organizational gaps in various countries.

The Nawa Cita program, led by Indonesian President Joko Widodo, focuses on e-government in five sectors: e-government, e-health, e-education, e-logistics, and e-procurement. Measures include e-leadership, cyber legislation, infrastructure development, pilot projects, and change management. The program provides network infrastructure, hardware, and software, and employs competent, capable, and innovative human resources. It improves communication, engagement, and efficiency, modernizes the public sector, increases citizen satisfaction, drives economic growth, and ensures effective governance.

The study looks at the significance of digital technologies in global governance, namely e-government, and how it affects Indonesian politics and governance. It investigates the opportunities and difficulties of digital transformation, its impact on efficiency, transparency, and public engagement, as well as the mental revolution movement's influence on public service quality. This study collects and examines various regulatory papers, government regulations, and evaluation results issued by credible entities. The policy documents reviewed are sourced between January 2014 and December 2023. Appendix A presents a sequential list of all policy documents that have been published relating to the mental revolution movement, governance, public service innovation, e-government, and digitalization along with attached references based on the time they were issued that policy.

Research Methods

This study used a descriptive qualitative approach to investigate the opportunities and constraints of implementing the national mental revolution movement in building digital public service governance innovations in Indonesia. Primary data was obtained through interviews using purposive sampling techniques, with informants selected based on their authority, expertise, and the impact of the national mental revolution and public service innovation policies (Miles, Matthew B & Huberman, 2014). Secondary data was obtained through a comprehensive analysis of relevant documents. This study employs descriptive approaches, such as data collection, reduction, presentation, and conclusions. Data validity checking was carried out by using triangulation of data sources. Ethical concerns were prioritized throughout the research procedure. Ethical issues were stressed throughout the research process, with consent from all interviews and measures made to preserve anonymity and confidentiality.

Results and Discussion
Mental Revolution to Build Integrity in Public Services

Mental revolution is an approach to realizing the noble ideals of the nation's founders to protect the entire Indonesian nation, brighten the nation's life, and advance general welfare. The spirit of change through the Mental Revolution was reaffirmed by President Joko Widodo in 2014 and emphasized in the 2015-2019 National Medium-Term Development Plan. The National Mental Revolution Movement in Indonesia has the potential to encourage innovation and digitalization of public services. This movement encourages community attitudes and behavior, which emphasizes quality public services. The mental revolution promotes integrity, honesty, and responsibility, encouraging government institutions to provide efficient services through innovation and digitalization. The Mental Revolution also encourages the adoption of technology to improve service quality, encourage digital transformation, and encourage community participation in development. For the Mental Revolution to be more than just a slogan and to succeed in restoring Indonesia's glory in regional and global competitiveness, a Mental Revolution Strategic Plan must be prepared for change and growth in the structure, culture, and processes of society. (Setkab, 2017). The Mental Revolution Movement is one of the implementations of the President of the Republic of Indonesia's vision in the 2015-2019 National Medium-Term Development Plan, and it will continue from 2020 to 2024. This movement was adopted during President Joko Widodo's two (2) terms. The President's vision is the attainment of a sovereign, autonomous, and personalized Indonesia through partnership. The National Movement for Mental Revolution aims to overhaul the mindset, attitudes, and behavior of state

officials to make them more responsive and innovative in responding to society's demands for quality services. This approach not only involves changing systems and processes but also prioritizing the values of integrity, professionalism, and excellent service. Expectations of change brought about by the Mental Revolution can be influenced by mental models or deep self-concepts that guide one's decision-making and memory representations of acquired knowledge (Crossan et al., 2017).

Joko Widodo's government in *Nawacita* aims to realize transparent, effective, democratic, and trustworthy governance, with a focus on transparency, accountability, public access, e-government, and open government in all agencies. The mental revolution seeks to convert three dimensions of change: cultural, functional, and structural, to improve the thinking, efficiency, and administration of the state apparatus (Zakaria, 2017). Reforms and structural improvements carried out by the Indonesian Government, especially in development policies, can cause significant changes in people's mentality (Wirutomo, 2019). Regulation of the Minister for Empowerment of State Apparatus and Bureaucratic Reform of the Republic of Indonesia Number 25 of 2018 concerning Guidelines for Implementing the 2018-2019 Serving Indonesia Movement outlines concrete action activities in the context of implementing the Serving Indonesia Movement program. The focus of the Serving Indonesia Movement program is expected to impact significant change, provide benefits to society, and raise a positive image of the government. The Serving Indonesia Movement aims to improve human resources through 10 program focuses, which produce the Public Service Index, implementation of the Public Service Mall by the Regional Government, and strengthening the ASN's core values of AKHLAK. In Coordinating Minister for PMK Regulation Number 3 of 2017, the target of the GIM program is to increase the integrity of ASN, the quality of public services, the application of filling positions following procedures, and competency standards for positions in Ministries/Institutions/Regional Governments. Through this target, it is hoped that there will be a reduction in disciplinary violations by the State Civil Service, the Indonesian National Army, and Law Enforcement Officials; increasing the number of State Civil Servants who have professional certification; increasing integration of the National Public Service Information System; increasing refinement of laws and regulations; simplification of business process maps; increasing Public Service Units implementing cashless payments.

