

THE ROLE OF MILLENNIAL DIGITAL COMPETENCE IN THE TRANSFORMATION OF PUBLIC BUREAUCRACY IN INDRAGIRI HILIR REGIONAL GOVERNMENT

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Abstract. Digital transformation in public bureaucracy has become a crucial aspect in improving government services, especially at the regional level. This study examines the role of millennial generation's digital competencies in public bureaucratic transformation in Indragiri Hilir Regional Government. Using qualitative research methods with case study approach, data were collected through in-depth interviews with millennial civil servants, direct observation, and document analysis. The results show that millennial generation has significant digital competencies including technical skills, information literacy, and digital communication abilities that support bureaucratic transformation. However, challenges such as organizational culture resistance, limited infrastructure, and generational gaps still hinder optimal transformation. This study recommends the need for comprehensive digital literacy programs, infrastructure improvement, and policy support to maximize the role of millennial generation in public bureaucratic transformation.

Keywords: Digital Competency, Millennial Generation, Bureaucratic Transformation, Public Administration

1. Introduction

The digital era has changed the paradigm of government administration around the world, including Indonesia. Digital transformation in the public sector is no longer an option, but an urgent need to improve the efficiency, transparency, and quality of public services (Margetts & Naumann, 2017). The Government of Indonesia through various initiatives such as Making Indonesia 4.0 and the Electronic-Based Government System (SPBE) has shown a serious commitment to encouraging the digital transformation of the public bureaucracy (Pratama, 2019). The millennial generation, born between 1981-1996, now dominates the workforce in various sectors, including in the government bureaucracy. The characteristics of the millennial generation who are technologically literate, adaptive to change, and have high expectations for efficiency make them potential agents in the transformation of the public bureaucracy (Twenge, 2017). Their digital competencies include technical skills, information literacy, digital communication, and critical thinking skills in using technology (Van Laar et al., 2020).

Indragiri Hilir Regency as one of the regions in Riau Province faces the challenge of complex bureaucratic transformation. With an area of 11,605.97 km² and a population of around 550,000 people spread across 20 sub-districts, the efficiency of public services is a top priority (BPS Indragiri Hilir, 2023). The presence of the millennial generation in the bureaucratic structure of the Indragiri Hilir Regional Government is expected to accelerate the process of digital transformation and modernization of public services. However, reality shows that the implementation of digital transformation in the public bureaucracy still faces various obstacles. Resistance to change, limitations of technological infrastructure, digital competency gap between generations, and a bureaucratic culture that is still conventional are the main challenges (Mergel et al., 2019). Therefore, this research is important to identify the extent to

which the role of digital competence of the millennial generation can contribute to the transformation of the public bureaucracy in Indragiri Hilir.

Based on the background that has been presented, the formulation of the problem in this study is whether the role of digital competence of the millennial generation is influential in the transformation of public bureaucracy in the Indragiri Hilir Regional Government? This research aims to analyze and describe the role of the millennial generation's digital competencies in the transformation of public bureaucracy in the Indragiri Hilir Regional Government. Digital competence is defined as the ability of individuals to use digital technology effectively, safely, and critically in various life contexts (European Commission, 2019). The digital competency framework includes five main dimensions: information and data literacy, communication and collaboration, digital content creation, digital security, and problem-solving (Vuorikari et al., 2016). In the context of public organizations, digital competence is the key to the success of digital transformation and the improvement of the quality of public services.

The millennial generation has unique characteristics in terms of technology adoption and use. Deloitte research (2021) shows that millennials have high levels of digital literacy, a preference for digital communication, and expectations of efficiency in various aspects of life. In the context of work, millennials tend to prioritize flexibility, collaboration, and the use of technology to increase productivity (Gallicano et al., 2021). Public bureaucratic transformation is a process of overarching change in government organizational structures, processes, and cultures to increase effectiveness, efficiency, and responsiveness to community needs (Dunleavy et al., 2020). Digital transformation in the public bureaucracy involves the integration of digital technology in all aspects of government operations, from decision-making to public services (Janowski, 2015). Previous studies have shown that employees' digital competencies are a critical factor in the success of the digital transformation of the public sector. Research by Lindgren et al. (2019) in Nordic countries shows that young employees with high digital competence play a role as champions in the digital transformation process. However, the success of transformation also depends on the support of management, technology infrastructure, and an organizational culture that supports innovation.

2. Method

This research uses a qualitative approach with a case study design to deeply understand the role of the millennial generation's digital competencies in the transformation of public bureaucracy in the Indragiri Hilir Regional Government. The location of the research is government offices in Indragiri Hilir Regency, with a focus on Regional Apparatus Organizations (OPD) that have direct public service functions. The research informants were selected by purposive sampling, consisting of 25 millennial generation civil servants (aged 27-42 years) who work in various OPDs, 8 structural officials, and 5 IT staff. The criteria for selecting informants include: having at least 3 years of work experience, being involved in digitalization programs, and having direct access to public services.

The data collection technique used triangulation methods consisting of: semi-structured in-depth interviews, participatory observation, and document analysis. Interviews are conducted with interview guidelines that have been validated by experts. Observations were carried out to observe the practice of using technology in daily work activities. Document analysis includes policies related to digitalization, performance reports, and information system technical documents. Data analysis uses the interactive analysis model of Miles and Huberman (2014) which consists of data reduction, data presentation, and conclusion drawn. Data validity is guaranteed through triangulation of sources, methods, and time. The credibility of the research is strengthened by member checking and peer debriefing.

