



Journal of Human And Education

Volume 4, No. 3, Tahun 2024, pp 257-264

E- ISSN 2807- 4238, P-ISSN 2807-4246

Website: <https://jahe.or.id/index.php/jahe/index>

The Urgency of Improving the Quality of Village Information Systems in Increasing Digital Business in Villages

Rieneke Ryke Kalalo^{1*}, Hairul², Said Hamzal³, Dini Pratiwi⁴, Ika Agustina⁵

Universitas Kristen Indonesia Tomohon, Indonesia¹ Universitas Islam Negeri Raden Mas Said Surakarta, Indonesia² Universitas Serela Lahat, Indonesia³ Universitas Serela Lahat, Indonesia⁴ Institut Pemerintahan Dalam Negeri, Indonesia⁵

Email: rinrykekalalo2@gmail.com^{1*}

Abstract

Woloan 1 Village is one of the villages in North Tomohon District, Tomohon City, North Sulawesi. Geographically, the location of Woloan 1 Village is very strategic from Tomohon City, North Sulawesi. When discussing with groups of wood craftsmen to make souvenirs in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi, they had a number of problems as well as reasons why regional craft businesses were not developing rapidly. The problem in question is a lack of information and education regarding the marketing of regional craft products in Woloan 1 Village, North Tomohon District. To overcome this problem, an alternative solution that can be implemented is for the author to discuss with village officials who suggest using a digital Village Information System to be able to increase the regional craft business in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi so that it can compete with competitors both online and offline. Therefore, the aim of this community service is to see the potential of using the Digital Village Information System in improving the welfare of the craftsman community in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi. To obtain the data used were observation and literature review. This service activity is an educational effort to improve the digital village information system to improve the welfare of the craftsman community in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi. As a form of the author's thoughts, several efforts and breakthroughs have been offered, namely providing education on how to use the digital village information system so that it can help increase the sustainable business of regional craftsmen in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi.

Keyword : *Woloan 1, Village Information System, Digital Village*

INTRODUCTION

In the era of digitalization and rapid technological development, digital transformation has become the main key in driving village progress in Indonesia. By exploiting the potential of digital technology, villages throughout the country can optimize resources, increase access to public services, and expand economic opportunities for rural communities (Zahirman, 2024). One of the main aspects of digital transformation in Indonesian villages is the implementation of the Village Information System. Digital Village Information Systems can also help strengthen community participation in the decision-making process, because it allows the community to provide input and suggestions in various village development activities (Alim, *et. al.*, 2024).

According to Sakban, *et. al.* (2020) A village is an area occupied by a number of residents as a community unit in which there is a legal entity that has the lowest government organization directly under the sub-district head and does not have the right to run its own household. Information in the village is very important for the wider community to know. But many people do not know about the information available in their own villages. The lack of socialization regarding information available in the village means that people are less aware of what is available in the village.

The Village Information System is a platform used by village governments to manage data and information supporting planning and budgeting based on data or evidence. The development of the Village Information System aims to encourage improvements in village governance through better and more inclusive planning and budgeting, so that it will benefit the community, especially poor and vulnerable groups as mandated by the Village Law. Village governance is guided by participatory, accountable, inclusive and sustainable principles (Budiman, 2021).

According to Law no. 6 of 2014 states that it requires central and regional governments to develop Village Information Systems and develop Rural Areas. Article 86 paragraphs 2, 4, and 5 of the Village Law states that this Village Information System includes village data, village development data, rural areas, as well as other information related to village development and rural area development. The existence of a village information system is very important. With this village information system. Information obtained by the village can be accessed easily and quickly by the village community. Apart from that, village information systems can also help villages in making decisions related to village development (Panda, 2023).