Integrity is a gradual construct, with programs that meet evolving norms that honor higher values. The organization supports employee integrity, but tensions must be reconciled. Four norms, intentional wholeness, organization, society, and process, operationalize the normative framework (Hoekstra & Kaptein, 2020). Integrity is an important concept that focuses on the moral quality of behavior in the governance process. This concept distinguishes between types of behavior that violate applicable moral norms and values, including corruption, conflicts of interest, abuse of information and power, intimidation, and violations of personal time (Huberts, 2018). The goal is to enhance transparency and accountability in government performance through a comprehensive reporting system, increased public access to information, effective e-government implementation, and open government. This includes strengthening policies, infrastructure, electronic procurement, and archival systems, and promoting open, participatory, and accountable governance.

The Indonesia Serving Movement Program, as per Presidential Instruction Number 12 of 2016, aims to enhance the capacity of the State Civil Apparatus' Human Resources, improve discipline enforcement, enhance service standards, improve

performance-based management, improve public service behavior, deregulation, streamline bureaucratic services, provide infrastructure, enforce laws, and implement rewards and sanctions. The Mental Revolution is crucial for national development, requiring government and society's encouragement to improve character and attitudes, fostering an advanced, modern, superior, and competitive nation. The Serving Indonesia Movement launched "*ASN BerAKHLAK*" Core Values for state civil servants, aiming to establish uniform basic values for a professional apparatus work culture. These core values include Service Oriented, Accountable, Competent, Harmonious, Loyal, Adaptive, and Collaborative, aiming to create a harmonious, loyal, adaptive, and collaborative work environment. The Ministry of State Empowerment and Bureaucratic Reform monitors and evaluates public service delivery performance to ensure objective, transparent, and accountable delivery. This evaluation assesses aspects such as Service Policy, Human Resources Professionalism, Facilities and Infrastructure, Public Service Information System, Consultation and Complaints, and Innovation to capture real service unit conditions.

Bureaucratic Reform for Good Governance

The Indonesian government's bureaucracy is inefficient and underdeveloped, with a formalism problem. Issues preventing optimal implementation include bureaucratic mindset, leadership commitment, bureaucratic pathology, corruption, and bureaucracy's lack of preparedness for technology and information utilization in orienting public services to the community (Faedlulloh et al., 2023); Maulana, Indriati, & Hidayah, 2022; Yasa et al., 2021; Haning, 2018). The 2014 State Civil Apparatus Law in Indonesia promotes administrative reform, requiring high competence, professionalism, integrity, and an apolitical stance against corruption, collusion, and nepotism in government institutions. To enhance Indonesia's bureaucracy performance, structural and mindset reforms can be implemented, simplifying public services while maintaining state and publicity interests, and encouraging visionary thinking (Faedlulloh et al., 2020).

The business climate is impacted by excessive licensing services, inconsistent service standards, low competency, a lack of innovation, uneven electronic service use, and fragmented service institutions. The National Mental Revolution Movement aims to enhance government bureaucracy's role in public services by implementing reforms to eliminate inefficiencies and improve service quality, fostering a clean and responsive bureaucratic culture. Public administration reform for better, faster, and more transparent public services through the deployment of e-government in Indonesia is still moving slowly (Prahono & Elidjen, 2015). Transformational government aims to enhance public administration efficiency, transparency, and effectiveness through e-government, promoting public engagement in decision-making processes and requiring more professional and accountable state administrators (Rakhmawati, 2017). Bureaucratic reform is carried out to build a state and government that understands good governance so that bureaucratic reform measures can have a real impact on the delivery of public services. The government established the Grand Design for Bureaucratic Reform 2005-2025, focusing on accountability and transitioning work culture and public service mechanisms to digital techniques. However, bureaucratic reform efforts have not fully prevented public policy distortion due to inadequate preparation, implementation, monitoring, and evaluation processes. Good governance principles like participation, transparency, and accountability are not fully implemented in government agencies and public positions.

