



Institutional Adaptation in Digitizing Population Administration at the Village Level

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ABSTRACT

Digitization of population administration is part of the transformation of public services that aims to improve the effectiveness, efficiency, and quality of services to the community. One form of innovation is the implementation of Digital Population Identity (IKD) at the village level. This article aims to analyze institutional adaptation in the implementation of IKD in village government as the leading unit of public services. This study uses a qualitative approach with a descriptive method. The analysis was carried out using Richard M. Steers' theory of organizational effectiveness which includes the dimensions of goal achievement, integration, and adaptation. The results of the study show that the implementation of IKD at the village level has been quite effective in terms of organizational policy and communication, but still faces obstacles in the ability of human resources, infrastructure, and community digital literacy. Therefore, strengthening the institutional capacity of villages is the key to the success of digitizing population administration.

INTRODUCTION

Digital transformation has become a strategic agenda in public administration reform in various countries in response to people's demands for faster, more transparent, and more accountable public services. The development of information and communication technology has encouraged a paradigm shift in government administration from the traditional bureaucratic model to digital-based governance (digital government). Digitalization in the public sector is not only understood as the use of technology to replace manual processes (Bambang Suprianto & Jiwa Riwayanti, 2024), but also as an organizational transformation process that requires changes in structure, work culture, and human resource capacity of apparatus (Dunleavy et al., 2006; Osborne & Brown, 2011). In the context of developing countries such as Indonesia, the digitization of public services has an important role in answering classic problems of government administration (Suprianto & Riwayanti, 2024), such as service inefficiency, overlapping data, and limited public access to basic services. The Indonesian government is gradually encouraging the implementation of e-government and digital government through various national policies, one of which is in the field of population administration. Population administration is a fundamental public service because it is directly related to the recognition of citizens' legal identities and is a prerequisite for accessing various other public services, such as education, health, social assistance, and financial services.

As part of these transformation efforts, the Ministry of Home Affairs through the Directorate General of Population and Civil Registration developed a Digital Population Identity (IKD) as an innovation in population administration services based on digital applications. IKD is normatively regulated in the Regulation of the Minister of Home Affairs Number 72 of 2022 and is designed to represent population documents in the form of electronic information that can be accessed through gadgets. This policy aims to improve service efficiency (Suprianto et al., 2025), reduce reliance on physical documents, minimize the risk of document loss and forgery, and speed up the identity verification process in various public and private services. Although the IKD policy is formulated centrally, the success of its implementation is largely determined by the capacity and readiness of the local government to the lowest level, namely the village. Villages have a strategic position as the spearhead of public services because they interact directly with the community. At the same time, villages are also faced with various structural limitations, such as the quality of human resources of the apparatus, the availability of technological facilities and infrastructure, and the diverse level of digital literacy of the community.

This condition makes the implementation of digital innovation at the village level a process that is not simple and requires continuous institutional adjustments (Pasolong, 2017; Sutrisno, 2011). From the perspective of public administration, the main challenge for digitizing public services at the local level lies not only in the technological aspect, but also in the ability of organizations to adapt to changes in the environment. The concept of institutional adaptation is relevant to explain how public organizations adjust the structure, work processes, and capacity of the apparatus in responding to the demands of

digitalization. Steers (1985) emphasized that organizational effectiveness is not only measured by the achievement of internal goals and integration, but also by the organization's adaptability to external environmental dynamics, including technological changes and societal expectations. In the context of the implementation of IKD at the village level, institutional adaptation includes several important aspects, including the ability of village officials to master digital technology, the effectiveness of organizational communication between the village government and population agencies above it, and the existence of a supervisory mechanism that supports the sustainability of the program. Without adequate institutional adaptation, digital innovation has the potential to not run optimally even though it has been supported by adequate regulations and technological systems. This is in line with the view of the World Bank (2016) which emphasizes that the success of digital government depends heavily on the capacity of institutions and human resources, not solely on technological sophistication. Various previous studies have shown that the implementation of Digital Population Identity at the local level still faces various obstacles, such as low community digital literacy, limited competence of implementing apparatus, and not optimal program socialization to the community (Firmansyah & Anisykurlillah, 2023; Suryanti, 2023). However, most of the studies focused more on the aspect of service effectiveness or community satisfaction, while studies that specifically placed village institutional adaptation as the focus of the analysis were still relatively limited.

Based on this background, this article aims to analyze institutional adaptation in the digitization of population administration at the village level through the implementation of Digital Population Identity. Using a qualitative approach and the theoretical framework of organizational effectiveness of Richard M. Steers, this research is expected to make an academic contribution to the development of public administration studies, especially related to the digitalization of public services at the village government level, as well as provide practical recommendations for strengthening the capacity of village institutions in supporting the success of digital transformation.

