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# IMPLEMENTATION OF THE SMART VILLAGE CONCEPT BASED ON LOCAL WISDOM THROUGH THE EMPOWERMENT OF OFFICIALS AND THE COMMUNITY OF TABAH VILLAGE IN THE KKN PROGRAM

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***Abstract :***

*The Smart Village Community Service Program (KKN) based on local wisdom in Tabah Village aims to encourage village transformation towards more modern, inclusive, and digitally oriented governance. This activity uses the Asset-Based Community Development (ABCD) approach as the main strategy to map, optimize, and empower local assets, including human resources, economic potential, social institutions, and village digital infrastructure. The program implementation includes mapping village assets, digital literacy training, assistance in using the DIGIDES platform, creating village websites and social media accounts, and compiling maps and infographics of public services. The results of the activity show that the ABCD approach has succeeded in increasing the capacity of village officials in digital administration, expanding access to public information, and encouraging the active role of youth and the community in the digital transformation of the village. Although there are still obstacles in the form of limited internet access and digital literacy among some residents, high community participation and support from village officials are factors that support the sustainability of the program. Overall, this KKN activity proved that the integration of digital technology and local wisdom through the ABCD approach can be an effective model in the development of an independent and sustainable Smart Village.*

***Keywords :*** *Smart Village,Local Wisdom, Community Empowerment*

## INTRODUCTION

The development of digital technology provides great opportunities for villages to improve governance, access to information, and accelerate public services. The trend of using Android-based smartphones in daily activities shows the need for a village information system that is in line with the needs of the community (Azmi et al., 2023; Kholili & Sulthony, 2024). This change has led to the emergence of the smart village concept, which is a village management approach that integrates information technology to strengthen the efficiency of public services, increase information transparency, and encourage active community involvement (Darmadi et al., 2025; Susilowati et al., 2025; Suwarjo, 2025) . This concept is also in line with the digitization agenda initiated by the Ministry of Villages, Disadvantaged Regions, and Transmigration (Kemendesa PDTT) through the strengthening of the Village Information System (SID), digital-based administrative services, and the use of village data for development planning (Aryani & Kusumaningrum, 2024; Effendi & Nurmadewi, 2023) . However, the implementation of the smart village concept in many areas still faces various obstacles, such as low digital literacy, lack of competence among officials in using technology-based systems, and the underutilization of digital services by the community.

Tabah Village, East Walenrang District, Luwu Regency, has great potential to develop a smart village concept based on local wisdom through the use of digital technology and the wealth of natural and cultural resources. This village is supported by adequate human resources, including young people, village officials, and village heads who are enthusiastic about promoting digital transformation. However, digitalization efforts still face challenges, particularly low digital literacy among officials and the community, as well as limited capabilities in operating technology-based services. The potential and local wisdom that could become the village's digital identity have also not been optimally documented. In addition, various supporting facilities such as the Village Information System (SID), village websites, the DIGIDES application, BUMDes, and village social media have not been fully utilized in supporting public services and local economic development.

The Community Service Program (KKN) with the theme of Smart Village and Local Wisdom, which was implemented in Tabah Village, became a forum for students to apply various fields of knowledge in a real-world context in the community. The Asset-Based Community Development (ABCD) method was used as a basis for identifying and maximizing the potential of the village, both in terms of community capabilities, available digital facilities, and local economic opportunities. Institutionally, this activity is a manifestation of the three pillars of higher education in the aspect of community service, while for the village itself, this activity is a direct contribution in the form of increasing literacy, developing MSMEs that utilize technology, and improving the quality of village services through digital systems.

Although many studies in Indonesia on Smart Villages focus on digital infrastructure development and village governance management, studies that

deeply explore the integration of local wisdom and community empowerment approaches are still very few. Research by Muhtar (2025) identifies that smart villages in Indonesia are still predominantly directed at expanding access to technology and improving basic services such as education, health, and the economy, rather than culture and village needs. Recent studies further emphasize this gap by highlighting that the digitization process at the village level is still constrained by social aspects, particularly related to the limited technological literacy of the community and the lack of community participation in community-based innovation development (Norsamsinar Samsudin et al., 2024; Räisänen & Tuovinen, 2020; Renukappa et al., 2024). Thus, this research aims to fill this gap through the integration of digital technology and local wisdom using the Asset-Based Community Development (ABCD) approach as a framework for developing smart villages that emphasize inclusiveness, active community involvement, and sustainability(Kusumastuti et al., 2024; Rahman & Hakim, 2024).

