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ADVANCES IN SOCIAL HUMANITIES RESEARCH

SIDeKaNG as a Government Communication Medium: Digital Village and Community Literacy

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Abstract

Digital transformation in government has encouraged the adoption of technology-based communication platforms to expand public access to information and improve public service delivery. However, the Integrated Village and Subdistrict Information System (SIDeKaNG), developed by the Central Lombok Regency Government to support digital village development, has not been optimally utilized due to disparities in village government officials' technological competencies, infrequent content updates, and uneven levels of digital literacy among community members. This study aimed to analyze the implementation of SIDeKaNG as a government communication platform in supporting digital village development and enhancing community digital literacy. The study was grounded in the theoretical premise that digital government platforms can facilitate two-way communication, promote transparency and public participation, improve service accessibility, and strengthen reciprocal relationships between village governments and local communities. A qualitative research approach employing a case study design was adopted. Data were collected through in-depth interviews, observations, document analysis, and a literature review, and were analyzed using the interactive qualitative data analysis model developed by Miles, Huberman, and Saldaña. The findings revealed that SIDeKaNG implementation remained suboptimal, as information updates were inconsistent and content management relied heavily on designated system operators. These challenges highlighted the need to strengthen village government officials' digital competencies, provide continuous technical assistance and institutional support, and conduct systematic community outreach and digital literacy initiatives. Overall, the study emphasized that the effectiveness of SIDeKaNG as a government communication platform depended not only on technological infrastructure but also on institutional capacity, sustainable content management, and active community engagement.

INTRODUCTION

The development of information technology has transformed how governments disseminate information, deliver public services, and establish relationships with communities (Das, 2024). Public services that previously relied primarily on face-to-face interactions have increasingly shifted toward digital communication platforms that offer faster and more

accessible information exchange. This transformation positions technology not merely as an administrative instrument but also as a medium of government communication capable of aligning governmental objectives with the information needs of citizens (Apriliyanti et al., 2021; Mao et al., 2025). Governments are expected to provide transparent, accurate, accessible, and comprehensible information to enable citizens to understand development programs, access public services, and participate in governance processes (Ahmadi et al., 2019; United Nations Department of Economic and Social Affairs, 2024). In Indonesia, the Electronic-Based Government System (Sistem Pemerintahan Berbasis Elektronik, SPBE) policy has reinforced this transformation by promoting the integration of information and communication technology into public administration and service delivery. Nevertheless, the availability of digital platforms does not automatically guarantee transparency, public participation, or institutional trust (Ingrams et al., 2022; Nurlinah et al., 2025). Effective government communication requires the systematic exchange of information among government institutions and communities to facilitate mutual understanding of public policies, development initiatives, and administrative services. Accordingly, the effectiveness of digital government communication depends on institutional capabilities to develop relevant messages, select appropriate communication channels, facilitate meaningful interactions, and ensure that information is accessible, understandable, and useful to the public (Benlahcene, Ramdani, & Safi, 2024).

The Central Lombok Regency Government, through its Communication and Informatics Office (Dinas Komunikasi dan Informatika, Diskominfo), developed the Integrated Village and Subdistrict Information System (SIDeKaNG) as part of its efforts to accelerate digital transformation at the village administration level. SIDeKaNG was designed to provide information concerning village profiles, government activities, development programs, administrative services, local economic potential, and other matters relevant to community needs (Sara & Saputra, 2021; Susilowati et al., 2025). The platform offers village governments an opportunity to disseminate public information more transparently while enabling residents to access relevant information without necessarily visiting village administrative offices. However, the implementation of SIDeKaNG across villages has demonstrated considerable disparities. Monitoring and evaluation data from the Central Lombok Regency Communication and Informatics Office, dated March 31, 2026, indicated that, among 105 registered village websites, only 27 were classified as active, while the remaining 78 were reported as inactive or otherwise not functioning optimally. The original monitoring records further distinguished 32 and 46 websites within these nonactive categories, although the specific classification criteria require clarification. Consequently, approximately 74.3% of the registered village websites were not classified as active. These implementation challenges were reflected in infrequent information updates, limited content diversity, dependence on individual system operators, and technical accessibility problems affecting certain websites. Such conditions suggest that technological infrastructure development has not been consistently accompanied by adequate human resource preparedness, institutional coordination, and sustainable communication management practices (Apriliyanti et al., 2021).

