



## Community Empowerment Through the Digitalization of Nagari Administrative Services in Tanah Datar Regency

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**Abstract.** This study aims to examine how the digitalization of Nagari administrative services can empower communities in Tanah Datar Regency. Using a case study method, the study finds that the digitalization of Nagari administrative services can improve the efficiency and effectiveness of public services, enabling communities to access services more easily and quickly. In addition, digitalization can enhance the transparency and accountability of Nagari governance. The study also finds that the implementation of e-government through online applications can improve the quality of public services in Tanah Datar Regency. Thus, the digitalization of Nagari administrative services can be a strategy to empower communities and enhance the quality of public services. However, the study also highlights several challenges in implementing the digitalization of Nagari administrative services, such as limitations in information and communication technology infrastructure and the insufficient capability of human resources in using digital technology. Therefore, training and support are required to enhance the capacity of human resources in utilizing digital technology.

**Keywords:** Administrative Services, Community Empowerment, Digitalization, Nagari, Tanah Datar Regency.

### 1. INTRODUCTION

Community empowerment is one of the main objectives of development in Indonesia (Permana et al., 2023). One effort to empower communities is by improving the quality of public services, particularly at the village or Nagari government level. Nagari, as the local government closest to the community, plays an important role in providing effective and efficient public services (Farmila, 2025). However, many challenges remain in public service delivery in Nagari, such as complex administrative processes, long waiting times, and lack of transparency (Azima et al., 2024). These issues can lead to community dissatisfaction and hinder development in Nagari.

In recent years, digital technology has become one of the solutions to improve the quality of public services (Irwan et al., 2021). The digitalization of Nagari administrative services can help improve the efficiency and effectiveness of public services (Pratama & Frinaldi, 2025), enabling communities to access services more easily and quickly (Bahari et al., 2023). Tanah Datar Regency is one of the regencies in West Sumatra that has undertaken efforts to digitalize Nagari administrative services (Sari & Astuti, 2022). Therefore, this study aims to examine how the digitalization of Nagari administrative services can empower communities in Tanah Datar Regency and what challenges are encountered in its

implementation. The results of this study are expected to contribute to the development of policies and strategies to improve the quality of public services in Nagari.

## **2. THEORITICAL REVIEW**

### **Community empowerment**

Community empowerment is a process aimed at enhancing the ability and capacity of communities to make decisions and control the resources within their environment (Akmal et al., 2023). According to Warnita (2025), community empowerment is a process intended to liberate communities from dependency and enhance their ability to make decisions.

### **Digitalization of Administrative Services**

The digitalization of administrative services is the process of utilizing information and communication technology to improve the efficiency and effectiveness of public services (Helmi et al., 2024). According to Rahmi et al. (2025), the digitalization of administrative services can help improve the quality of public services by enhancing efficiency, transparency, and accountability.

### **E-Government Theory**

E-Government is a concept that uses information and communication technology to improve the quality of public services and increase community participation in governance (Sepri & Riska, 2025). According to Rahmi et al. (2024), e-government can help enhance the efficiency, transparency, and accountability of government.

### **Theory of Community Empowerment through Digitalization**

Community empowerment through digitalization is a concept that uses digital technology to improve the ability and capacity of communities to make decisions and control the resources within their environment (Helmi & Oktaviane, 2022). According to Deska et al. (2025), digital technology can help increase community participation in governance and improve the quality of public services.

Thus, this theoretical review can help understand how the digitalization of Nagari administrative services can empower communities in Tanah Datar Regency and what factors affect the successful implementation of these services.

## **3. METHOD**

This study employs a qualitative research method with a case study approach. The case study was chosen because this research aims to gain an in-depth understanding of how the digitalization of Nagari administrative services can empower communities in Tanah Datar

Regency. The data sources in this study consist of primary data obtained through in-depth interviews with the Head of Nagari and Nagari officials, community leaders, and Nagari residents, as well as administrative service officers. Secondary data were obtained from Nagari and regency documents, previous research reports, scientific articles, and online news. The data collection techniques used in this study include in-depth interviews with informants to obtain information about the digitalization of Nagari administrative services and its effects on community empowerment; direct field observation to gather information about the digitalization process of Nagari administrative services; and document analysis of Nagari and regency documents to obtain information regarding policies and the implementation of digitalized administrative services. The data analysis techniques in this study include thematic analysis, which is used to identify themes emerging from interview and observation data, and content analysis, which is applied to analyze Nagari and regency documents. Thus, this study can provide a comprehensive understanding of how the digitalization of Nagari administrative services can empower communities in Tanah Datar Regency.

