

# IMPLEMENTATION OF SIMPLE VILLAGE APPLICATION AS A REALIZATION OF SMART VILAGE IN IMPROVING THE EFFICIENCY AND QUALITY OF ADMINISTRATIVE SERVICES IN NAGARI LUBUAK BATINGKOK, HARAU DISTRICT, 50 KOTA REGENCY

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**Abstract.** This study aims to investigate the "SimpelDesa" application as a manifestation of the smart village concept in improving administrative services and to identify factors inhibiting the implementation of the SimpelDesa application in Nagari Lubuak Batingkok, Harau District. This study employed a qualitative approach, utilizing methods such as in-depth interviews, participatory observations, and content analysis focusing on the implementation of the SimpelDesa application. The research participants included community members and local government representatives. An inductive analytical method was applied to interpret the data and uncover emerging themes and patterns. The results show that the adoption process of the SimpelDesa application by the Nagari Lubuak Batingkok government follows the diffusion of innovation theory. The Nagari government became aware of the SimpelDesa application through interpersonal communication channels. The persuasion stage indicated that the Nagari government adopted the SimpelDesa application by conducting a needs analysis for Nagari Lubuak Batingkok. The decision-making stage involved signing a Memorandum of Understanding (MoU) with PT Telekomunikasi Indonesia. The implementation stage included socializing the SimpelDesa application, followed by the utilization of its various features. With the presence of the "SimpelDesa" application, the people of Lubuak Batingkok have successfully overcome several challenges in building self-reliance, such as improving access to information, encouraging active participation, and enabling more inclusive decision-making. However, this study also identified several inhibiting factors in the application's implementation in Nagari Lubuak Batingkok, including limited community access, a mindset that the application is not yet important, a lack of digital knowledge and skills, as well as challenges in ensuring sustainability and continued adoption of the application.

**Keywords:** *SimpelDesa; Smart Village; Lubuak Batingkok*

## 1. INTRODUCTION

In today's technological era, service innovation is highly sought after by the public. Innovations that make it easier for people to carry out activities related to correspondence and facilitate matters without the need for piles of documents, therefore innovation comes from new government ideas. The use of information technology in the government sector is one form of significant technology application. The integration of information technology into government institutions contributes to improving the quality of public services, making them more efficient and effective. This is reflected in the government's provision of various applications and websites, equipped with supporting features to facilitate access to services for both the public and the government itself (Saidah et al., 2022). In practice, e-government implementation has shown mixed results. In developed countries, e-government implementation has resulted in various innovations and increased efficiency in administration and public services. However, in developing countries like Indonesia, the results are still not fully optimal. Despite the availability of information and communication technology infrastructure, several

government institutions still face various obstacles and have not been able to demonstrate significant improvements in the quality of public services (Sudarsono & Lestari, 2018).

The presence of applications in government institutions, particularly village governments, is an effort to realize smart villages. A smart village is a village development concept that integrates the use of appropriate technology to explore local potential, stimulate economic growth, and simplify various aspects of community life (Irawaty et al., 2023).

The Smart Village concept aligns with the provisions of Law Number 6 of 2014 concerning Villages, specifically Article 83, which states that rural area development is directed at accelerating and improving the quality of public services more effectively and efficiently, one of which is through the utilization and development of technology. Therefore, this law stipulates that village development utilize technology. One village that has already adopted technology is Lubuak Batingkok Village, which uses the Simpeldesa application. This phenomenon can be explained by the tendency that in the future, village governance will likely no longer rely on conventional methods, but will instead transform towards the use of internet-based technology (Cahyani, 2021).

One concrete manifestation of village digitalization is the "SimpelDesa" application developed by Telkom. This application is designed to support the effectiveness of village government work by utilizing cloud-based technology, both in web and smartphone applications, and upholds the values of digitalization, active participation, and independence.

The Simpeldesa application makes it easier for village governments to transfer various administrative activities and public services into digital formats, both web-based and mobile (Parwita, 2021). Furthermore, this application plays a role in supporting the efficiency of village officials in meeting community needs, while also providing an open communication channel to facilitate coordination between the village government and relevant institutions.

This village is the first on the island of Sumatra to implement the Simpeldesa application from PT Telkom's Smart Village Nusantara (SVN) program. This application aligns perfectly with Lubuak Batingkok Village's mission to create a digital village that integrates governance, social governance, and economic commerce.

In today's modern era, village governments are required to transform and innovate in providing administrative services to the public, which is the core of public service and the primary form of interaction between the village government and its citizens. The importance of village digitalization is also emphasized in Minister of Village Regulations Number 13 and 21 of 2020 concerning the priority use of village funds. This aligns with Article 86 of Law Number 6 of 2014, which requires the central and regional governments to develop a village information system managed by the village government and accessible to the public and all stakeholders. As the smallest administrative unit, the village is required to adapt to technological advances and increase its capacity in population data management (Asyikin et al., 2015).