Table 1. Worldwide Governance Indicators (WGI) Indonesia 2015-2022

Indicators	Percentile Rank(0-100)							
	2015	2016	2017	2018	2019	2020	2021	2022
Voice and Accountability	53.69	51.72	51.23	51.94	51.69	52.17	52.66	52.66
Political Stability and Absence of Violence/Terrorism	24.29	32.38	28.10	26.42	26.89	28.30	27.36	29.25
Government Effectiveness	42.86	50.00	53.33	59.05	59.52	63.81	64.76	66.04
Regulatory Quality	48.10	51.90	55.71	52.38	56.67	58.10	60.95	59.43
Rule of Law	39.52	40.95	40.00	41.90	40.95	40.48	44.29	45.28
Control of Corruption	36.67	38.10	45.24	44.29	35.24	36.67	36.67	37.74

Source: World Bank, 2023

Table 1 shows that government effectiveness and regulatory quality scores in Indonesia have increased, indicating good governance. The World Bank ranks Indonesia 73rd in the World Governance Indicators (WGI), with an increase from 64.76 in 2022 to 66.04 in 2023. However, strategic policies for reform and management of the state apparatus must be implemented simultaneously. In general, the public considers government bureaucracy to be inefficient and public services inadequate. Bureaucracy hinders Indonesia's development goals, but reform is a priority in the 2015-2019 plan. Prioritized tasks include improving government performance transparency, enhancing bureaucratic reform quality, and promoting public participation (Ministry of State Apparatus Utilization and Bureaucratic Reform of Indonesia, 2016). Sustainable bureaucratic reform aims to restructure government organizations, improve civil servant competence, enhance public service performance monitoring and supervision, and promote public participation (Ministry of National Development Planning of the Republic of Indonesia, 2015).

The Ministry of Communication and Information has released documents on e-government implementation, including regional government blueprints, master plans, and government portal infrastructure. Effective governance requires competent authorities, an understanding of technological advancements and difficulties, and a holistic approach. The Open Government Indonesia program has facilitated the development of electronic systems and transaction standards in the Indonesian government, promoting collaboration between state-owned telecommunications companies and government institutions, thereby improving public sector services. Indonesia is implementing an electronic government service system for various functions such as e-procurement, permits, office, planning, budgeting, monitoring, employment, retirement, complaints, health, and education. The Indonesian government is enhancing its electronic systems across all disciplines, aiming to create a reliable, trustworthy, and accessible service system.

The 2005-2025 National Long-Term Development Plan seeks to build an independent, advanced, and prosperous Indonesia through a gradual, coordinated, and sustainable process. This strategy focuses on forming superior human resources, increasing the use of science and technology, creating advanced infrastructure, modernizing the legal system, and strengthening the household economy. Information technology's growth enables efficient data management, shortening transaction times and eliminating bureaucracy. E-government enhances trust between the government and the public by increasing direct engagement and making information accessible (Rosacker & Rosacker, 2010). Public trust in e-government services is determined by

perceived risk and faith in government security mechanisms, indicating their willingness to adopt new technology (Fakhruzzaman, 2019; (Myeong et al., 2014).

The Indonesia Serve Movement Encourages Public Service Innovation

Indonesia's vast population and territory require the implementation of e-government, standardized regulations, stakeholder involvement, and increased human resources to encourage democratic processes and simplify operations (Rose, 2004). Increasing public innovation through network collaboration among various stakeholders (Sørensen & Torfing, 2011). Public service innovation in Indonesia generally focuses on process innovation, which combines technological and administrative components. The most targeted objectives are the health and education sectors, which seek to alleviate community illnesses. The majority of innovations occur on the island of Java, but some also occur on neighboring islands. The Ministry of Foreign Affairs oversees one of the innovations abroad (Pratama, 2020). The growth of the service sector requires innovative sources to gain competitive advantage, especially in developing countries, despite resource scarcity (Barrett et al., 2015). The information revolution affects government relations, but e-government implementation is hampered by a lack of strategy, influenced by citizen orientation, technology, the digital divide, economic growth, and political stability (Malodia et al., 2021).