The concept of a digital village extends beyond the availability of internet connectivity, computer equipment, or an official village government website. Rather, digital village

development encompasses the capacity of government institutions and local communities to utilize digital technologies to improve public services, manage information, strengthen community empowerment, encourage civic participation, and develop local socioeconomic potential. Within this framework, digital literacy among village government officials and community members constitutes a critical factor influencing the effective adoption and utilization of digital platforms. Digital literacy involves the ability to access, understand, critically evaluate, create, and responsibly use information through digital technologies (Tinmaz et al., 2022). Limited digital literacy may prevent community members from accessing, comprehending, or effectively utilizing information disseminated through SIDeKaNG, even when relevant content is available (Jamil, 2021; Jongebloed et al., 2024; Lythreatis et al., 2022; Reddick et al., 2020). Similarly, differences in technological competencies among village government officials may affect the consistency and quality of digital information management. Operating SIDeKaNG effectively requires not only technical proficiency but also communication skills, public information management capabilities, appropriate content selection, and consistent information updates. Therefore, the challenges associated with SIDeKaNG implementation extend beyond technological limitations to encompass government communication practices, organizational management capacity, community information-seeking behaviors, and institutional support from regional authorities (Malodia et al., 2021; Sampetoding & Er, 2024).

Previous studies on village information systems have predominantly examined administrative digitalization, public service effectiveness, government transparency, and technological infrastructure readiness (Benlahcene, Awang, et al., 2024; Sampetoding & Er, 2024). However, comparatively limited attention has been devoted to examining village information systems as government communication platforms, particularly regarding the interrelationships among communication strategies, digital platform management, digital village development, and community digital literacy. Addressing this research gap, the present study conceptualizes SIDeKaNG as a communication platform connecting village governments and local communities rather than merely as an administrative application or digital information repository. This perspective draws on Michael Kaye's communication management framework, which emphasizes the importance of systematically planning, organizing, implementing, and evaluating communication activities to achieve organizational objectives effectively. Furthermore, Rogers' Diffusion of Innovations Theory provides an analytical framework for understanding how SIDeKaNG is introduced, adopted, and utilized by village government officials and community members. According to this theoretical perspective (Rogers, 2003), innovation adoption is influenced by five perceived attributes: relative advantage, compatibility, complexity, trialability, and observability. Integrating these theoretical approaches enables a more comprehensive examination of how Diskominfo's communication strategies, village government readiness, platform characteristics, and community perceptions shape the adoption and utilization of digital government information services (Susilowati et al., 2025).

This study aims to analyze the implementation of SIDeKaNG as a government communication platform in supporting digital village development and enhancing community

digital literacy in Central Lombok Regency. Specifically, the research examines the communication strategies employed by the Communication and Informatics Office to introduce and develop SIDeKaNG, the information management practices adopted by village governments, community utilization of the platform, and the institutional, technological, and sociocultural factors facilitating or constraining its implementation (Benlahcene, Ramdani, & Safi, 2024). The analysis also explores the potential contributions of SIDeKaNG to public information transparency, service accessibility, community participation, and the development of citizens' capabilities to access, evaluate, and utilize digital information. By integrating communication management and innovation diffusion perspectives, this study seeks to contribute to the literature on digital government communication and village-level digital transformation. Its central proposition is that successful digital village development depends not solely on technological availability but also on effective communication management, institutional capacity, continuous technical assistance, and meaningful community engagement. The findings are expected to provide practical insights for the Central Lombok Regency Government in strengthening SIDeKaNG as a more active, informative, accessible, and participatory communication platform that responds to the needs and characteristics of rural communities (Sindakis & Showkat, 2024).

METHOD

This study employed a qualitative approach using a case study design to examine the implementation of SIDeKaNG as a government communication platform in Central Lombok Regency, Indonesia. The research focused on government communication management, stakeholder experiences, digital platform utilization, and the institutional and social factors influencing SIDeKaNG implementation at the village level. The case study design enabled an in-depth examination of the program within its institutional, technological, and community contexts.