However, the implementation of the Simpeldesa app in Lubuak Batingkok Village has not been running as expected and could be considered suboptimal. Observations indicate that public interest and willingness to use the app remains very low. This is evident in the fact that people rarely open the app, and some have even deleted it. Most residents are also unfamiliar with how to use the app, so when they need documents, they prefer to go directly to the village government.

The theories used in this research are the innovation diffusion theory (Rogers 2003) on the decision-making process regarding innovation, Jones' theory (in Widodo, 2009:89) on program implementation activities, and the theory of Mazmanian and Sabatier in Nugroho (2004:161) on the steps of program implementation. Then the theory of factors influencing an implementation from George C. Edward III in Sujianto (2008:38-45).

Pratna & Khaerudin (2022) in a research entitled, "The Application of Village Service Applications for Smart Village Implementation in Lubuak Batingkok Village." The results of their research indicate that the implementation of smart villages in Lubuak Batingkok Village is quite good, but has not been implemented optimally. Research conducted by Eldo and Nur Inzana (2022) regarding the opportunities and challenges of implementing smart villages in the 4.0 era revealed that the implementation of this concept still faces various obstacles. Some of these include limited human resources at the village government level and a community culture that still prioritizes local values and is not yet fully accustomed to technological advances. However, normatively, the government has provided support through regulations, both in the form of laws and regional regulations to encourage the implementation of smart villages as a more progressive village development strategy. Based on the background description, this study aims to answer two main research questions, namely: how the application of the SempelDesa application as a concrete form of smart village in improving the efficiency and quality of administrative services in Nagari Lubuak Batingkok, and what factors hinder its implementation. This research is considered significant because it can provide a basis for consideration in efforts to optimize the use of the SempelDesa application in the region.

## **2. RESEARCH METHOD**

This research is a qualitative study. The method used is descriptive. Subjects included the Head of Lubuak Batingkok Village, the Village Secretary, the Head of Services, the Head of Government, the Head of Welfare, the Head of Finance, the SempelDesa application operator, the Village Information Team, and the Lubuak Batingkok Village community. Data collection techniques included observation, interviews, and documentation studies. The data obtained were then tested for validity using source triangulation. Furthermore, data analysis techniques included data collection, data reduction, data presentation, and conclusion drawing. By using a qualitative approach, this study is expected to provide a deeper understanding of the role of the "SempelDesa" application as an implementation of the smart village concept in improving the efficiency and quality of administrative services in Lubuak Batingkok Village.

## **4. RESULTS AND DISCUSSION**

The application of the SempelDesa application as a manifestation of a smart village in Lubuak Batingkok Village. The application of technology in development in this village is an important thing to do in order to form a smart village or smart village. One of the villages that uses technology for development is Lubuak Batingkok Village by using the SempelDesa application. This village is one of the first villages on the island of Sumatra to adopt the Smart Village Nusantara (SVN) program at PT. Telekomunikasi Indonesia (Telkom). By using this SempelDesa application, Lubuak Batingkok Village can be said to be a smart village because it has adopted technology in its village development, the process of implementing the SempelDesa application in Lubuak Batingkok Village is in line with the theory of diffusion of innovation, from Roger (2003). The stages of the technology adoption process start from several stages including the knowledge stage, persuasion stage, decision-making stage, implementation stage and confirmation stage. Some of the technology adoption processes include the following stages:

The first stage (1) is the knowledge stage. During this stage, the Lubuak Batingkok Village Government learned about the SempelDesa application through interpersonal communication with the head of the Village Consultative Body (Bamus).

The second stage (2) is persuasion, where at this stage the Lubuak Batingkok Nagari government is interested in the SempelDesa application because the Nagari government has analyzed the Nagari government's needs to store and search for community data quickly and to make it easier for the community to obtain services. This is in line with the theory of Mazmanian and Sabatier in Nugroho (2004:161) which states that in implementing policies there is a process of identifying problems that will be implemented.

The Nagari government wants to be efficient in time, costs and energy in managing community data and making it easier for the community to obtain services. Before the existence of this *simpeldesa* application, the Lubuak Batingkok Nagari government had difficulty storing and searching for community data when needed.

In the next stage, the Nagari government formed a group or team to obtain information from Nagari Lubuak Batingkok as a supporting factor for the implementation of the simple village application. This is in line with Jones in Widodo (2008: 89-94) who stated that in the implementation of the program there are activities. The implementation of the simple village application in Nagari Lubuak Batingkok refers to Law Number 6 of 2014 concerning villages which gives freedom to villages to develop their areas according to the potential of the village. Government Regulation Number 38 of 2016 concerning regional innovation which encourages local governments to innovate in local government governance. Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE).