This Community Service activity aims to drive the transformation of Tabah Village into a Smart Village by strengthening the capacity of officials and the community, with a focus on the utilization of digital technology, improving digital literacy, and developing the potential of local wisdom as the foundation for independent and sustainable village development.

## RESEARCH METHOD

This Community Service Activity (PKM) with the theme of Smart Village based on local wisdom was carried out in Tabah Village, East Walenrang District, Luwu Regency during the period of July 7 to August 20, 2025. This village consists of five hamlets: Pongrakka, Tabah, Papokko, Pangalli, Panilangkan, and Poringan.

The program took place during the Community Service Program (KKN) period and involved collaboration between the village government, village institutions, youth, and the local community. The partners involved included village MSME actors, youth groups, housewives, and village officials who participated in various activities such as introducing digital services, improving technological literacy, and providing assistance in managing local potential digitally.

In this study, the Asset-Based Community Development (ABCD) approach is used as a development strategy that views residents as key actors, not merely beneficiaries. This approach does not focus on the problems or shortcomings of the village, but rather on identifying and developing the various assets owned by the community, such as human resource potential, natural wealth, cultural heritage, social networks, and facilities and infrastructure that can be utilized .

Table 1. Stages of PKM Activity Implementation

| Activity Stages | Implementation Description |
|---|---|
| **Identification of Potential and Problems** | The activity begins with initial observations and dialogue with village officials and the local community to map out digitalization needs and opportunities for community empowerment at the local level. |
| **Joint Program Planning Community** | A consultation forum was held to determine priority activities, such as training in the use of Microsoft Word and Excel applications, improving technology literacy for children and adolescents, and community-based environmental management. |
| **Socialization and Training** | The team provided an introduction and guidance on the use of the DIGIDES application, training on the use of basic applications such as Microsoft Word and Excel, the use of digital applications such as Facebook, Instagram, TikTok, and WhatsApp channels for village mapping, as well as digital literacy education for the target groups. |
| **Field Implementation** | All activities were carried out at partner locations, village offices, elementary schools, community areas, and the KKN command post |

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| | itself, with direct community involvement. |
| Evaluation and Sustainability | Routine monitoring is conducted to assess activity achievements, accompanied by the development of follow-up plans in collaboration with village officials and residents to ensure the program's sustainability. |

Table 2. Tools and Materials for Activities

| Category | Type of Tool/Material | Purpose |
|---|---|---|
| **Digital Equipment** | *Laptop, projector, sound system, and internet network* | Training in the use of Microsoft Word and Excel applications, training in the use of DIGIDES applications. |
| Educational Media | Training modules, Activity posters | Community Education and Village Equipment |

This approach is expected to accelerate the realization of more inclusive, self-reliant, and sustainable village development through capacity building of residents and the use of digital technology that involves community participation, especially village officials, in line with the smart village development agenda in Indonesia(Manoby et al., 2021; Susilowati et al., 2025)

## FINDINGS AND DISCUSSION

The approach used in implementing this KKN is Asset-Based Community-Driven Development (ABCD), a development method that focuses on empowering the assets and potential already possessed by the village community. The initial stage involved mapping and identifying various assets in Tabah Village, including human resources such as digital skills and knowledge, physical and economic assets that support empowerment activities, and social assets in the form of networks and relationships between residents.

Through active community participation, this approach aims to maximize the community's role in planning and implementing initiatives to create a digitally smart environment. After the asset mapping was completed, empowerment activities were carried out in the form of village web training to improve the ability of village officials to manage and store village data through the web. This activity was carried out collaboratively between KKN students,

village officials, community leaders, and residents to develop a smart digital village.