LITERATURE REVIEW

Organizational Effectiveness and Institutional Adaptation

Organizational effectiveness according to Steers (1985) is the level of success of the organization in achieving the goals that have been set through the dimensions of achieving goals, integration, and adaptation. Adaptation is defined as the ability of an organization to adjust to the external and internal environment, including technological changes and societal demands.

Digitization of Public Services and Population Administration

Digitization of public services is part of public sector innovation that aims to improve the quality of services through the use of information technology (Osborne & Brown, 2011). In population administration, digitalization is realized through a nationally integrated IKD system.

METHODOLOGY

This study uses a qualitative approach with a descriptive method. Data was collected through in-depth interviews, observations, and documentation at the village government. Data analysis is carried out through the stages of data reduction, data presentation, and conclusion drawing.

RESEARCH RESULT

The results of the study show that the implementation of Digital Population Identity (IKD) at the village level is part of the implementation of the population administration digitization policy that has been carried out based on national regulations and technical directions from the Population and Civil Registration Office. The village government as a leading public service unit has a strategic role in bridging the policy with the needs of the community. In general, the implementation of IKD shows that there are efforts by village institutions to support the digital transformation of public services. However, the effectiveness of the implementation of this program is still influenced by various internal organizational factors and diverse community conditions.

Dimension of Goal Achievement

In the dimension of achieving goals, the results of the study show that the village government has understood the main purpose of implementing IKD as an effort to improve the efficiency of population administration services, accelerate the service process, and make it easier for the community to access population documents. This understanding is reflected in the compatibility between village policies and national regulations and the efforts of village officials in socializing the IKD program to the community. The village government has also established service procedures that integrate the activation of IKD in population administration services provided to residents. However, the level of achievement of the goals of the IKD program has not been fully optimal. This can be seen from the low number of people who have activated and actively used IKD. Most of the village people still prefer to use physical population documents because they are considered more practical and have been used for a long time. In addition, there is still a perception among the public that IKD has not completely replaced the function of physical ID cards in various services, so the benefits offered have not been felt directly. This condition shows that there is a gap between the policy objectives designed by the government and the reality of the use of IKD at the village community level.

Integration Dimensions

Judging from the integration dimension, the results of the study show that the integration of organizational elements in the implementation of IKD still faces a number of obstacles. From the aspect of human resources, village officials involved in population administration services do not all have adequate technical competence in the operation of the IKD system. The mastery of information technology is still limited to a few specific apparatuses, so the burden of service tends to be concentrated on individuals who have better digital skills. This

condition has an impact on the effectiveness of services, especially when the apparatus concerned is not in place or has a high workload.

In addition, integration is also influenced by the availability of supporting facilities and infrastructure. The results of the study show that information technology facilities at the village level are still not fully adequate to support IKD services optimally. Limited computer devices, unstable internet network quality, and lack of technical support are obstacles that are often encountered in the process of activating and using IKD. The instability of the internet network not only slows down the service process, but also affects public trust in the reliability of digital services provided by the village government. In terms of institutional coordination, integration between the village government and related agencies at the district level has been running, but it is still administrative and not fully structured. Coordination is generally carried out in the form of information delivery and activity reporting, while more intensive and sustainable cooperation mechanisms are still limited. This shows that the integration between organizational units in the implementation of IKD still needs to be strengthened so that all elements can work synergistically.

Adaptation Dimensions

In the adaptation dimension, the results of the study show that the ability of village institutions to adjust to the demands of population administration digitalization is still in the early stages and developing gradually. Organizational adaptation is greatly influenced by the readiness of human resources of village apparatus in dealing with changes in technology and work patterns. Village officials realize that the digitalization of public services requires increased competence and changes in working methods, but the limitations of training and mentoring cause the adaptation process to run relatively slowly. In addition to the human resource aspect, institutional adaptation is also reflected in the ability of village organizations to build effective communication with the community. The results of the study show that the village government has carried out socialization related to IKD through various channels, such as village meetings and direct services at the village office. However, the level of public understanding of the use of IKD still varies. Some people, especially the elderly group, have difficulties in using digital applications, so they need more intensive assistance from village officials. In terms of supervision, the results of the study show that the monitoring and evaluation mechanism for the implementation of IKD has been carried out by related agencies, but it has not been fully institutionalized systematically. Supervision focuses more on the administrative aspects and reporting of activities, while evaluation of the impact and sustainability of the program is still limited. This condition shows that the adaptation of village institutions in the implementation of IKD still needs strengthening, both in terms of internal organizational capacity and external support from local governments. Overall, the results of the study show that the implementation of Digital Population Identity at the village level has shown that there are efforts to adapt institutions in supporting the digitalization of population administration. However, the effectiveness of program

implementation is still not optimal because it is influenced by limitations in the dimensions of goal achievement, integration, and adaptation. Limited human resources, technological facilities and infrastructure, and low digital literacy of the community are the main factors that hinder the successful implementation of IKD at the village level. These findings confirm that the digitalization of public services at the village level requires a comprehensive and sustainable institutional approach so that policy objectives can be optimally achieved.

