Maharati INSTITUTE
BASWASTI PT BATARA SWASTIKA HARATI
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Indexed By : GARUDA Google Scholar Crossref ROAD ISJD EBSCO OneSearch OPEN ACCESS
Community Service : Sustainability Development

Msme Digitalization and Community Empowerment Through the Community Service (Kkn) Program in Sedang Village

Ni Putu Ayu Tika Kurniawati[1], A A Istri Krisna Gangga Dewi[2], I Wayan Gde Yogiswara Darma Putra[3]
[1,2,3]Warmadewa University, Indonesia

Abstract

The Community Service Program (Kuliah Kerja Nyata/KKN) is a form of community engagement that provides students with opportunities to participate directly in supporting community development and empowerment. The 2026 KKN-PMM program of Warmadewa University was implemented in Sedang Village, Abiansemal District, Badung Regency, Bali Province, through work programs tailored to local conditions and community needs. The activities included designing banners as promotional media for micro, small, and medium enterprises (MSMEs), collecting Village Sustainable Development Goals (Village SDGs) data, participating in Digital Population Identity (Identitas Kependudukan Digital/IKD) services, and supporting MSME digitalization through banner installation, QRIS assistance, and updates to business locations on Google Maps. The activities were implemented through observation, coordination, direct assistance, data collection, and active participation with the village government, MSME operators, and community members. The results indicate that the KKN program contributed to MSME promotion and digitalization, supported the Village SDGs data-collection process, and assisted the delivery of digitally based population administration services. The activities also provided students with practical experience in understanding community conditions and applying their knowledge through direct community engagement. Overall, the KKN-PMM work programs in Sedang Village are expected to benefit the community and support village development through collaboration among students, the village government, and community members.

Keywords: KKN, MSME Digitalization, Community Empowerment

Article History
Received: 2026-02-13
Revised: 2026-02-27
Accepted: 2026-03-07

Vol 3 Issue 2 2026
tikakurniawati1991@gmail.com
Page: 27 - 33

INTRODUCTION

The Community Service Program (Kuliah Kerja Nyata/KKN) is a form of community engagement that provides students with opportunities to participate directly in community life. Through this program, students not only apply the knowledge acquired during their university studies but also learn to understand the conditions and challenges encountered within communities. KKN serves as a means of strengthening the relationship between higher education institutions and communities through the implementation of programs that provide tangible benefits. The presence of students within the community is expected to help identify and respond to local needs and potential. Therefore, KKN activities should be designed through relevant and well-directed work programs capable of generating positive impacts for the community.

Sedang Village, located in Abiansemal District, Badung Regency, Bali Province, is an area with diverse potential that can be developed through community empowerment activities. Community livelihoods encompass agriculture, livestock farming, trade, services, and micro, small, and medium enterprises (MSMEs), reflecting the village's varied economic potential. In addition, the presence of village government institutions, customary village institutions, and various community organizations constitutes an important foundation for supporting local development. This potential needs to be strengthened through activities that enhance the community's capacity to respond to social, economic, and technological developments. In this context, KKN students have opportunities to participate in initiatives that support the development and empowerment of the Sedang Village community.

The development of digital technology has brought significant changes to various aspects of community life, including economic activities and public services. The use of technology enables

Maharati INSTITUTE
BASWASTI PT BATARA SWASTIKA HARATI
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Indexed By : GARUDA Google Scholar Crossref ISJD ROAD EBSCO OneSearch OPEN ACCESS
Community Service : Sustainability Development

communities to obtain information, conduct transactions, and access various services more easily. However, the effective utilization of digital technology still requires assistance so that it can be adopted optimally across different segments of society. Limited knowledge, experience, and technological skills may become barriers to digital transformation. Accordingly, KKN activities can serve as a means of assisting communities in understanding and utilizing technological developments in practical ways that are appropriate to their needs.

Micro, small, and medium enterprises (MSMEs) constitute an important sector in the economic life of Sedang Village. MSMEs not only provide income for business operators but also contribute to broader local economic activity. In operating their businesses, MSME owners require promotional and service strategies that can adapt to changing consumer needs. Attractive promotional media, easily accessible business-location information, and digital payment systems are among the forms of technology utilization that can support business development. Therefore, MSME digitalization is a relevant program for assisting business operators in Sedang Village in improving promotional effectiveness and service convenience for consumers.