Indonesia's government, under Government Regulation Number 38 of 2017, is promoting public sector innovation through regional government practices, focusing on management and service delivery. Digital governance necessitates robust policies, strategic data system plans, and strong leadership from top government decision-makers to effectively implement e-government and other public service innovations. The Indonesia Melayani Movement, part of the National Mental Revolution Movement, aims to enhance human resource capacity, discipline, and service standards, promoting Pancasila principles, bureaucratic simplification, and infrastructure improvements. Innovation is important in economic development, production, management decisions, investment efficiency, and business performance (Kogabayev & Maziliauskas, 2017). Public service innovation is innovative ideas or modifications that provide societal benefits, involving the creation, development, and institutionalization of new services to enhance their quality. The government's One Agency, One Innovation program promotes competitive, adaptive, and sustainable innovation through competition, information systems, networks, capacity building, and continuous monitoring. Public Service Complaint Management is handling complaints following mechanisms and procedures. The competition, organized by the Ministry of State Apparatus Empowerment and Bureaucratic Reform in collaboration with the Presidential Staff Office and the Ombudsman of the Republic of Indonesia, included screening, selection, assessment, and giving awards to public service providers. Transforming governance strategies necessitates high capacity, resource optimization, and clear roles, while integrated technology can enhance public service quality and streamline work processes. Digital public services innovation is crucial for modern government governance, enhancing efficiency, effectiveness, and responsiveness in providing public services.

Innovation is critical to organizational success and long-term survival contributing to competitive advantage and encouraging innovative work behavior (Palazzeschi et al., 2018). The rapid development of digital transformation is transforming various industries by introducing new business models like frugal innovation and the circular economy (Vaska et al., 2021). It is important to support actors in service innovation,

especially in developing countries with limited resources. Open innovation is needed to improve organizational performance and overcome resource limitations (Vincenzi & da Cunha, 2021). The Serving Indonesia Movement aims to enhance public services through digital transformation, automation, and citizen engagement, while the Ministry of State Apparatus Empowerment and Bureaucratic Reform develops policies for improved service quality.

Information and computer technologies modernize government by enhancing structures, processes, transparency, empowerment, performance monitoring, and societal relations. Challenges include defining, assessing, and measuring public services, bribery, and compliance (Prahono & Elidjen, 2015). Public service orientation is a crucial organizational strategy that prioritizes understanding public needs, organizing the environment, making it accessible, and soliciting feedback, complaints, and recommendations (Moon et al., 2016). Bureaucratic change is crucial in modern organizations, requiring leaders to transition from administrators to entrepreneurs. Indonesia's unique context offers a model for managing public service innovation (Andhika et al., 2018). Most developing countries are undergoing significant public administration reforms based on best practices and good governance models, emphasizing empirical data, performance indicators, and results. Addressing governance inefficiencies is crucial for empowering democracy, and transitioning countries face unique challenges in developing governance. Service quality in the public sector impacts customer satisfaction and delivery effectiveness.

Results of Public Service Innovation Development

Digital governance modernizes public services by increasing engagement and collaboration. Technological innovation helps democratic governance and policy development. Perseverance and discipline are necessary for long-term goals. Information technology-based transformation is occurring in jurisdictions where leaders can improve the public sector (Sandoval-Almazán et al., 2017). Indonesia's President Joko Widodo has set five steps to accelerate its digital transformation: expanding internet access, designing a roadmap, integrating data, preparing human resources, and preparing regulations, funding schemes, and budgeting. This innovation is crucial for modernizing public services, increasing citizen satisfaction, driving economic growth, and ensuring effective governance (Humas Setkab, 2020). The National Electronic-Based Government System Coordination Team in Indonesia focuses on enhancing governance, public services, technology foundation, and human resources for a secure electronic-based government system.

From 2014 to 2016, public service innovation in Indonesia was primarily driven by local government innovation and processes, which primarily focused on health and education issues, especially in Java (Pratama, 2020). The five pillars of public services, namely products, policies, people, infrastructure, and innovation, are crucial for enhancing and maintaining the quality of public services (Achmadi, 2021). Several models of public service innovation in the field of digitizing government administration, namely the Village Financial System (SISKEUDES) application oversee the planning, budgeting, administration, and financial reporting processes electronically. Jakarta Evolution (JAKEVO) offers licensing services in DKI Jakarta, including the Integrated System for Traffic Accidents (INSIDENT), facilitating fast treatment, and guaranteed financing for National Health Insurance participants (Mishbah, 2023). Provincial and district governments in Indonesia have implemented innovations, but not evenly across typologies, categories, and geographies. Equitable implementation of innovation