DISCUSSION

The findings of the study show that the implementation of Digital Population Identity (IKD) at the village level is a process of transformation of public services that does not only depend on the availability of technology and regulations, but is highly determined by the institutional adaptability of the village government. These results reinforce the view in the public administration literature that public sector digitalization is a complex and multidimensional process of organizational change, not just a technical innovation (Dunleavy et al., 2006; Osborne & Brown, 2011). In this context, the effectiveness of digitization of population administration at the village level needs to be understood through the framework of institutional adaptation as stated by Steers (1985). In the dimension of goal achievement, the low level of community participation in the use of IKD shows that there is a gap between policy objectives and the reality of implementation at the grassroots level. Although the village government has understood the strategic goals of digitizing population administration, the results of the study show that these goals have not been fully translated into benefits that are directly felt by the community. This finding is in line with the view of Steers (1985) that the achievement of organizational goals is greatly influenced by the extent to which these goals are understood and accepted by the parties involved. In the context of IKD, the weak public understanding and perception that physical documents are still more relevant shows that the success of achieving goals requires not only policy clarity, but also sustainable communication and public education strategies.

In the integration dimension, the limitations of human resource competence and technological infrastructure facilities show that the internal integration of village organizations has not been fully formed optimally. Steers (1985) emphasized that integration reflects the level of integration between parts within the organization, including the alignment between structures, human resources, and support systems. The findings of this study show that dependence on a small number of apparatus with information technology capabilities has the potential to cause workload imbalances and vulnerability to service disruptions. In addition, the limitation of technological infrastructure and the instability of the internet network weaken the integration of service systems, thereby hampering the effectiveness of the implementation of IKD. This condition strengthens the argument that the digitalization of public services requires comprehensive organizational readiness, not just at the policy level. Furthermore, in the adaptation dimension, the results of the study show that village governments are still in the early stages of adjusting to the demands of digitizing population administration. Institutional adaptation in this context is not only related to the

technical capabilities of the apparatus, but also includes changes in work patterns, organizational culture, and the way organizations interact with society. Steers (1985) views adaptation as the ability of organizations to respond to environmental changes in a sustainable manner in order to remain relevant and effective. The findings of this study show that the limitations of training and mentoring hinder the organizational learning process, so that adaptation to digital technology is gradual and not optimal.

From the perspective of organizational communication, the results of the study show that coordination between the village government and population agencies at the district level is running relatively well and is a supporting factor in the institutional adaptation process. This is in line with the view of Osborne and Brown (2011) who emphasize the importance of collaboration and networking between organizations in supporting public sector innovation. However, communication with the public still faces challenges, especially related to differences in digital literacy levels. Certain community groups, such as the elderly, need special approaches and assistance so as not to be left behind in the process of digitizing public services. These findings suggest that village institutional adaptation needs to consider the social characteristics of the community as part of the organizational environment. Overall, the results of this study confirm that the effectiveness of digitization of population administration at the village level is highly determined by the institutional adaptability of the village government. Digitalization cannot be forced as a technocratic solution alone, but must be accompanied by strengthening organizational capacity, improving the competence of the apparatus, and developing communication mechanisms and continuous supervision. These findings enrich the study of public administration by emphasizing that the success of digital innovation at the village government level requires a comprehensive and contextual institutional approach, in line with social dynamics and the capacity of local organizations.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results and discussion of the research, it can be concluded that the implementation of Digital Population Identity (IKD) at the village level is a strategic step in supporting the digitization of population administration and improving the quality of public services. The village government has shown institutional commitment in implementing the IKD program through adjustments to policies and service procedures that refer to national regulations. However, the effectiveness of the implementation of IKD is not fully optimal because it is still faced with various institutional limitations, especially in the aspects of achieving goals, organizational integration, and adaptation to technological changes. Low community participation, limited competence of village officials' human resources, inadequate technological facilities and infrastructure, and differences in the level of community digital literacy are the main factors affecting the success of this program. In line with these findings, this study recommends the need to strengthen the institutional adaptation of village government as the main prerequisite for the success of digitization of population administration. Local governments and related agencies are advised to increase the capacity of human

resources of village apparatus through continuous training and technical assistance, especially in mastering information technology and digital service management. In addition, the provision and improvement of supporting infrastructure, especially a stable internet network and adequate technological devices, needs to be a priority in supporting the smooth running of IKD services. The village government also needs to strengthen the socialization and education strategy to the community with a more inclusive and participatory approach so that the benefits of IKD can be widely understood and felt. With planned and sustainable institutional strengthening, the digitization of population administration at the village level is expected to run more effectively and make a real contribution to improving the quality of public services.

ADVANCED RESEARCH

The next study is recommended to use a comparative approach between villages or mixed methods to obtain a more comprehensive.

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