1. Discovery: identification of village assets

At this stage, KKN students from post 72, together with the community, mapped village assets through field observations, transect surveys, and group discussions. Various village potentials were discovered, including natural resources (rice fields, corn, mangoes, and livestock such as chickens and buffaloes), human resources with skills in agriculture, animal husbandry, and small businesses, as well as social capital (local organizations such as youth organizations, PKK, Majelis Taklim, and posyandu cadres). These asset discoveries show that Tabah Village has strong basic capital to support digitization and development based on local wisdom.

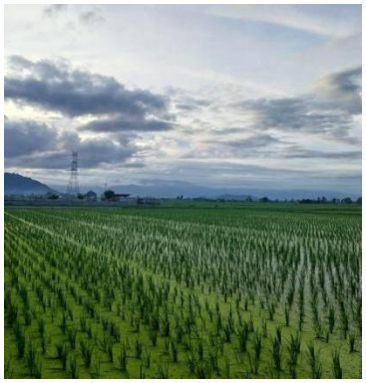

Figure 1: Field observation to identify the assets owned by the village

2. Dream: Formulating a Shared Vision

Discussions with village officials, community leaders, and local organizations revealed a shared vision to transform Tabah Village into a Smart Village based on local wisdom. The community desires a more transparent public service system, easier access to information, and broader promotion of the village's potential through digital media. This dream was agreed to be realized through collaboration between KKN Posko 72, village officials, and the DIGIDES (Digital Desa Indonesia) platform.

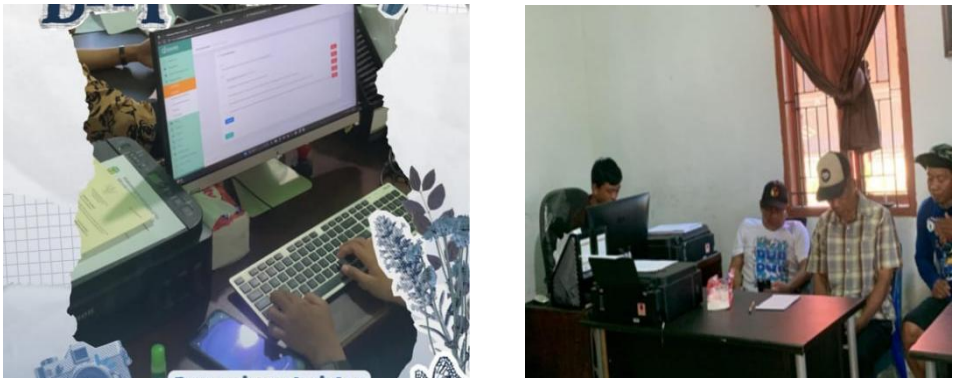

Figure 2: Assistance in Using the DIGIDES Platform

3. Design: Program Design Based on the agreed vision, a number of work programs were designed that combine digital technology with the village's local assets. The main programs designed are:

a. Creation of a DIGIDES-based village website to manage village administration and profiles.
b. Creation of official village social media accounts (Facebook, Instagram, TikTok) as a means of public communication and promotion of the village's potential.
c. Creation of village maps and service infographics at the village office.
d. Creation of digital educational videos.


Figure 3: Documentation of several main programs

4. Define: Setting Program Priorities

From various designs, realistic and feasible program priorities were set for the duration of the Community Service Program (KKN). These priorities include the development of a village website and social media as the primary tools for the Smart Village initiative, as well as the creation of infographics and educational videos as supporting media for community literacy. This prioritization considers resource availability, urgent needs, and active community involvement.

5. Destiny/Delivery: Program Implementation

During the KKN period, all priority programs were successfully implemented. The village website was completed and integrated with the DIGIDES system. The official village social media accounts were launched and began to be filled with content about community activities, economic potential, and public service information. Infographics and service flowcharts were posted in the village office and health centers to improve public service literacy. Digital educational videos were published as a means of educating people about ethics in social media. The implementation of this program received broad support from village officials, youth, and local organizations, demonstrating the active participation of the community in building a Smart Village.