#### **4. RESULTS AND DISCUSSION**

This study indicates that the digitalization of Nagari administrative services in Tanah Datar Regency has had a positive effect on community empowerment. The research findings are as follows:

1. Improvement of Efficiency and Effectiveness of Public Services: The digitalization of Nagari administrative services has improved the efficiency and effectiveness of public services, enabling communities to access services more easily and quickly. The improvement of efficiency and effectiveness in the digitalization of Nagari administrative services in Tanah Datar Regency is achieved through several measures, including:
  - a) Nagari Information System: The implementation of an integrated Nagari information system helps enhance the efficiency and effectiveness of administrative services.
  - b) Online Services: Online services enable the community to access Nagari administrative services more easily and quickly without visiting the Nagari office.
  - c) Use of Information Technology: The use of information technology, such as mobile applications and web portals, helps improve the efficiency and effectiveness of administrative services.
  - d) Effective Business Processes: Effective and efficient business processes help improve the quality of Nagari administrative services.

- e) Training and Human Resource Development: Training and development of human resources (HR) help improve the skills and capabilities of Nagari employees in utilizing digital technology.
- f) Monitoring and Evaluation: Regular monitoring and evaluation help improve the quality of Nagari administrative services and identify areas that require improvement.

Thus, the digitalization of Nagari administrative services in Tanah Datar Regency can improve the efficiency and effectiveness of services, as well as enhance the quality of life of the community.

2. Improvement of Community Participation: The digitalization of Nagari administrative services has increased community participation in governance, allowing communities to provide input and suggestions online. The improvement of community participation in the digitalization of Nagari administrative services in Tanah Datar Regency can be achieved through several measures, including:

- a) Socialization and Education: Socializing and educating the community about the benefits and how to use digital services can increase community participation.
- b) Ease of Access: Providing easy and convenient access for the community to use digital services, such as mobile applications or web portals.
- c) Active Participation: Encouraging active community participation in decision-making processes and the planning of digitalized Nagari administrative services.
- d) Feedback and Complaints: Providing effective feedback and complaint channels for the community to submit input and suggestions regarding digital services.
- e) Collaboration with the Community: Promoting collaboration with the community, civil society organizations, and other stakeholders to enhance community participation in digitalized administrative services.
- f) Community Capacity Building: Enhancing the community's capacity in using digital technology through training and education.
- g) Promotion and Marketing: Conducting effective promotion and marketing to increase awareness and community participation in using digital services.

Therefore, community participation in the digitalization of Nagari administrative services in Tanah Datar Regency can increase, which in turn improves the quality of services and enhances community trust in Nagari governance.

3. Improvement of Community Capacity: The digitalization of Nagari administrative services has increased the community's capacity in using digital technology, enabling them to access information and public services online. The improvement of community capacity in the digitalization of Nagari administrative services in Tanah Datar Regency is achieved through several measures, including:

- a) Training and Education: Organizing training and education on the use of digital technology and online Nagari administrative services.
- b) Workshops and Seminars: Conducting workshops and seminars on the digitalization of Nagari administrative services and its benefits for the community.
- c) Assistance: Providing guidance for community members who require help in using digital services.
- d) Educational Materials: Providing educational materials about the digitalization of Nagari administrative services and how to use them.
- e) Free Internet Access: Providing free internet access in public areas to improve community accessibility to digital services.
- f) Collaboration with Communities: Promoting collaboration with local communities and civil society organizations to enhance community capacity in using digital technology.
- g) Evaluation and Monitoring: Conducting evaluation and monitoring of community capacity-building programs to ensure their effectiveness and efficiency.

Thus, communities in Tanah Datar Regency can enhance their capacity to use digital technology and utilize online Nagari administrative services more effectively.