necessitates a shared awareness of the importance of innovation and political will among regional leaders (Farhan, 2023). Innovation is a strategic approach for organizations to adapt and thrive in an uncertain environment, involving diverse actors and knowledge sources to increase competitive advantage and overcome social challenges (Edwards-Schachter, 2018). Table 2 shows that Indonesia is among the 80 most innovative countries for the first time in the last 9 (nine) years, showing extraordinary innovation development even though Indonesia is a lower middle-income country. Innovation requires more effort, time, and political will from regional heads to make fundamental changes in processes, services, and organizations.

Table 2. Global Innovation Index Indonesia an Number of Registered Innovations 2014-2023

Year	Rating	Index	Number of innovations registered in the Public Service Innovation Information System
2014	87 out of 143 countries	31.81	515
2015	97 of 157 countries	29.79	1189
2016	88 from 128 countries	29.07	2476
2017	87 out of 127 countries	30.10	3054
2018	85 of 126 countries	29.80	2824
2019	85 of 132 countries	29.72	3156
2020	85 of 132 countries	26.49	3059
2021	87 out of 132 countries	NULL	3178
2022	75 from 132 countries	27.90	3478
2023	61 of 132 countries	30.30	3110

Source: WIPO Global Innovation Index and Ministry of State Apparatus Utilization and Bureaucratic Reform, 2024

As governments around the world seek to digitize their public services, they face some problems and obstacles (Ziyadin et al., 2020). Digitalization of government services, especially in developing countries, faces challenges due to inadequate infrastructure, technical skills, resistance to change, inadequate funding, and insufficient user knowledge (Panganiban, 2019; Ziyadin et al., 2020). Barriers to collaborative innovation are complex, diverse in innovation processes and types, and interconnected throughout the process, indicating the need for a new classification (Cinar et al., 2018). The slow progress of e-government in Indonesia is attributed to insufficient regulations, data integration issues, ICT infrastructure gaps, limited competence, and a bureaucratic culture (Aminah & Saksono, 2021; Prayitno, 2023). Multi-actor collaboration is an excellent source of discovery and can stimulate public innovation. Overcoming barriers to collaborative creativity by combining institutional design, leadership, and management approaches (Torfing, 2018).

The Indonesian government is implementing a Mission-Oriented Innovation Policy Framework to digitize government management, but challenges include sectoral silos, requiring improved e-government (Manjali, 2023). Well-rounded personnel are critical to generating creative ideas, fostering collaboration, and remaining competitive in a rapidly changing marketplace, by leveraging their intelligence, problem-solving abilities, and specialized knowledge (Urbancova, 2013). Local government innovation methods highlight internal factors including organizational size, administrative capacity, and learning (Walker, 2014). Digital transformation in Indonesia's politics enhances efficiency and engagement but presents challenges like cyber threats and data privacy, necessitating adaptive policies and robust regulatory frameworks (Hafel, 2023).

Indonesia is implementing e-government to improve public trust, service quality, and convenience, requiring a robust bureaucracy, competent officials, technical capabilities, and fast responses (Malodia et al., 2021). E-government integration into public management reform is crucial for transforming social and political behavior and government-citizen relations, but implementation is inefficient due to overlaps and inefficiencies in information system development, procurement, and utilization (Regulation of the Minister for Administrative Reform and Bureaucratic Reform, 2015). E-Government is a strategy aimed at simplifying, enhancing, and enhancing government and development processes through strengthened policies, integrated systems, and infrastructure built on information and communication technology (Nababan & Darwanto, 2015). The success of the government in developing information technology is contingent upon data and information, information technology, effective organizational management, regulations, and an efficient organizational environment.

The Indonesian government is accelerating digital transformation through infrastructure development, regulatory changes, human resource development, and international cooperation in the digital economy, aiming to address the digital divide by prioritizing policies, legal frameworks, and partnerships. The Indonesian government initiated Making Indonesia 4.0 in 2018 to improve productivity, efficiency, and service quality but faces challenges in terms of innovation readiness and adoption. The Network Readiness Index (NRI) is a tool that assesses a country's readiness for innovation, digitalization, and service advancement public. A high NRI value indicates a country's ability to adopt and utilize information and communication technology, which leads to economic growth. A high NRI score also reflects a country's ability to embrace digital transformation, increasing efficiency, connectivity, and competitiveness in the digital era. Countries with high NRI rankings have superior digital infrastructure, governance, and technological capabilities for efficient public services, as demonstrated by the Indonesia Network Readiness Index in Table 3.