The MSME digitalization program was implemented through several activities, including banner design, banner installation, assistance with the use of QRIS, and the registration or updating of business locations on Google Maps. These activities were intended to support MSME operators in developing clearer business identities and promotional media that are more easily recognized by the public. The use of QRIS also provides an alternative cashless payment method that can facilitate transactions between business operators and consumers. Meanwhile, Google Maps can help consumers locate businesses more easily through digital searches. Through these activities, KKN students provided practical assistance that MSME operators could use to support their daily business operations.

In addition to economic empowerment activities, the KKN program in Sedang Village involved students in collecting data for the Village Sustainable Development Goals (Village SDGs). Data play an important role in development planning because they provide information on community conditions, needs, and potential. Accurate data collection can assist village governments in determining development priorities that are more responsive to local conditions. KKN students participated in collecting and recording community information as a form of support for village development data needs. This activity demonstrates that student involvement in KKN is not limited to initiating new programs but can also support ongoing programs and activities required by the village government.

Village SDGs data collection is one of the activities associated with efforts to promote sustainable village development. The information collected may cover various dimensions of community life, including social, economic, educational, health, and environmental conditions. More comprehensive data can help the village government develop a more complete understanding of community circumstances. KKN students assisted in the information-collection process by following the mechanisms and instructions established by the village government. Through this collaboration, KKN activities can function as a form of partnership among students, the village government, and the community in supporting a more focused development process.

The work programs also included student participation in the Digital Population Identity (Identitas Kependudukan Digital/IKD) program in Sedang Village. Digital identity services represent part of the development of technology-based population administration services intended to improve public convenience. During these activities, students assisted community members in understanding the registration and activation process for Digital Population Identity in accordance with procedures established by the responsible officers. Student involvement supported the smooth delivery of services while also providing direct experience of technology-based public service processes. The activity further strengthened understanding of the importance of orderly population administration in meeting community needs in the digital era.

Maharati INSTITUTE
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Community Service : Sustainability Development
BASWASTI PT BATARA SWASTIKA HARATI
Indexed By : GARUDA Google Scholar ROAD ISJD EBSCO OneSearch OPEN ACCESS

The various work programs implemented during KKN reflected efforts to align student activities with the needs and conditions of the Sedang Village community. Economic programs were directed toward supporting MSME development through promotional media and digital technology, while Village SDGs data collection and participation in IKD services represented student support for development programs and public services implemented by the village government. Each activity required coordination and the involvement of multiple stakeholders to ensure that the programs were implemented in accordance with their objectives. Cooperation among students, the village government, MSME operators, and the community was therefore essential to generating direct benefits. Ultimately, the KKN program in Sedang Village served both as a student learning process and as a form of community engagement through planned activities. Students gained experience in understanding community conditions, coordinating with various stakeholders, and implementing programs based on needs identified in the field. The community, in turn, benefited from mentoring activities, MSME promotional support, data-collection assistance, and student participation in public service activities.

METHODS

This community service activity employed a descriptive method with a participatory approach, implemented through field observation, coordination, direct assistance, data collection, and documentation of all KKN-PMM work programs in Sedang Village, Abiansemal District, Badung Regency. This method was used to obtain an overview of community conditions, the needs of MSME operators, the implementation of Village SDGs data collection, and student involvement in Digital Population Identity (IKD) activities. Data and information were obtained through direct communication with the Sedang Village Government, MSME operators, and community members targeted by the activities. The students subsequently implemented the programs based on coordination results and needs identified in the field, while documenting the implementation process and outcomes as a means of evaluating target achievement.

RESULT AND DISCUSSION

The implementation of KKN-PMM work programs in Sedang Village during the fourth week demonstrated active student involvement in activities related to community empowerment, village development, public services, and the strengthening of the local economy. The programs were formulated based on the conditions and needs identified during the KKN implementation period. The main activities included designing banners as promotional media for MSMEs, collecting Village SDGs data, participating in Digital Population Identity activities, and supporting MSME digitalization in Sedang Village. In addition, students participated in an additional activity commemorating the Anniversary of the Independence of the Republic of Indonesia at SD No. 3 Sedang. All activities were implemented in coordination with the village government, community members, and the stakeholders targeted by the programs.