Table 1.1 Characteristics of Respondents

No	Characteristics	Sum	Percentage
1	Age		
	27-32 Year	15	60 %
	33-37 Year	7	28 %
	38-42 Year	3	12 %
2	Education		
	High School	7	72 %
	Diploma/S1/S2	18	28 %
3	Position		
	Leadership Elements	20	80 %
	Staff	5	20 %

Source: Research Primary Data, 2025

3. Discussion

Digital Competency Level of the Millennial Generation

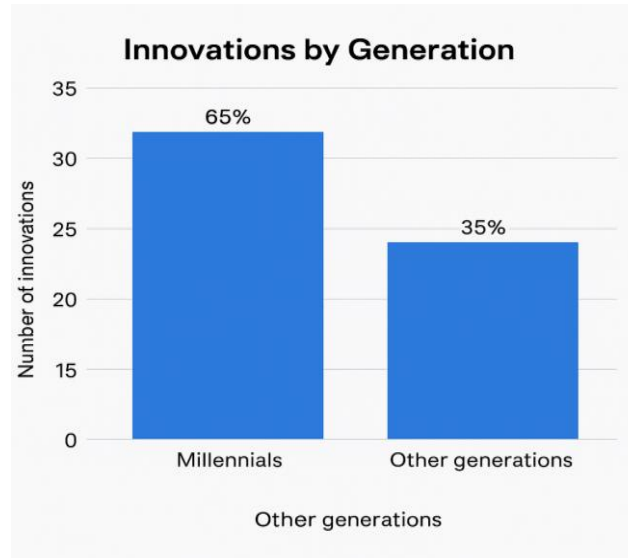
The results of the study show that the millennial generation in the Indragiri Hilir Regional Government has various levels of digital competence but is generally in the middle to upper category. Based on the Digital Competence framework (DigComp 2.1), the digital competence of informants can be categorized into five main dimensions. In the dimension of information and data literacy, 84% of informants showed good ability to search, evaluate, and manage digital information. They are able to use various search platforms, verify the credibility of information sources, and organize data with digital tools such as simple spreadsheets and databases. However, advanced data analysis capabilities are still limited, with only 36% of informants able to use data analysis tools such as SPSS or R.

The communication and collaboration dimensions showed the most prominent results, with 92% of informants having high ability to use digital communication platforms, professional social media, and collaboration tools such as Google Workspace and Microsoft Teams. The COVID-19 pandemic has proven to be a catalyst that accelerates the adoption of digital communication technology in the government work environment. For digital content creation, 68% of informants are able to create simple multimedia content such as interactive presentations, infographics, and informative videos. This ability is very useful in improving the quality of public communication and socialization of government programs. However, the ability to program and develop applications is still very limited, owned by only 16% of informants.

Role in the Transformation of Public Bureaucracy

The digital competence of the millennial generation has proven to play a significant role in encouraging the transformation of the public bureaucracy through several mechanisms. First, as early adopters of new technologies. The millennial generation is the first group to adopt new information systems, public service applications, and other digital platforms. They act as informal beta testers and provide feedback for system improvements. Second, as a knowledge broker that bridges the digital divide between generations. Millennials are actively providing informal training to more senior colleagues, facilitating technology knowledge transfer, and creating a culture of digital learning within organizations. Observations show that 78% of informants routinely assist their colleagues in using new technologies. Third, as an innovation champion who proposes and implements digital innovation. Of the 47 technological innovations implemented in various OPDs in the last 3 years, 65% of them were initiated or

encouraged by millennial generation employees. These innovations include mobile service applications, digital document management systems, and internal communication platforms.



Picture 1.1 Innovation Champion

Challenges and Obstacles

Despite having great potential, optimizing the role of the millennial generation in bureaucratic transformation faces various challenges. The main challenge is the resistance of organizational culture which is still thick with hierarchical and formalistic values. Rigid bureaucratic structures often hinder the implementation of innovative ideas carried by the millennial generation. The limitations of technological infrastructure are a second significant obstacle. Although the Indragiri Hilir Regional Government has invested in information technology, the quality of the internet network, the availability of computer devices, and system integration are still not optimal. This has led to frustration among millennials who are used to responsive and integrated technology. The digital competency gap between generations creates complex work dynamics. While millennials are driving faster technology adoption, older generations need longer adaptation times. This situation requires a change management approach that is sensitive to generational differences.

Optimization Strategy

Based on the findings of the research, several strategies can be implemented to maximize the role of the millennial generation in the transformation of the public bureaucracy. First, the development of a two-way digital mentoring program, where the millennial generation becomes a technology mentor while the senior generation becomes an institutional and procedural mentor. Second, the establishment of the Digital Innovation Lab as a forum for creativity and technological experimentation. These labs can be an incubator of innovative ideas before they are implemented organizationally. Third, the implementation of flexible work arrangements that allow the millennial generation to work in an optimal way according to their characteristics. Fourth, increasing investment in technological infrastructure that not only focuses on hardware but also integrated software and systems. Fifth, the development of a reward and recognition system that appreciates the contribution of digital innovation and knowledge sharing.

4. Conclusion

This study concludes that the millennial generation in the Indragiri Hilir Regional Government has significant digital competencies and plays an important role in the transformation of the public bureaucracy. Their role is manifested in three main functions: as early adopters of technology, intergenerational knowledge brokers, and innovation champions. Their digital competencies, especially in digital communication and collaboration, have been proven to drive the modernization of public services and increase organizational efficiency. However, optimizing the role of the millennial generation still faces structural challenges in the form of organizational cultural resistance, infrastructure limitations, and competency gaps between generations. To maximize their contribution, a holistic strategy is needed that includes the development of digital mentoring programs, the establishment of innovation labs, the improvement of technology infrastructure, and the implementation of reward systems that support innovation. A sustainable transformation of the public bureaucracy requires optimal synergy between the digital competencies of the millennial generation and the institutional wisdom of the senior generation, supported by adequate policies and infrastructure.

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