The study was conducted at the Central Lombok Regency Communication and Informatics Office (Dinas Komunikasi dan Informatika, Diskominfo) and selected villages implementing SIDeKaNG. Villages were selected purposively based on differences in website activity, frequency of information updates, and utilization of the platform for public information dissemination and service delivery. Informants were recruited through purposive sampling and included Diskominfo representatives, SIDeKaNG management personnel, village heads, village government officials, website operators, community leaders, and residents who had accessed or utilized village digital information services. Informant selection was based on participants' direct involvement, relevant experiences, and knowledge of SIDeKaNG implementation.

Data were collected through in-depth interviews, direct observations, document analysis, and a literature review. Semi-structured interviews explored government communication strategies, technical assistance, operational challenges, village government readiness, and community experiences with SIDeKaNG. Observations focused on website accessibility, content updates, information categories, available service features, and opportunities for interaction between village governments and residents. Documentary

evidence included government policies, monitoring and evaluation reports, community outreach materials, program records, website activity data, and relevant institutional publications. The literature review supported the interpretation of findings concerning government communication, digital village development, innovation diffusion, and community digital literacy.

Data were analyzed using the interactive qualitative data analysis model developed by Miles et al. (2020), comprising data condensation, data display, and conclusion drawing and verification. Data condensation involved selecting, categorizing, and organizing interview transcripts, observation records, and documentary evidence into themes related to communication strategies, program implementation, platform utilization, digital literacy, and facilitating and inhibiting factors. The findings were presented through thematic descriptions to identify patterns, relationships, and differences across stakeholder perspectives and village implementation contexts. Conclusions were developed iteratively by comparing evidence from interviews, observations, and documents. The trustworthiness of the findings was strengthened through source triangulation, methodological triangulation, member checking with relevant informants, and cross-verification against supporting documentation.

RESULTS AND DISCUSSION

Implementation of SIDeKaNG as a Government Communication Media

SIDeKaNG was developed as a digital media that connects the village government with the community through the provision of government information, administrative services, publication of activities, village potential, and development programs. The presence of the platform shows a change in the government's communication pattern from the dominant communication that takes place directly to communication supported by digital media. The village government has the space to convey information more quickly, while the community can access information without always having to come to the village office (Liao et al., 2025).

The results of the study show that the implementation of SIDeKaNG has not run optimally and has not been evenly distributed in all villages in Central Lombok Regency. Monitoring and evaluation data from the Communication and Information Office of Central Lombok Regency as of March 31, 2026 noted that of the 105 village websites, only 27 websites are in the active category. A total of 32 websites are in the inactive category, while 46 other websites are inactive. This condition shows that most village websites have not been consistently used as government communication media.

The active category can be seen from the existence of information updates, publication of village activities, presentation of regional profiles, and the availability of service information that can be accessed by the public. Websites that are less active are generally still accessible, but content updates are carried out in an irregular period of time. Inactive websites show a more serious condition because they do not have information updates or cannot be accessed by the public. This difference shows that the existence of SIDeKaNG is technically not always followed by the ability of the village government to manage digital-based public communication.

The use of SIDeKaNG is also still more directed as a place to store profiles and documentation of village activities. The interactive function as a government communication medium has not been seen strongly. The available information tends to be one-way, while the space for the community to provide responses, convey needs, or obtain responses is still limited. This condition causes SIDeKaNG to not fully function as a two-way communication medium between the village government and the community.

The perspective of government communication places digital media as a means to build understanding, openness, and closer relationships between the government and the community. Government communication is not only related to policy delivery, but also to the creation of mutual understanding and public participation. The findings of the study show that SIDeKaNG has fulfilled the informative function in several villages, but the educational, participatory, and interactive functions are still not running in a balanced manner.

This condition emphasizes that the success of government communication media cannot be measured only by the number of websites that have been built. The more important measure lies in the quality of information, the sustainability of content updates, ease of access, the relevance of the message, and the ability of the media to open communication relationships with the community. SIDeKaNG has provided a technological basis for village digital communication, but its use still requires strengthening in terms of management and user participation.