The first work program involved designing banners as promotional media for MSMEs in Sedang Village. The activity was successfully implemented as a form of support for the promotional needs of local business operators. It began with the collection of relevant information, including business names, product types, business identities, and other supporting details. The information was then developed into banner design concepts tailored to the characteristics of each business. During the design process, students considered information readability, visual composition, and the suitability of the design for the needs of each MSME. The resulting banner designs could be used as informational and promotional media to introduce the businesses to the wider community.

Achievement of the banner-design program targets was reflected in the availability of more attractive and informative promotional media for the participating MSMEs. Prior to the activity, business operators required support in communicating their business identities and products more clearly to the public. Through the developed designs, business information could be presented visually and was therefore easier for prospective consumers to recognize. Students also coordinated with MSME

Maharati INSTITUTE
BASWASTI PT BATARA SWASTIKA HARATI
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Indexed By : GARUDA Google Scholar ISJD ROAD EBSCO OneSearch OPEN ACCESS
Community Service : Sustainability Development

operators to obtain feedback before the designs were finalized. Accordingly, the program objective of providing promotional media support for MSMEs in Sedang Village was achieved in line with the intended purpose of the activity.

The next activity involved Village SDGs data collection in Banjar Kauripan, Sedang Village, as a form of student participation in supporting village development data requirements. The activity was carried out in coordination with the Sedang Village Government to understand the required mechanisms and information. Students assisted with the collection and recording of community data using the predetermined instruments. The collected information was subsequently rechecked to ensure its consistency with the data requirements. The activity formed part of the students' support for the village government's efforts to complete and update community data.

The Village SDGs data-collection activity provided students with practical experience in understanding the importance of data for development planning. The collected data can provide an overview of community conditions across social, economic, educational, health, and environmental dimensions. The activity also demonstrated collaboration among KKN-PMM students, the Sedang Village Government, and the community in collecting information. The principal objective of assisting the village government in obtaining supporting development data was pursued through student involvement throughout the data-collection process. Through this participation, students contributed to supporting village development that is more responsive to community needs.

The following work program involved participation in Digital Population Identity (IKD) activities conducted in several banjar within Sedang Village. This activity represented student support for digitally based population administration services. Students participated in accordance with directions from the village government and other relevant service providers. During implementation, students assisted community members who required support in registering for and activating IKD. The activities were conducted in Banjar Kauripan, Banjar Sigaran, Banjar Aseman, and Banjar Sedang.

Student involvement in IKD activities benefited community members who experienced difficulty understanding the use of the digital identity application. Students provided guidance on registration procedures, data entry, account creation, and activation in accordance with procedures communicated by the responsible officers. The assistance was provided in continued coordination with the service organizers to ensure that service delivery complied with applicable procedures. Student participation also contributed to the smooth implementation of services for the Sedang Village community. Thus, the program target of supporting student participation in digitally based population administration services was achieved.

In addition to providing benefits to the community, IKD activities gave students direct experience of public service implementation at the village level. Students were able to observe how technological developments are utilized to support population administration. The activity demonstrated that digital transformation requires support from multiple stakeholders to ensure that technology can be accessed and understood by a broader range of community members. Student participation constituted one form of contribution to assisting the community's adaptation to the use of technology in public services. Therefore, IKD activities became an important component of the community service and learning experience during the KKN program.

The MSME digitalization program in Sedang Village focused directly on strengthening community businesses through the use of promotional media and digital technology. The program targeted three MSME operators who required assistance in improving promotion and service convenience for consumers: Warung Rujak WMD, Madu Sedana Sculpture Crafts, and Warung Pak Yudi. Students provided assistance through banner installation, support for the use or registration of QRIS, and the registration or updating of business-location information on Google Maps. These activities were implemented as practical initial steps to help business operators begin utilizing digital facilities in their business activities.