According to Salman, *et. al.* (2023) Digital Village Information System using information and communication technology to collect, manage and disseminate information related to public services in villages. The Village Information System also allows villages to integrate data and village administration processes into one centralized system, making it easier to access and process information. Increasing efficiency in village administration management is one of the main benefits of using the village information system itself. With the Village Information System, administrative data such as population data, financial data and service activity data can be integrated digitally. This can reduce dependence on manual processes which tend to be slow and prone to errors. With the Village Information System, data processing can be carried out quickly and accurately, so that time and resources can be used efficiently (Fahriza, *et. al.*, 2022).

According to Mardinata, *et. al.* (2023) The Village Information System allows for transparency in public services in villages, information related to government activities and services can be accessed easily by the community through the Village Information System. The community can monitor and supervise service processes carried out by the village government. This can reduce the potential for abuse of authority and increase village government accountability. In developing a Village Information System, there are several steps that need to be taken. First, villages need to disseminate information to the community regarding the benefits and how to use the Village Information System. This socialization can be carried out through village meetings, social media, and information materials that are easily understood by the community (Setiawan, 2013). Then, villages need to carry out data collection and mapping related to information needs that will be integrated into the Village Information System. Village administrative data such as population data, financial data, service activity data, and other data need to be collected and organized well (Khairuldi, *et. al.*, 2020).

The Village Information System is a system that utilizes information technology to collect, manage and disseminate information related to village services and management (Fathani, *et. al.*, 2022). The data and information needed to manage villages can be accessed and used efficiently through the Village Information System. Even though the potential for Village Information Systems is large. However, its use is still not optimal in many villages in Indonesia. According to Shelly, *et. al.* (2014) One of the main factors influencing the success of implementing the Village Information System is the lack of socialization and understanding of the benefits and how to use the Village Information System among village communities.

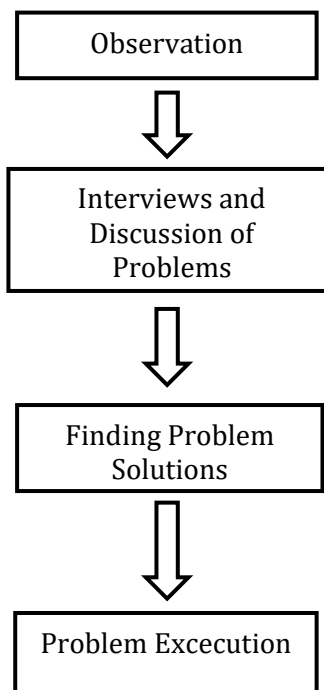
In outreach efforts, social media and village websites can also be used as a means to disseminate information about the Village Information System. Guides for using the Village Information System, creating informative materials, and successful case studies of using the Village Information System in other villages can also be disseminated through this media (Taslam, *et. al.*, 2019). According to Akbar (2024), In this digital era, the transformation of villages into Digital Villages is not only a need, but also a necessity. Adopting digital technology brings great potential to improve people's quality of life, increase productivity, and open up new economic opportunities. Through the adoption of digital technology, villages can achieve higher levels of efficiency in various sectors, from the economy to public services.

When the author carried out his service in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi. The author encountered problems experienced by residents in Woloan 1 Village, namely the lack of information and outreach regarding the Urgency of Improving the Quality of Village Information Systems which can improve Digital Business in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi, thus causing regional craft businesses such as souvenirs and handicrafts. hands that could become business land are not utilized properly and properly. In fact, Woloan 1 Village, Woloan Utara District itself is a village that has high tourism potential. If used and managed well, it can help village communities develop their businesses so that they can improve their business, especially digitally, and can create new livelihoods for the residents of Woloan Village for the sustainability of Woloan Village 1, North Woloan District, Tomohon City, North Sulawesi.

Therefore, the author believes that the presence of a Digital Village Information System in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi, could be a solution to eliminate a number of problems experienced by the people of Woloan 1 Village, especially in distributing products and so on.