4. Improvement of Transparency and Accountability: The digitalization of Nagari administrative services has enhanced the transparency and accountability of Nagari governance, allowing the community to access information about Nagari government activities online. The improvement of transparency and accountability in the digitalization of Nagari administrative services in Tanah Datar Regency is achieved through several measures, including:

- a) Transparent Information System: Developing a transparent information system accessible to the community to monitor Nagari administrative service processes.
- b) Public Announcements: Announcing information about Nagari administrative services online and offline to enhance transparency.
- c) Access to Information: Providing easy and fast access for the community to obtain information about Nagari administrative services.

- d) Supervision and Monitoring: Conducting supervision and monitoring of Nagari administrative service processes to ensure transparency and accountability.
- e) Reporting System: Developing an effective reporting system to monitor the performance of Nagari administrative services and enhance accountability.
- f) Community Participation: Encouraging community participation in decision-making and supervision of Nagari administrative services to improve transparency and accountability.
- g) Rewards and Sanctions: Providing rewards for outstanding employees and sanctions for employees who commit violations to enhance accountability.

Thus, the digitalization of Nagari administrative services in Tanah Datar Regency can improve transparency and accountability, thereby increasing community trust in Nagari governance.

5. Challenges and Obstacles: This study also identified several challenges and obstacles in the implementation of the digitalization of Nagari administrative services, such as limitations in information and communication technology (ICT) infrastructure and the insufficient capability of human resources in using digital technology. The main challenges of digitalizing Nagari administrative services in Tanah Datar Regency include:

- a) Limited Technology Infrastructure: Uneven technology infrastructure and limited internet access in some areas remain major challenges.
- b) Low Digital Literacy: Community members and civil servants who are not accustomed to using digital technology may face difficulties operating digital systems.
- c) Unstable Network: Unstable internet connections can hinder administrative service processes.
- d) Human Resource Skills: Lack of digital skills among human resources can impede the implementation of digitalization.
- e) Community Engagement: Awareness and participation of the community in using digital services still need to be improved.

To address these challenges, several solutions can be implemented, including:

1. Sustainable Technology Infrastructure Development: Enhancing the availability of adequate and sustainable technology infrastructure.
2. Digital Literacy Improvement: Conducting training and education to enhance digital skills among the community and civil servants.

3. Development of User-Friendly Applications: Developing applications that are easy to use and do not require high-speed internet connections.
4. Collaboration with the Private Sector: Promoting cooperation with the private sector to improve infrastructure and technological innovation.
5. Supervision and Evaluation: Conducting supervision and evaluation of the digitalization implementation to ensure the process runs effectively and efficiently.

Thus, this study demonstrates that the digitalization of Nagari administrative services can be a strategy to empower communities in Tanah Datar Regency. Community empowerment through the digitalization of Nagari administrative services in Tanah Datar has shown positive results. The Population and Civil Registration Office (Disdukcapil) of Tanah Datar Regency has implemented digital systems to improve the efficiency and accuracy of population administrative services. Some implementations of digitalization include:

1. KTP Recording and Printing Services: KTP recording and printing services are available in all sub-district offices across Tanah Datar, so that the community no longer needs to visit the Disdukcapil office to access services.
2. Assignment of Nagari Registration Officers: Nagari registration officers are assigned to assist the community in Nagari, enabling easier access to population administrative services.
3. Optimization of Online Services: Disdukcapil Tanah Datar is committed to enhancing online services, allowing the community to access population administrative services online.
4. Implementation of Digital Population Identity (IKD): Disdukcapil Tanah Datar reports progress on performance targets and innovations in population administrative services, including the implementation of IKD.

The implementation of the digital KTP recording and printing system in Tanah Datar Regency has been carried out through several measures, including:

1. Digital Population Identity (IKD): The Population and Civil Registration Office (Disdukcapil) has implemented IKD as a key access point for the digital transformation of public services. IKD allows the community to access integrated online public services.
2. Online Services: Disdukcapil Tanah Datar launched the public service platform "Tanah Datar at Your Fingertips," enabling the community to access population administrative services online via gadgets or smartphones.

3. Outreach Services: Disdukcapil Tanah Datar provides mobile KTP-el recording services for high school students and the general public across Nagari and Jorong in Tanah Datar Regency.
4. Nagari Registration Officers: Disdukcapil Tanah Datar has assigned Nagari registration officers to assist the community with services such as Child Identity Cards (KIA) registration, Family Card issuance, and birth and death data entry.