Communication Management in SIDeKaNG Management

The implementation of SIDeKaNG involves the Communication and Information Service of Central Lombok Regency as the developer and coach of the system, while the village government is in charge of managing information at the local level. The relationship between the two parties is an important part because the management of digital media requires continuous division of roles, coordination, mentoring, and evaluation. Weaknesses in one of the stages can affect the level of activity of the village website.

Michael Kaye's communication management concept places planning, organizing, implementing, and controlling as interconnected parts. The planning stage can be seen from the development of SIDeKaNG as an integrated village and sub-district information system. The local government has provided a platform that can be used for the publication of information, services, and the promotion of village potential. The technical planning has not been fully accompanied by detailed content planning for each village.

Village governments still face difficulties in determining what information should be published, update times, the division of author duties, and content quality standards. Unclear planning causes website management activities to depend heavily on the operator's initiative. Content becomes irregular when operators have other jobs or do not obtain information materials from village officials. Communication planning should include publication schedules, message types, target readers, information sources, and content approval mechanisms.

The organizing stage shows that there are differences in capacity in each village. Some villages already have operators who understand website management, while other villages still hand over all digital tasks to one village official. The unclear division of tasks makes the

management of SIDeKaNG dependent on certain individuals. Changing operators can also cause content update activities to stop because knowledge and system access are not transferred properly.

Effective organization requires the involvement of village heads, village secretaries, service apparatus, data managers, and website operators. Each element can provide information according to its field of task, while the operator is responsible for processing and publishing content. This pattern can reduce dependence on one person while ensuring the availability of information materials on a regular basis.

The communication implementation stage can be seen through socialization, training, mentoring, and information publication activities on village websites. The results of the study show that the implementation has not produced the same level of activity in each village. Technical training helps operators understand the use of the system, but it is not always able to build content management habits in a sustainable manner. The ability to operate a website does not automatically make village officials able to write news, select important information, and present messages that are easy for the community to understand.

The control stage is carried out through monitoring the activity of the village website. The data on active, inactive, and inactive categories show an evaluation effort from the Communication and Information Service. The evaluation provides an overview of the level of utilization of SIDeKaNG, but needs to be followed up with different follow-ups according to the conditions of each village. Villages that are less active need content assistance and organizational strengthening, while inactive villages require re-identification of technical obstacles, human resources, and leadership support.

Analysis based on communication management shows that the problem of SIDeKaNG does not only lie in implementation. Undetailed content planning, weak division of responsibilities, training that still focuses on technical aspects, and uneven follow-up of evaluations are part of the causes of the low activity of village websites. Strengthening at all stages of communication management is needed so that SIDeKaNG does not stop as a technically available system, but is actually used as a government communication medium.

SIDeKaNG in Supporting the Realization of Digital Villages

Digital villages are a form of village governance that utilizes technology to improve public services, information disclosure, data management, community empowerment, and the development of local potential. This concept is not only characterized by the existence of an internet network or village website. The ability of the village government to use technology productively is a more decisive element.

SIDeKaNG has provided the basis for the realization of a digital village in Central Lombok Regency. The village government can display regional profiles, economic potential, development activities, service information, and various community activities. This information can expand the reach of village communication while introducing local potential to parties outside the region. Actively managed websites also help the community get information faster.

SIDeKaNG's contribution to digital villages still differs between regions. Villages with active website management show the readiness of the apparatus to integrate digital media into

government activities. Villages that are less active or inactive show that the digitalization process is still at the stage of providing infrastructure. Technology has not fully become part of the work habits and services of the village government.

The Innovation Diffusion Theory can explain the difference in acceptance. An innovation is easier to accept when it is considered to have relative advantages, according to user needs, is not too complicated, can be tried, and the results are easy to observe. SIDeKaNG has advantages in the form of ease of information dissemination and expansion of service access. These benefits have not always been felt directly by the village government and the community because the use of the platform is still limited.

The level of complexity also affects the adoption process. Apparatus who have experience using digital media tend to manage SIDeKaNG more easily. Apparatus with limited skills requires more intensive time, training, and mentoring. The availability of a uniform system does not necessarily result in a uniform utilization pattern because each village has different human resource readiness, leadership, and organizational habits (Sara & Saputra, 2021).