Table 3. The Network Readiness Index of Indonesia 2014-2023

Year	Rank	Score
2014	64 (out of 148)	4.0
2015	79 (out of 143)	3.9
2016	73 (out of 139)	4.0
2017	59 (out of 139)	50.26
2019	76 (out of 121)	46.15
2020	73 (out of 134)	46.71
2021	66 (out of 130)	50.37
2022	59 (out of 131)	51.51
2023	59 (out of 134)	50.26

Source: network readiness index, 2024

The government is enhancing public services through strategies such as the consistent implementation of Law Number 25 of 2009, encouraging innovation, increasing community participation, and strengthening supervision capacity. The aim is to improve the quality of national bureaucratic reform, with a focus on efficient institutions, increasing management capacity, consistent implementation of the State Civil Service Law, and improving public services, to support national development and competitiveness, by ensuring integrity, accountability, and effectiveness. The implementation of e-government transformation is very dependent on attitudes,

intentions, and cultural and behavioral changes within the government (Batara et al., 2017). The e-government implementation strategy should prioritize administrative output based on its societal impact, considering cycle time, service quality, cost efficiency, and political and social aspects (Funabashi & Grzech, 2005). Governments must adopt digital transformation to improve services and efficiency, but empirical evidence suggests flexibility increases with progress and depends on organizational elements (Gong et al., 2020).

The Serve Indonesia Movement enhances public services through system integration and one-stop initiatives, including the construction of a Public Service Mall for population database and identity cards (Fenat et al., 2020). Presidential Instructions enhance e-government implementation in government agencies through the decisions of ministers, governors, regents, and mayors. Mental revolution in the public servants can be measured and planned, directing change by national development priorities. The Indonesia Serve Movement initiative has produced better results. This is the Mental Revolution Achievement Index component of the Movement to Serve Indonesia which increased by 7.64 points from 78.90 in 2018 to 86.54 in 2021. The increase in the number of achievements reflects the increase in the quality of service and performance of state administrators who provide public services to society. The Indonesia Serve Movement initiative is increasingly successful as evidenced by the following trends: The National Public Service Index increased significantly from 3.79 in 2021 to 3.88 in 2022. The implementation of the Public Service Mall in Indonesia aims to improve the quality and innovation of public services in various locations. As of December 2022, 53 Public Service Malls have been built in various locations, bringing the total number of Public Service Malls to 103. The number of Public Service Malls has increased by 106 percent compared to the previous year which was 50.

The Ministry of National Development Planning streamlines governance and development procedures, improves government-to-government relations, and accelerates e-government implementation. The strategies implemented include strengthening institutions, and human resources optimizing infrastructure, supporting the management of development performance data, and budget preparation. To produce progress in government digitalization, the government bureaucracy must be structured and organized (Soderström & Melin, 2019). The Presidential Regulation Number 95 of 2018 was issued regarding Electronic-Based Government Systems. Indonesia's Presidential Decree aims to improve cooperation and promote good governance through electronic-based government administration services. The Master Plan aligns with the National Long-Term Development Plan for 2005-2025, focusing on real-time public services, digital tools, and transparent business processes, encouraging innovation and productivity for national development.

Table 4. E-Government Development Index (EGDI) Indonesia 2014-2022

	2022	2020	2018	2016	2014
E-Gov Development Index (Rank)	77	88	107	116	106
E-Gov Development Index (Value)	0.71600	0.66120	0.52580	0.44784	0.44874
E-Participation Index (Rank)	37	57	92	114	110
E-Participation Index (Value)	0.71590	0.75000	0.61800	0.37288	0.29411