METHODS

Table 1
Problem discovery and problem solutions



During discussions with Woloan 1 Village Officials, the method of activity carried out was theory and direction to residents and introducing and providing direction to the community regarding the Urgency of Improving the Quality of Village Information Systems which can

improve Digital Business in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi. From the observations made, it can be concluded that the residents and village officials do not fully know that the Digital Village Information System is one of the solutions for the Woloan 1 Village Community in improving the home business of local Craftsmen in Woloan 1 Village so that their products can compete well online. or offline. The potential of Woloan 1 Village is very large because Woloan 1 Village is a village that has high tourism potential. The problems presented in this method are such as:

1. Benefits of improving the quality of digital village information systems in improving digital business for the community in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi.
2. Solutions on how to implement a digital Village Information System so that it can be a solution to the problems of the regional craftsmen community in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi.

DISCUSSION

The development gap is something that still occurs in Indonesia today. These disparities occur between regions and between cities and villages. The gap that occurs between cities and villages also occurs in terms of information and communication technology. Digital villages are a program to reduce the gap in information flow that occurs in villages. The digital village concept is the integrated use of information and communication technology in public services and economic activities. With the digital village, it is hoped that public services can improve and community economic empowerment will develop (Desanesia, 2021).

An Information System is a series of procedures that are interrelated and organized as a whole to carry out certain actions or achieve certain goals (Lestari, *et. al.*, 2021). Therefore, system design refers to the specific details of a computer-based problem solution that have been selected after careful analysis. Furthermore, information is a group of facts that have been arranged in such a way that they have meaning for the person who receives them (Sati, *et. al.*, 2023).

According to Ilham *et. al.* (2024) an information system is a series of official procedures that groups data, processes it into information, then disseminates it to users. This can be an incentive to utilize information, where the main purpose of information is to increase knowledge or reduce uncertainty for information users. On the other hand, the development of Village Information Systems both digitally has begun to be widely carried out by village governments. In the context of systems and infrastructure, the Village Information System platform is already available. However, the lack of optimal use of data and connectivity with other information systems limits the use of the Digital Village Information System by the villages themselves (Budiman, 2021).

Digital Village is a rural area that has adopted digital technology as a whole to improve welfare and advance the lives of its people. Digital Village includes the application of information and communication technology in various aspects of life, including education, health, agriculture, economy and public services (Maryadi, 2023).

According to Baihaqi (2021), the urgency of implementing digital Village Information System improvements allows for transparency, acceleration of information and public services, ease of access, promotion of Community Resources and the village economy, as well as increasing community knowledge. Digitization transparency is related to openness of information, finances and village programs. Promotion of village potential can be done through blogs or websites. Community Resource Training can also improve the business and multimedia business sectors. The hope is that a number of villages in Indonesia can implement this concept with the support of a number of parties. So that technological facilities and village potential continue to develop.

According to Ambarsari, *et. al.* (2024) The Digital Village Information System is a system device, which functions as an information medium, publication facility and interaction medium between village officials and the community. A website is an implementation of several pages that can be used to publish information in the form of text, still or moving images, animation, sound, or a combination of all of these, both fixed and changing, each of which is

connected to a network of pages (Istiqomah, *et. al.*, 2021).

With a digital-based Village Information System, the government can easily provide quality services to the community that are effective and efficient. Through the Digital Village Information System service, the community can easily obtain information and get services quickly. After this socialization stage, it will be followed up with a workshop to strengthen the program of the digital-based online service (Huda, 2022).

According to Akbar (2024), opportunities for digital village information systems are divided into 3 types, namely:

1. Improved Accessibility and Connectivity

a) Digital Infrastructure

Improving digital infrastructure includes building and improving facilities that support the use of digital technology in villages. This includes the installation of a broadband internet network, the provision of stable electricity, and the availability of hardware such as computers and smartphones. Good infrastructure opens the door to various digital services and innovations that can improve the welfare of rural communities.

b) Internet Access in the Village

Internet access in villages is the main key in connecting communities with digital resources. This initiative includes providing affordable and reliable internet access throughout the village. By connecting to the internet, village communities can access information, online education, and various digital services that can improve their productivity and quality of life.