Ease of seeing results is an important element in encouraging adoption. Villages that are able to see the benefits of websites in disseminating information, promoting potential, and public services will have a stronger incentive to maintain activeness. Good practices from active villages need to be published to other villages so that the benefits of SIDeKaNG can be seen in real terms. This process can accelerate the acceptance of innovation through inter-village learning.

The findings of the study show that a digital village cannot be realized through a technology approach alone. Leadership commitment, apparatus capabilities, information management culture, budget support, and community participation have equally important positions. SIDeKaNG has the potential to become the foundation of a digital village if it is used regularly in government administration and is not only activated when there are monitoring activities.

SIDeKaNG's Contribution to Community Digital Literacy

Digital literacy is related to people's ability to access, understand, evaluate, and use information through digital media. This ability is not only determined by device ownership or internet access. People also need to understand the source of information, distinguish official information from unverified information, and use this information to meet their daily needs.

SIDeKaNG opens up opportunities to increase digital literacy because it provides official sources of information from the village government. The community can learn to search for service information, read development activities, recognize government programs, and understand the potential of the area through the village website. The use of official media can also reduce people's dependence on information from informal conversations or social media that is not necessarily accurate.

This contribution has not been carried out optimally because the use of SIDeKaNG by the community is still limited. The habit of seeking information through the village government website has not been firmly formed. Some people are more accustomed to obtaining information through hamlet heads, village officials, conversation groups, or social media. This

condition shows that the availability of information digitally has not automatically encouraged people to access it.

Low content updates can also reduce public trust in village websites. People will stop accessing the platform when the information available is old, incomplete, or not in accordance with their needs. The activeness of managers is an important requirement because digital literacy develops through repeated interactions between the community and media that are considered useful (Xiong et al., 2024).

Improving community literacy requires broader socialization of the functions of SIDeKaNG. The village government can introduce the website through community meetings, services at village offices, social media, youth groups, women's organizations, and community activities. Every service information published also needs to be accompanied by directions so that the public can access official sources on SIDeKaNG.

Website content needs to be compiled using simple, concise, and easy-to-understand language. Information that is too administrative can make it difficult for the public to understand the message conveyed. Content about service procedures, social assistance, village agendas, budget use, business potential, and community activities has greater practical value for users.

Digital literacy in this context is formed through the relationship between the ability of managers and the needs of the community. Village officials must be able to produce quality information, while the community needs to be encouraged to access and use this information. SIDeKaNG can be a digital educational medium if the content is relevant, regularly updated, and introduced through various communication channels.

Supporting and Inhibiting Factors for the Implementation of SIDeKaNG

The policy support of the Central Lombok Regency Government is the main factor in the implementation of SIDeKaNG. The presence of an integrated platform shows the commitment of the local government to encourage digital transformation to the village level. The role of the Communication and Information Service as a developer, facilitator, and coach also provides an institutional basis for the sustainability of the program.

The availability of devices, internet networks, operators, and village head support also affect the level of activity of SIDeKaNG. Villages that have experienced operators and leadership support tend to be better able to update information consistently. Good coordination between village apparatus also makes it easier to collect materials for publication.

The main obstacle can be seen in the limited capabilities of human resources. Operators are not only required to understand the use of the system, but must also be able to write, process data, select photos, and compile public information. The concurrent workload causes website management to often be placed as an additional task. Operator changes without a good handover process also cause management activities to stop.

Limited internet networks and work devices are still obstacles in some areas. Access disruptions can slow down information updates and reduce the motivation of managers. Inadequate budget support also affects the ability of villages to provide tools, training, and incentives for operators.

The habit of the community in obtaining information directly is another challenge. Some people do not see the village website as the main source of information. The low number of users can make managers feel that content updates do not provide direct benefits. This situation creates a mutually affecting relationship because inactive websites reduce public interest, while low public interest reduces the enthusiasm of managers.