Source: *www.publicadministration.un.org, 2023*

The Indonesian government has demonstrated improvement in its implementation of an electronic-based government system. In Table 4, Indonesia has achieved a high score in the UN E-government Survey's High e-government Development Index, demonstrating its commitment to implementing an electronic-

based government system to enhance public services, standards, procedures, information accessibility, security, and cost efficiency. The improvement of Indonesia's EGDI level in 2014-2022 is supported by regulations issued by the government that facilitate and support building and developing digital public service innovations. The supporting regulations can be seen in appendix A. The strategy involves implementing policies in managerial and professional roles, involving key stakeholders, developing experienced implementation brokers, and providing ongoing support for problem-solving and capacity-building to develop sustainable skills and knowledge. Implementation readiness is crucial for policy success, ensuring organizations accept policy legitimacy, maintain political support, and provide clear objectives (Hudson, Hunter, & Peckham, 2019; Peckham, Hudson, Hunter, & Redgate, 2021). Indonesia has made significant progress in supporting e-government innovation through policies and regulations from 2014 to 2023. Frameworks like the SPBE and One Data Indonesia have paved the way for a more efficient e-government system. Investments in digital infrastructure, data standardization, and human resource development have improved data-driven decision-making and service delivery. Policies have also emphasized digital literacy among government employees, fostering innovation and public-private collaboration. Indonesia can improve its e-government capabilities with strategic implementation, despite challenges like uneven digital infrastructure development, cybersecurity threats, and bridging the digital divide.

Table 5. Asian Countries with the Highest E-Government Development Index 2020-2022

Country	Rating class		EGDI Rank		EGDI	
	2020	2022	2020	2022	2020	2022
Republik of Korea	VH	VH	2	3	0.9560	0.9529
Singapore	VH	VH	11	12	0.9150	0.9133
Japan	VH	VH	14	14	0.8989	0.9002
China	V 2	V 2	45	43	0.7948	0.8119
Malaysia	V1	V1	47	53	0.7892	0.7740
Thailand	V1	V1	57	55	0.7565	0.7660
Brunei Darrussalam	HV	HV	60	68	0.7389	0.7270
Indonesia	H3	HV	88	77	0.6612	0.7160

Source: United Nations, E-Government, 2023

The UN e-Government Survey reveals significant disparities in information technology access and usage, requiring concerted action at national, regional, and international levels. Governments should incorporate e-government into development plans, collaborating with the private sector, civil society, international organizations, and donor communities. The EGDI group is divided into four quartiles to assess country performance, with rating classes descending from very high to low. Very high (VH, V3, V2, and V1), high (HV, H3, H2, and H1), middle (MH, M3, M2, and M1), and low (LM, L3, L2, and L1).

Digital transformation is increasingly viewed as a challenge by organizational culture, with clear digital strategies and a culture that drives transformation being key factors. Digitally mature organizations have a more collaborative and innovative culture, with leadership possessing sufficient digital skills (Teichert, 2019). Leadership commitment is crucial for continuous improvement in electronic-based government systems. Technological advances like cloud computing, social media, and mobile

technology modernize public services. The Ministry of Communication and Information implemented an online licensing system in 34 provinces. Table 5 shows that the development of EGDI in Indonesia has increased and is included in the best ranking at the Asian level.

Table 6. Policies and Objectives 2014-2023

Year	Number of Policies	Objectives
2014	4	The regulations aim to enhance the effectiveness of data and information units in ministries and institutions in implementing sustainable development.
2015	1	Indonesia's vision is to maintain sovereignty, self-reliance, and "*Gotong Royong*" through national security, a developed, equitable, democratic society, independent foreign policy, improved quality of life, and a competitive nation.
2016	6	The importance of implementing electronic systems, improving digital services, managing system implementation, and implementing information security management in public services and local government.
2017	6	Regional officials are supported in public services, with a roadmap for five programs, including Indonesia Serving, and guidelines for implementing the Mental Revolution.
2018	3	Indonesia is implementing e-Government as one of its implementation strategies, with guidelines for realizing e-government in all government agencies.
2019	3	Creating a national reference data source, developing a digital government information system, implementing comprehensive regulation, and utilizing information technology for electronic transactions.
2020	6	Indonesia's Vision 2045 aims for human resource development, infrastructure development, regulatory simplification, bureaucratic simplification, and economic transformation through *Nawacita* and digital data management in the postal, telecommunications, and broadcasting sectors.
2021	2	*AKHLAK* is responsible for regulating service-oriented, accountable, competent, harmonious, loyal, adaptive, and collaborative behavior.
2023	2	The project focuses on implementing priority SPBE Applications for digital transformation and national service integration, enhancing interoperability and efficiency, and improving service-oriented, accountable, competent, and collaborative state civil apparatus management.