Figure 4: Installation of Village Map at Village Office

6. Reflection: Reflection and Evaluation

Evaluation results show that the community has positively embraced digitalization through DIGIDES. Village officials feel that it has helped them in managing administration and public communication. Youth are active in managing the village's social media. However, several challenges remain, such as the limited digital literacy of some community members and unstable internet access. Nevertheless, joint reflection shows that this program has succeeded in raising collective awareness of the importance of a Smart Village based on local wisdom and emphasizes the need for program sustainability after the KKN.


Figure 5: Documentation of the Welcome Dinner

**Table 3. Findings**

| Findings | Explanation |
|---|---|
| Asset mapping | Mapping village assets (human resources, natural resources, socio-cultural resources) using the ABCD method successfully identified local |

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| | potential. |
| Youth involvement in digital transformation | Karang Taruna and village officials actively manage village social media accounts such as Facebook, TikTok, YouTube, and Instagram to promote potential and public communication. |
| Improving the digital literacy of village officials | DIGIDES training improves the skills of village officials in digital administration. It also determines who will manage the village website to ensure its sustainability. |
| Public Service Infographics | Infographics and service flowcharts improve residents' access to public information. |
| Digital education for the younger generation | Digital education videos improve children's and teenagers' understanding of ethics in using social media. |

**DISCUSSION**

The implementation of the Smart Village Community Service Program in Tabah Village shows that the Asset-Based Community Development (ABCD) approach is an effective strategy to encourage village change towards more modern and inclusive governance. Asset mapping in the early stages successfully identified the village's strengths, ranging from community skills in agriculture, animal husbandry, to small businesses, as well as social capital in the form of local organizations such as Karang Taruna, PKK, and Majelis Taklim. These findings show that Tabah Village has a strong basic capacity to develop a Smart Village if supported by increased digital literacy and technology utilization (Adi Candra et al., 2025; Dirgatama et al., 2024).

The ABCD stages, from discovery to delivery, encourage the community to actively participate in formulating the direction of village development. Through deliberation, residents and village officials agreed on a shared vision to realize a Smart Village based on local wisdom. This vision was translated into a number of programs, such as the development of a DIGIDES-based village website, management of the village's official social media, creation of village maps and service infographics, and production of digital educational videos. This program has proven to help village officials improve their digital administration skills and expand public access to information for the community.

The involvement of young people has also been an important factor in the program's success. The active role of the Karang Taruna youth organization in managing social media and documenting activities shows that the younger generation can be a driving force for digital transformation in villages. Digital literacy education for children and teenagers has also increased their

understanding of social media ethics and their ability to produce positive content (Agusta et al., 2025; Ulfa & Lubis, 2025).

However, the program still faces several challenges, particularly the low digital literacy of some communities and limited internet access in some rural areas. This highlights the need for continued assistance and infrastructure strengthening to ensure the sustainability of rural digitalization. Nevertheless, the high enthusiasm of residents and the commitment of village officials are important assets for continuing the digital transformation.

Overall, the implementation of the ABCD approach in Tabah Village proves that the integration of digital technology and local wisdom can strengthen public services, increase transparency, and empower the community. This KKN program emphasizes that the development of Smart Villages requires solid collaboration, the utilization of local assets, and consistent improvement of digital literacy.

## CONCLUSION

The Smart Village Community Service Program (KKN) in Tabah Village proves that the integration of digital technology and local wisdom through the Asset-Based Community Development (ABCD) approach can be an effective strategy in strengthening community capacity and village governance. Through the stages of asset mapping, formulating shared dreams, and program implementation, this activity successfully encouraged the active participation of village officials, youth, and residents in the development of digital services such as the DIGIDES-based village website, official village social media, village maps, public service infographics, and digital educational content. Digital administration training helped village officials improve their data management and public service capabilities, while youth involvement strengthened village digital communication and promotion of local potential. Despite challenges such as uneven digital literacy and limited internet access, the community showed good acceptance of the digital innovations introduced. Overall, these activities demonstrate that the utilization of local assets combined with digital technology can serve as a strong foundation for building an inclusive, adaptive, and sustainable Smart Village.

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