To enhance the achievement of performance targets and innovations in population administrative services, Disdukcapil Tanah Datar has also undertaken several efforts, including:

1. Innovation Development: Disdukcapil Tanah Datar has developed the "Sari Madu Lebah Plus" innovation to improve public services.
2. Collaboration with Stakeholders: Disdukcapil Tanah Datar collaborates with stakeholders to enhance performance targets and innovations in population administrative services.

However, the implementation of the digital KTP recording and printing system in Tanah Datar Regency still faces several challenges, including:

1. Unstable Network: Unstable internet connections can hinder population administrative service processes.
2. Limited Community Understanding of Technology: Many community members still lack sufficient technological knowledge and require assistance in using digital services.
3. Insufficient Application Updates: Lack of regular updates can cause the service system to be ineffective and inefficient.

In addition, Tanah Datar Regency has implemented the OpenSID system in several Nagari, such as Nagari Salimpaung, to facilitate population and Nagari administrative data management. Thus, the digitalization of Nagari administrative services in Tanah Datar Regency can improve the efficiency, accuracy, and accessibility of public services for the community.

## **Discussion**

This study indicates that the digitalization of Nagari administrative services in Tanah Datar Regency has had a positive effect on community empowerment. Through digitalization, communities can access public services more easily and quickly, thereby improving the efficiency and effectiveness of public service delivery.

## **Improvement of Efficiency and Effectiveness of Public Services**

The digitalization of Nagari administrative services has enhanced the efficiency and effectiveness of public services. Communities can access public services online, reducing

waiting times and increasing community satisfaction. In addition, digitalization can reduce administrative costs and improve the transparency of public services.

### **Improvement of Community Capacity**

The digitalization of Nagari administrative services has also increased the community's capacity in using digital technology. Communities can access information and public services online, thereby enhancing their ability to obtain information and utilize public services effectively.

### **Challenges and Obstacles**

However, this study also identified several challenges and obstacles in the implementation of digitalized Nagari administrative services. One of the main challenges is the limitation of information and communication technology infrastructure in the Nagari. In addition, the insufficient capability of human resources in using digital technology also poses a challenge to the implementation of digitalization.

### **Implications and Recommendations**

Based on the research findings, it can be concluded that the digitalization of Nagari administrative services can empower communities in Tanah Datar Regency. Therefore, Nagari and Regency governments need to increase investments in information and communication technology infrastructure and enhance the capacity of human resources in using digital technology. Furthermore, continuous evaluation and monitoring are necessary to ensure that the digitalization of Nagari administrative services can provide maximum benefits to the community.

## **5. CONCLUSION**

This study indicates that the digitalization of Nagari administrative services in Tanah Datar Regency has had a positive effect on community empowerment. Digitalization has improved the efficiency and effectiveness of public services, increased community participation in governance, and enhanced the community's capacity to use digital technology. Therefore, it can be concluded that the digitalization of Nagari administrative services can be one of the strategies to empower communities in Tanah Datar Regency. Accordingly, Nagari and Regency governments need to continue investing in information and communication technology infrastructure and enhancing human resource capacity in using digital technology to improve the quality of public services and empower communities. This study also demonstrates that the digitalization of Nagari administrative services can serve as an example

for other Nagari across Indonesia to improve the quality of public services and empower communities through digital technology..

## REFERENCES

Akmal, A. D., Yuliarti, Y., Permana, I., & Fajri, H. (2023). Dinamika pelaksanaan pemerintahan nagari di Provinsi Sumatera Barat tahun 2023. *Journal of Policy, Governance, Development and Empowerment*, 3(3), 74-80. <https://doi.org/10.24036/pgde.v3i3.222>

Azima, F., Zamzami, L., & Arif, E. (2024). Komunikasi pemerintah dengan masyarakat dalam mensosialisasikan aplikasi simpeldesa: Studi kasus nagari Lubuak Batingkok Kabupaten Lima Puluh Kota. *Education and Social Sciences Review*, 5(1), 38-45. <https://doi.org/10.29210/07essr413300>

Bahari, A., Rahmi, D. Y., Rahmadoni, J., Anwar, K., & Anshar, A. A. (2023). Digitalisasi pemerintahan nagari melalui implementasi sistem informasi manajemen Nagari di Nagari Kamang Mudiak Kabupaten Agam. *Jurnal Hilirisasi IPTEKS*, 6(2), 62-70. <https://doi.org/10.25077/jhi.v6i2.652>