Source: processed by the Author, 2024

The government is committed to providing technology, information, and communication education to state officials and society, as well as resources for e-government and digital community development (Mi'rojul Huda, 2016). MANTRA is a government system for data exchange and integration between agencies, serving various ministries like Foreign Affairs, Directorate General of Population and Civil Registry, Home Affairs, and BNP2TKI. It functions as a Government Service Bus and Web-API. *PNSMail* service is also available for civil servants in Indonesia. Indonesia's Ministry of Communication and Information Technology has launched info.go.id as an integrated public information center, aiming to unite the 27,400 applications belonging to ministries and government agencies. The goal is to make the information system

more accessible and reliable, similar to US-based public openness websites (Dewi, 2023).

Indonesian President Joko Widodo launched INA Digital to act as an accelerator for the transformation of government digital services, creating better quality, more reliable, and efficient public services, integrating government digital services in 27,000 applications, improving service quality and competitiveness by strengthening digital public infrastructure and GovTech transformation. INA Digital will focus on community-centered services, such as civil registration, job search assistance, and social assistance. The government commits to providing a public service portal and government administration portal that meets the needs of every community's life journey. INA Digital, part of PERURI, is following the Government's mandate to PERURI as GovTech Indonesia as stated in Presidential Decree Number 82 of 2023 concerning the Acceleration of Digital Transformation and Integration of National Digital Services (Humas Kemenpanrb- Humas Kemenbumn, 2024).

Conclusion

Indonesia is facing challenges in implementing digital public service innovations, including low internet penetration, vague integration strategies, digital literacy gaps, digital divides, cybersecurity and data privacy, and strong regulatory frameworks. The need for effective collaboration between government agencies, private sector entities, and citizens, as well as capacity-building for officials, underscores the need for a comprehensive approach. Organizational, and regulatory aspects of digital public service innovation in Indonesia. Addressing these challenges requires targeted skills development programs, addressing digital gaps, ensuring cyber security and data privacy, and encouraging collaboration between government agencies and citizens. The program will work effectively if it is supported by public policy and leadership that supports the development of digital public service innovation. Consistency implementation and evaluation continue to be done so that innovation development can run sustainably.

Governments can increase citizens' satisfaction by implementing policies that meet their needs, boosting public confidence and legitimacy. Digitization of public services can boost economic growth, attract companies, and drive innovation. These innovations are vital to addressing development problems, supporting evidence-based policies, and boosting economic growth. The transformation of government administration towards a democratic, transparent, and efficient electronic governance system (e-government) is driven by a fundamental change in the country and the country that requires clean, transparent, and responsive governance. E-Government aims to meet community needs, ensure public participation in policy-making, and improve public services. It integrates central and regional institutions, reduces administrative costs, and promotes justice and democratic governance by fostering a dynamic, transparent bureaucracy.

Indonesia is fostering public service innovation through President Joko Widodo's digital leadership, public participation, and infrastructure development. Strategies include creating reliable service systems, regulating government processes, training human resources, leveraging information technology, and increasing business participation. The government's Mental Revolution Movement Program aims to build a transparent, effective, democratic, and credible government, restoring public confidence. The government has allocated funds to build access to telecommunications

networks, the Internet, and other communications media, enhancing efficiency and service quality.

Technological innovation requires a role of government that takes into account social, economic, and environmental contexts. Technological innovations must be used responsibly, taking into account the potential challenges of societies and their diversity. The transformation of government administration towards a democratic, transparent, and efficient electronic governance system is driven by fundamental changes in the country and demands clean, transparent, and responsive governance. E-government is implemented to meet the needs of the wider community and ensure public participation and dialogue in policy-making. Effective public programs and policies require efficient management systems, regulations, and human resources. However, Indonesia's e-government implementation faces weaknesses such as limited resources, lack of strategies, and insufficient budget for innovation development.

Digital public server innovation is ongoing in various sectors, with limited access to internet networks and e-government digital services among the population. For that, the development of digital public service innovation in Indonesia requires enhanced digital skills, integration strategies, internet penetration, public involvement, resource allocation, technical support, data security, and government adaptability. Leaders at the national, regional, institutional, and civil government levels must be trained in digital tools and technologies to implement digital services effectively. Improve access and quality of the Internet that reaches the entire territory of Indonesia so that digital services can be used. Improving the quality of public knowledge and low levels of digital literacy through socialization and educational programs to increase public participation and acceptance of digital services.

Future research in Indonesia should focus on longitudinal studies to track the sustainable impact of digital innovation in public services. Quantitative data can provide comprehensive data on policy effectiveness and efficiency. Studying the success of digital public service innovation in a specific local government can provide insights for other governments.

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