Maharati INSTITUTE
BASWASTI PT BATARA SWASTIKA HARATI
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Indexed By : GARUDA Google Scholar Crossref ROAD ISJD EBSCO OneSearch OPEN ACCESS
Community Service : Sustainability Development

Banner installation constituted one of the tangible outputs of the MSME digitalization activities implemented by KKN-PMM students. The banners served both as business identifiers and as promotional media that informed the public about the existence and type of business operated. Before installation, students verified the information to be displayed to ensure consistency with the identity of each MSME. The presence of the banners was expected to make it easier for the public to recognize the businesses and identify their locations. With these promotional media in place, MSME operators obtained a promotional tool that could be used continuously in their day-to-day business activities.

Figure 1. Students assisting an MSME with banner installation as promotional media

Digital technology assistance was also provided through support for the use or registration of QRIS by MSME operators. QRIS offers an alternative cashless payment method that can facilitate transactions between business operators and consumers. Students provided assistance in accordance with the needs of business operators and applicable procedures so that participants could understand the benefits of digital payment methods. This activity represented an effort to improve MSME readiness in responding to changes in community transaction patterns. The availability of this alternative payment method provides business operators with an additional facility for improving convenience for consumers.

In addition to QRIS assistance, students supported the registration or updating of MSME location information on Google Maps. This activity was conducted so that business locations could be more easily found by the public through digital searches. Digitally available location information can help prospective consumers obtain directions to business premises without relying solely on direct information from other individuals. Students assisted by entering or updating the required information in accordance with the conditions of each business. The results of this activity are expected to improve the accessibility of MSMEs in Sedang Village through the use of information technology.

Achievement of the MSME digitalization program targets can be observed from the implementation of several forms of assistance provided to the three participating business operators. MSMEs received support in the form of promotional banners, alternative digital payment facilities, and improved ease of communicating business locations to consumers. Students not only assisted with implementation but also provided straightforward explanations regarding the use of these media and technologies in daily business activities. The activity demonstrates that digitalization does not necessarily require complex technology and can begin with simple facilities that correspond to community needs. Thus, the MSME digitalization program generated tangible improvements in promotional and service facilities for the participating businesses.

Maharati INSTITUTE
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Community Service : Sustainability Development
BASWASTI PT BATARA SWASTIKA HARATI
Indexed By : GARUDA Google Scholar ROAD ISJD EBSCO OPEN ACCESS

The implementation of all work programs also demonstrated the importance of coordination between students and the Sedang Village Government. The village government provided support, guidance, and information regarding community needs and the implementation of activities within the village. This coordination helped students determine program targets and adjust implementation methods to field conditions. The involvement of the village government also supported communication with community members and MSME operators. Through the established cooperation, the work programs could be implemented in a more focused manner and in accordance with the objectives of the KKN activities.

In addition to the main programs, KKN-PMM students participated in an additional activity commemorating the Anniversary of the Independence of the Republic of Indonesia at SD No. 3 Sedang. The activity was held on Friday, August 14, 2026, from 07:00 to 09:00. Student participation represented involvement in social and educational activities within the Sedang Village environment. Their presence was intended to contribute to the celebration while strengthening positive relationships with the school and the surrounding community. This additional activity complemented the KKN work programs by extending student participation beyond the principal initiatives to broader community activities.

Figure 2. Students providing digitalization assistance to MSME operators

Overall program achievement can also be assessed from the outputs generated by each activity. These outputs included the availability of MSME promotional designs and media, the collection of supporting Village SDGs data, student participation in IKD services, and the enhancement of digital facilities among the participating MSMEs. The implemented programs provided students with experience in applying academic competencies and social skills within the community. For the community and village government, student involvement provided additional support for activities related to development, public services, and economic empowerment. Therefore, the implementation of KKN-PMM in Sedang Village can be considered to have made a positive contribution through activities tailored to local conditions and community needs.

CONCLUSION

The implementation of the Warmadewa University KKN-PMM work programs in Sedang Village, Abiansemal District, Badung Regency contributed to community empowerment, village development,

Maharati INSTITUTE
BASWASTI PT BATARA SWASTIKA HARATI
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Indexed By : GARUDA Google Scholar ROAD ISJD EBSCO OPEN ACCESS
Community Service : Sustainability Development

public services, and the strengthening of the local economy. The implemented programs included banner design as promotional media for MSMEs, Village SDGs data collection, participation in Digital Population Identity (IKD) activities, and MSME digitalization through banner installation, QRIS assistance, and the updating of business locations on Google Maps. All activities were implemented through coordination and cooperation among KKN-PMM students, the Sedang Village Government, MSME operators, and the community as the target groups. The implementation results indicate that the programs helped provide promotional media for MSMEs, supported the collection of village development data, facilitated digitally based administrative services, and encouraged the use of practical technology in community business activities. Overall, the KKN-PMM activities in Sedang Village represented a form of student community engagement while also providing practical experience in understanding community needs and participating directly in village development and empowerment.