2. Village Economic Empowerment

a.) Local E-commerce

Utilizing local e-commerce provides opportunities for village businesses to market their products more widely. The Digital Village Information System can support the establishment of a local e-commerce platform that allows local producers to sell their products online. This not only expands their market but also helps in increasing the income and competitiveness of the village economy.

b.) Digital Skills Training

Village economic empowerment also involves digital skills training for the community. This can include training in the use of online business applications, inventory management, digital marketing and more. By having digital skills, village communities can more effectively manage their businesses and participate in the digital economic ecosystem.

3. Innovation in Public Services

a.) Fast and Easy Service and Administration

Digital Villages provide opportunities to increase the efficiency of public services. By implementing technology, village governments can provide faster and easier services to the community, such as online tax payments, processing permits, and other administrative services. This not only saves time but also increases transparency and accountability in village administration.

b.) Online Letter Creation

Innovations in public services also include creating online letters. Villagers can apply for documents such as KTP, KK, or business permits online, reducing complicated bureaucracy and increasing accessibility for village residents. This system provides convenience for the community and speeds up village administrative processes.

Digital Village Information System as a Catalyst for Improvement of Public Services and the Digital Village Economy is a program concept that implements a system of government services, community services and community empowerment based on the use of information technology. This program aims to develop village potential, marketing and accelerate access and public services. In a digital village, public services will be digital by being connected via wireless networks (Salahudin, *et. al.*, 2023).

The digital Village Information System will encourage improvements in public services in villages and make it easier for village officials to evaluate and improve services using the database they will have. In an economic context, digital villages can be used as a catalyst for improving village economic performance and empowering the economy of village communities. Digital

villages are planned to have websites and social media accounts for promotions and news, e-commerce systems and applications that suit the character and economic potential of each village (Desanesia, 2021).

When the author carried out service in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi, the author encountered problems experienced by the people in this village, namely the lack of information regarding the marketing of handicrafts to be used as souvenirs typical of Woloan 1 Village, North Tomohon District. Some village communities only use traditional Minahasan wooden house crafts as a source of income to sell outside the region and export abroad. However, the lack of a handicraft marketing network for souvenirs typical of Woloan 1 Tomohon Village is not developing well. If you look back at Woloan 1 Village, it has high tourism potential in Tomohon City, South Sulawesi, which if it can be utilized properly and correctly will create good business opportunities and be able to improve the village economy and make the village sustainable. Therefore, the author tried to discuss with other co-authors and propose ideas by improving the Digital Village Information System so that the marketing of souvenir crafts typical of Woloan 1 village, North Tomohon District, could be more widely known and able to compete with others. so that the Digital Village Information System can be a solution in developing businesses owned by the community in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi.

The Digital Village Information System is considered capable of being a solution in helping village communities market their business products which can improve village economic performance and empower the economy of the Woloan 1 village community, North Tomohon District, Tomohon City, South Sulawesi. Digital villages are planned to have websites and social media accounts for promotions and news, e-commerce systems and applications that suit the character and economic potential of each village. so that village communities are able to market their souvenir craft products widely and are able to compete both outside and within the region. Some breakthrough things that the author can do so that the people of Woloan 1 Village, North Tomohon District can overcome the problems they face, are providing education on how to use the Village Information System Digitally so that they can help improve the Business of Regional Craftsmen in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi sustainable.