Strengthening the implementation of SIDeKaNG requires different strategies according to the level of village readiness. Active villages can be directed to develop interactive content and digital services. Less active villages need assistance in content management, task sharing, and publication schedules. Inactive villages require technical handling, operator redetermination, leadership support, and evaluation of fundamental obstacles.

The results of the discussion showed that SIDeKaNG has great potential as a government communication medium, but its implementation is still in the strengthening stage. The success of the program is highly dependent on the ability of local and village governments to integrate technology, communication, human resources, and community needs. The communication management approach helps explain the weaknesses in the planning to evaluation process, while Innovation Diffusion explains the differences in the acceptance and use of SIDeKaNG between villages.

The logic of the research concludes that the availability of digital platforms is not enough to realize a digital village and increase community literacy. SIDeKaNG only has an impact when the village government actively manages information, the community uses the platform as a source of information, and the Communication and Information Service provides assistance on an ongoing basis. Strengthening the capacity of the apparatus, clear division of roles, socialization to the community, providing relevant content, and evaluation based on the conditions of each village are the main steps to increase the success of the implementation of SIDeKaNG (Nurlinah et al., 2025).

CONCLUSION

The implementation of SIDeKaNG as a government communication platform in Central Lombok Regency remained suboptimal. Although the platform provided village governments with a digital channel for disseminating government information, facilitating public services, reporting development activities, and promoting local village potential, its utilization varied considerably across villages. These disparities were associated with differences in website operators' technical competencies, village leadership support, technological infrastructure, internet connectivity, organizational responsibilities, and the consistency of content updates. Website activity data indicated that most participating villages had not yet established SIDeKaNG as a systematically managed and sustainable government communication platform. These findings highlighted the persistent gap between the availability of digital infrastructure and the institutional capacity required to maintain effective digital communication at the village level.

SIDeKaNG demonstrated considerable potential to support digital village development and enhance community digital literacy. However, realizing these benefits required the platform to function beyond a repository of administrative data and serve as an accessible

channel for public information, service delivery, community education, promotion of local economic potential, and interaction between village governments and residents. Infrequent information updates, limited opportunities for two-way communication, and low levels of community engagement with official village websites constrained the platform's contribution to digital literacy development. These findings suggested that digital transformation at the village level depended not only on technological availability but also on effective communication management, institutional readiness, human resource competencies, and meaningful community participation. Accordingly, strengthening SIDeKaNG required an integrated approach that addressed both the operational capacity of village governments and the ability of community members to access, understand, and utilize digital information.

To improve SIDeKaNG implementation, village governments should establish structured content management plans, clearly define administrative responsibilities, strengthen website operators' digital competencies, and implement continuous technical assistance and performance evaluations tailored to each village's level of digital activity. Information disseminated through the platform should be accurate, regularly updated, accessible, and relevant to the needs and digital literacy levels of local communities. Furthermore, the Central Lombok Regency Communication and Informatics Office (Dinas Komunikasi dan Informatika, Diskominfo) should strengthen institutional coordination, facilitate two-way communication mechanisms, expand community outreach and digital literacy programs, and introduce recognition or incentive schemes for villages demonstrating consistent and effective digital information management. Future research could examine community engagement patterns, digital literacy outcomes, and the long-term effectiveness of these institutional interventions across villages with different levels of technological readiness. Collectively, these measures could strengthen SIDeKaNG as a transparent, accessible, and participatory government communication platform while supporting inclusive and sustainable digital village development.

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AUTHOR CONTRIBUTION

All authors contribute to the preparation of research concepts, methodology development, data collection and analysis, manuscript preparation, and manuscript revision. All authors have read and approved the final version of the manuscript.

GENERATIVE ARTIFICIAL INTELLIGENCE USAGE STATEMENT

The authors state that generative artificial intelligence (AI) was used in the preparation of this manuscript. The authors acknowledge the use of generative AI to help improve language clarity and improve the grammatical structure of manuscripts. The use is carried out in compliance with applicable ethical guidelines regarding the use and disclosure of generative AI in scientific research. Each author has made substantial intellectual contributions to this

work. The entire content of the manuscript has been carefully reviewed to ensure its accuracy, and the author is solely responsible for the integrity and final content of the manuscript

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