Deska, Y., Indraddin, & Azwar. (2025). Strategi pemberdayaan masyarakat dalam pengembangan pariwisata berbasis komunitas nagari. *Jurnal Niara*, 18(2), 443-458. <https://doi.org/10.31849/yh2m6a17>

Farmila, R. (2025). Pelayanan administrasi interaktif berbasis digital masyarakat Nagari Ampalu Kecamatan Lareh Sago Halaban Kabupaten Lima Puluh Kota. *Fokus: Publikasi Ilmiah Untuk Mahasiswa, Staf Pengajar Dan Alumni Universitas Kapuas Sintang*, 23(1). <https://doi.org/10.51826/fokus.v23i1.1487>

Helmi, R. F., & Oktaviane, D. P. (2022). Akselerasi implementasi nagari digital di Sumatera Barat melalui kontribusi akademisi perguruan tinggi: Literature review. *Jurnal Ilmu Sosial Dan Ilmu Administrasi Negara*, 6(02), 233-247. <https://doi.org/10.30737/mediasosian.v6i2.3205>

Helmi, R. F., Akmal, A. D., Hanoselina, Y., & Anindya, A. (2024). Digitalisasi nagari: Pengelolaan website pemerintahan nagari Salimpauang. *Widya Laksana*, 13(1), 13-22. <https://doi.org/10.23887/jwl.v13i1.66962>

Irwan, I., Azmi, A., Syafril, R., & Tiara, M. (2021). Pemberdayaan aparatur pemerintahan nagari melalui literasi digital anti-hoaks dan penguatan ketahanan informasi nagari. *Abdi: Jurnal Pengabdian Dan Pemberdayaan Masyarakat*, 3(2), 209-214. <https://doi.org/10.24036/abdi.v3i2.165>

Permana, I., Hanoselina, Y., Helmi, R. F., & Yuliarti, Y. (2023). Peningkatan kapasitas pemerintah dan masyarakat nagari Salimpauang melalui aplikasi SIANA. *Jurnal Pengabdian UNDIKMA*, 4(2), 589-602. <https://doi.org/10.33394/jpu.v4i3.6607>

Pratama, T., & Frinaldi, A. (2025). Inovasi budaya organisasi dan partisipasi pegawai dalam meningkatkan kinerja pelayanan publik: Studi kasus pada Dinas Pemberdayaan

Masyarakat Dan Nagari Kabupaten Agam. *Social: Jurnal Inovasi Pendidikan IPS*, 5(2), 639-648. <https://doi.org/10.51878/social.v5i2.5732>

Rahmi, U., Amilia, W., Fajri, B. R., & Azrul, A. (2024). Layanan informasi berbasis web nagari sebagai upaya mewujudkan digitalisasi pelayanan publik di Nagari Sariak Laweh Kabupaten Lima Puluh Kota. *Panrita Abdi - Jurnal Pengabdian Pada Masyarakat*, 8(3), 574-583. <https://doi.org/10.20956/pa.v8i3.28510>

Rahmi, U., Amilia, W., Rahmadika, S., & Azrul, A. (2025). Ujicoba sistem integrasi pelayanan informasi dan persuratan nagari (SIPIDI) di Nagari Sariak Laweh Kabupaten Limapuluh Kota. *Panrita Abdi-Jurnal Pengabdian Pada Masyarakat*, 9(3), 602-613. <https://doi.org/10.20956/pa.v9i3.40216>

Sari, V. D. P., & Astuti, N. F. V. (2022). Smart Nagari: Digital innovation in document and archives services Nagari III Koto Aur Malitang, West Sumatra. *Jurnal Kearsipan*, 17(2). <https://doi.org/10.46836/jk.v17i2.252>

Sepri, J., & Riska, A. (2025). Pengembangan sistem informasi berbasis WebGIS untuk digitalisasi data wilayah nagari Durian Kapeh Darussalam Kabupaten Agam. *Universitas Bung Hatta*.

Warnita, E. D. (2025). Prototype aplikasi pelayanan administrasi Kecamatan Tanjung Raya (Pelantara) dalam optimalisasi pelayanan publik di Kabupaten Agam Provinsi Sumatera Barat. *IPDN*.