CONCLUSION

Based on the explanation above, it can be concluded that this Community Service Activity has broadened the insight of local village residents in knowing that the Urgency of Improving the Quality of Digital Village Information Systems is able to increase business opportunities for the Community of Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi, although there are several things that still need to be improved for the progress of the community in Woloan 1 Village. The implementation of the Digital Village Information System in Woloan 1 Village currently still has many obstacles such as:

1. The lack of information and outreach regarding the Urgency of Improving the Quality of Village Information Systems which can improve Digital Business in Woloan 1 Village, North Woloan District, Tomohon City, North Sulawesi, has resulted in regional craft businesses such as souvenirs and handicrafts which could become business opportunities not being utilized properly. good and maximum
2. The lack of awareness from the community regarding the use of the Digital Village Information System so as to create business opportunities for the community that can generate income in Woloan 1 Village, North Tomohon District, Tomohon City, North Sulawesi.
3. It is felt that the role of the village government has not been maximized in implementing the Village Information System in the form of a village website, so it is hoped that after carrying out socialization on the use of the digital system in Woloan 1 village, it can utilize and practice the knowledge that has been obtained and is also provided well so that community resources can be utilized. use the Digital Village Information System properly and correctly.

EXPRESSING OF THANKING

The author would like to express his deepest gratitude to all parties involved in this service, including the residents and officials of Woloan 1 Village and Tomohon City government officials, North Sulawesi who accepted the proposal given and hope to be able to make this happen.

REFERENCES

- Alim, M.S., Ibrahim, R., 2024. Optimalisasi Kualitas Pelayanan Publik Di Era Digital Desa Moluo Kab. Gorontalo Utara. *INNOVATIVE: Journal Of Social Science Research*, 4(2),1-10.
- Akbar, W., 2024. "Peluang dan Tantangan Implementasi Desa Digital". Digitaldesa.id : <https://digitaldesa.id/artikel/peluang-dan-tantangan-implementasi-desa-digital>.
- Ambarsari, I. F., Azizah, N., Ansori, Al-Faruq, Y.F., Fahrozi, K.K., 2024. Digitalisasi Informasi dan Peningkatan Kualitas Pelayanan Publik Transformasi Desa Digital Melalui Pengembangan Website Desa Klatakan. *I-Com: Indonesian Community Journal*, 4(1), 394-405.
- Baihaqi, I., 2021. "Urgensi Desa Digital dalam Mengembangkan Potensi dan Pemberdayaan Masyarakat". Infopublik.id : <https://www.infopublik.id/kategori/nusantara/539227/urgensi-des-digital-dalam-mengembangkan-potensi-dan-pemberdayaan-masyarakat?video=>
- Budiman, V., 2021. PANDUAN FASILITASI REPLIKASI DAN PELEMBAGAAN PENGEMBANGAN SISTEM INFORMASI DESA (SID). Kompak : Jakarta.
- Desanesia, 2021. "Apa Urgensi Mewujudkan Desa Digital?" . desanesia.com : <https://www.desanesia.com/blog/apa-urgensi-mewujudkan-des-digital.html>.
- Fahriza, Azis, W., Sihabudin, Anwar, A., Nursetiawan, Irfan, 2022. PENGELOLAAN SISTEM INFORMASI DESA DI DESA PASIRMUJATI KECAMATAN CINEAM KABUPATEN TASIKMALAYA. *Unigal Repository*, 2143-2152.
- Fathani, A.T., Pribadi, U., Suling, C.F., Azmi, N.A., 2022. Pemanfaatan Sistem Informasi Desa (SID) terhadap Peningkatan Pelayanan Publik di Desa Dlingo, Bantul. *JUSTIN (Jurnal Sistem dan Teknologi Informasi)*, 10(1), 92-97.
- Huda, S., 2022. Pengenalan Pemanfaatan Cloud Computing dalam Pengembangan Desa Wisata Budaya di Desa Plunturan. *Parta: Jurnal Pengabdian Kepada Masyarakat*, 3(1), 14-18.
- Ilham, J., Harun, E. H., Dako, A. Y., Tamu, Y., 2024. Pengembangan Sistem Informasi Desa Bendungan sebagai Desa Digital. *Jurnal Pengabdian kepada Masyarakat Nusantara (JPKMN)*, 5(2), 1518-1524.
- Istiqomah, N., Hidayat, A., 2021. SISTEM INFORMASI WEBSITE SEBAGAI MEDIA PROMOSI DAN SARANA INFORMASI PADA RUMAH SAKIT MARDI WALUYO METRO. *Jurnal JMSI*, 3(1), 19-26.
- Khairuldi, Mulyadi, Nurhadi, 2020. Perancangan Sistem Informasi Administrasi Data Kependudukan Desa Sumber Jaya, Kec. Kumpeh Ulu, Kab. Muaro Jambi. *Processor: Jurnal Ilmiah Sistem Informasi, Teknologi Informasi dan Sistem Komputer*, 15(1), 62-74.
- Lestari, T. S., Jaya, S. M., 2021. Perancangan Sistem Informasi Berbasis Web Melalui Whatsapp Gateway Studi Kasus Sekolah Luar Biasa-Bc Nurani. *FIKI : Jurnal Teknologi Informasi dan Komunikasi*, 11(1), 38-48.
- Mardinata, E., Cahyono, T.D., Rizqi, R.M., 2023. Transformasi Digital Desa Melalui Sistem Informasi Desa (SID): Meningkatkan Kualitas Pelayanan Publik dan Kesejahteraan Masyarakat. *PARTA: Jurnal Pengabdian Kepada Masyarakat*, 4(1),73-81.
- Maryadi, 2023. "Apa yang Dimaksud dengan Desa Digital: Transformasi Teknologi Menuju Kemajuan Desa". updesa.com : <https://updesa.com/apa-yang-dimaksud-dengan-des-digital/>
- Panda, 2023. "Sistem Informasi Desa : Solusi Teknologi Untuk Kemajuan Masyarakat Pedesaan" panda.id : <https://www.panda.id/sistem-informasi-des-d-3/>
- Sakban, M., Sinaga, R., 2020. Perancangan Sistem Informasi Desa Berbasis Web (Studi Kasus: Desa Tanjung Maraja Kab. Simalungun). *Jurnal Bisantara Informatika (JBI)*, 4(2), 1-12.