The third stage is the decision-making process. This stage involves a memorandum of understanding (MoU) with PT Telkom Indonesia, the operator of the *Simpeldesa* application. This collaboration demonstrates the Nagari government's decision to adopt the *Simpeldesa* application in Lubuak Batingkok. The Nagari government then improved the internet network by preparing a fiber optic network and installing Wi-Fi in every hamlet of Lubuak Batingkok.

The fourth stage is the implementation stage. In this implementation stage, the application of the *Simpeldesa* application in Lubuak Batingkok Village is implemented through community outreach. This stage begins with outreach, which includes providing technical guidance to the community, door-to-door outreach, creating a short movie video of the *Simpeldesa* application, and outreach through the Village's social media. Furthermore, the community and the Lubuak Batingkok Village government utilize the features of the *Simpeldesa* application. This is also in line with Jones in Widodo (2008: 89-94), who stated that program implementation includes activities such as communicating policies (socialization) and utilizing the program.

The fifth stage is the confirmation stage, or evaluation stage, of the application. The implementation of the *Simpeldesa* application as a manifestation of smart villages in Nagari Lubuak Batingkok has not been optimally implemented. The *Simpeldesa* application as a manifestation of smart villages has been utilized and follows a clear flow of stages. However, the stages of the *Simpeldesa* application implementation carried out by Nagari Lubuak Batingkok have not had a significant impact on the application's application in facilitating administrative services for the community in Nagari Lubuak Batingkok. This is evident in the confirmation stage, which indicates the community's reluctance to own and use the *Simpeldesa* application.

Inhibiting factors in the implementation of the Simple Village application as an embodiment of a smart village in improving the efficiency and quality of administrative services in Nagari Lubuak Batingkok.

The implementation of the *SimpleDesa* application plays a crucial role in improving public access to effective and efficient administrative services. The presence of development programs, government policies, and local economic development opportunities are supporting factors in realizing a village oriented towards the smart village concept. Features such as news, announcements, and activity calendars in the *SimpelDesa* application enable the public to stay informed and actively participate in various development activities. The innovation of the *SimpelDesa* application plays a crucial role in expanding access to information for residents, supporting the public education process, and making a real contribution in providing digital solutions that simplify the lives of village residents towards the realization of a technologically intelligent and independent village. This also increases access to administrative services for the community. The relevance of the existence of such an application lies in its ability to bridge the gap in access to information at the village level, while contributing to improving the efficiency and quality of public services to the community. However, it is very

unfortunate that the implementation of the SempelDesa application has not been able to run optimally due to a number of obstacles. One of the main obstacles is the limited ownership of smartphones among the community, which means not all residents can access the application. Although the SempelDesa application provides positive contributions and tangible benefits, the village community still experiences difficulties in operating it due to limited access to technology and varying levels of digital literacy. Furthermore, resistance to change and privacy concerns emerged during the implementation process. These findings emphasize that technical and social challenges need to be addressed through a holistic approach in technology planning and implementation within the village community. This indicates that the success of village technology implementation is not only determined by technical readiness but also depends heavily on the community's level of digital literacy and strategies for overcoming resistance to change. Changing the community's mindset is crucial, as emphasized by Palinggi & Alolinggi (in Nurahman et al., 2023) who stated that the initial step in building a digital ecosystem is through transforming the community's mindset. This view aligns with the digital divide theory put forward by Dewan in Maharani (2021), which explains that individuals' inability to benefit from information technology is caused by limited access and a lack of skills in utilizing it.

## **CONCLUSION**

Based on the results of the research, the main objective of this research to evaluate the influence of Agile Leadership and Crowd Logistics on last-mile delivery (LMD) efficiency at PT Pos Indonesia has been achieved. Key findings show that Agile Leadership contributes significantly to improving LMD efficiency through operational flexibility, accelerated decision-making, and more effective communication. In addition, the implementation of Crowd Logistics has proven to strengthen distribution efficiency by utilizing community-based delivery networks, increasing delivery speeds, and optimizing operational costs. Thus, both independent variables have a direct and positive effect on the efficiency of LMD, which confirms the importance of agility-based managerial strategies and public participation in the logistics industry.

This research enriches the literature on Agile Leadership and Crowd Logistics in logistics, especially in Indonesia. Practically, these findings help PT Pos Indonesia and other logistics companies in designing adaptive strategies. The implications of the research point to the need for the integration of Agile Leadership and community-based approaches. Agile Leadership can be strengthened through training, digitalization, and increased collaboration, while Crowd Logistics can be optimized by expanding its partner network, leveraging technology, and developing incentive policies. However, this research is limited to one company and has not considered external factors such as government policies and infrastructure readiness. Further research can expand the scope of the industry and examine more advanced technologies. Globally, the research highlights the importance of innovation and community-based approaches in addressing distribution challenges in the digital age, which can serve as a model for other countries with similar logistical challenges.

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