- Salahudin, Iskandar, Jayadisastra, Y., Lasinta, M., Arif, L.O.K., Dima, D., 2023. BIMBINGAN TEKNIS DAN IMPLEMENTASI KONSEP DESA DIGITAL SEBAGAI MEDIA MENINGKATKAN PELAYANAN DAN PARTISIPASI MASYARAKAT DALAM PEMBANGUNAN DI DESA KONDA SATU KECAMATAN KONDA KABUPATEN KONAWA SELATAN. *JPIPM (Jurnal Pengembangan Inovasi dan Pembangunan Masyarakat)*, 1(1),34-39.
- Salman, Hasdinawati, Arifin, Z., 2023. MANAJEMEN SITUS WEB DESA UNTUK Mendukung PENYAMPAIAN INFORMASI BERBASIS DI DESA PALAE KECAMATAN SINJAI SELATAN. *Jurnal Ilmiah Administrasita'*, 14(2),80-88.
- Sati, A. T., Aditya, D. T., Azzahra, N. L., Djutalov, R., 2023. Perancangan Sistem Informasi Keuangan Orens Peninggaran Raya (Opera) Berbasis Desktop Dengan Java Se & Mysql Menggunakan Metode Research And Development (RND). *JORAPI : Journal of Research and Publication Innovation*, 1(2), 196-200.
- Setiawan, B., 2013. *Perancangan Sistem Informasi Pelayanan Desa Berbasis Client-Server*. Artikel Ilmiah. Universitas Kristen Satya Wacana.
- Shelly, G. B., Cashman, T. J., Vermaat, M.E., 2014. *Web Design dan Teknologi: Pengantar Pemrograman Web*. Jakarta: Penerbit Salemba.
- Taslam, H., Haris, R., 2019. *Sistem Informasi Desa dan Pemberdayaan Masyarakat*. Gava Media.
- Zahirman, 2024. "Mendorong Kemajuan Desa Dengan Transformasi Digital". Padangpariamakab.go.id : https://padangpariamakab.go.id/blog/berita_tampil/23159.