REFERENCES

Aliyah, A. H. (2022). Peran usaha mikro kecil dan menengah (UMKM) untuk meningkatkan kesejahteraan masyarakat. *WELFARE: Jurnal Ilmu Ekonomi, 3*(1), 64–72. https://doi.org/10.37058/wlfr.v3i1.4719

Anzor, M. Z. (2026). Digitalisasi UMKM Desa Sibrama: Pendataan, penguatan branding, optimalisasi Google Maps, media sosial, dan implementasi QRIS. *WIKUACITYA: Jurnal Pengabdian Kepada Masyarakat, 5*(2)

Harjun, Igo, A., Hasniah, Ahiri, Y., Lewa, M. J., Haq, H. R., & Fadlilahi, M. (2026). Pendampingan digitalisasi UMKM melalui pendaftaran lokasi usaha pada Google Maps dan edukasi QRIS. *Aksi Kita: Jurnal Pengabdian kepada Masyarakat, 2*(3), 1814–1819. https://doi.org/10.63822/c32vdg83

Lestari, D. P. O., Saputra, K. A. K., Riasa, N. P., & Kerans, F. F. A. (2026). Pemberdayaan OSIS dalam Pencegahan Kanker Serviks, Bahaya Game Online, dan Pinjaman Online pada Siswa SMA di Kawasan Pariwisata Bali. *Bhakti Persada*, *12*(1), 39-47.

Nugroho, P. A., Sriwijaya, S. B., Kristianti, T., Apriyanti, R., Amalia, L., Amanda, A., Putri, R. M. A., Putri, J. A., Aulia, N., & Amaliah, A. (2023). Penerapan sistem digitalisasi UMKM melalui QRIS, Google Maps, dan literasi teknologi masyarakat: Pengabdian. *Jurnal Pengabdian Masyarakat dan Riset Pendidikan, 2*(1), 346–349. https://doi.org/10.31004/jerkin.v2i1.5886

Putri, M. W., & Prabowo, B. (2024). Implementasi program digitalisasi UMKM melalui media pembuatan QRIS dan Google Maps di Desa Kemiri Kabupaten Sidoarjo. *Jurnal Studi Administrasi Bisnis*.

Qur'any, R., Afandi, N., Hastyifa, I., & Sofyan, A. (2026). Peningkatan kesadaran digital UMKM melalui sosialisasi QRIS dan Google Maps di Desa Cilaku. *Jurnal Pengabdian Masyarakat: Pemberdayaan, Inovasi dan Perubahan, 5*(6). https://doi.org/10.59818/jpm.v5i6.2328

Riyadi, B., Yuliari, G., & Perdana, P. (2023). Micro, small and medium enterprise development strategies through business digitalization in the face of global competition. *Kontigensi: Jurnal Ilmiah Manajemen, 11*(2), 761–762.

Sa'Idah, A. I., Tafrijiyanto, A. W., Rizky, Y. A., Salsabila, N., Fitriana, R., & Farliana, N. (2026). Digitalisasi UMKM melalui implementasi QRIS dan optimalisasi Google Maps sebagai upaya peningkatan akses pasar di Desa Jawisari. *Inspira: Jurnal Pengabdian Masyarakat, 2*(1), 20–31.

Sancaya, I. W. W., & Saputra, K. A. K. (2024). Implementation Of Good Village Governance In The Village of Dauh Puri Kangin Village. *Community Services: Sustainability Development*, *1*(3), 76-82.

Surasmi, I. A., Apriliani, N. N., & Saputra, K. A. K. (2026). Peran Modal dalam Memoderasi Pengaruh Jumlah Anggota, Jumlah Simpanan, dan Jumlah Pinjaman Terhadap Sisa Hasil Usaha (SHU) Pada Koperasi Simpan Pinjam (KSP) di Denpasar Selatan. *Jurnal Riset Akuntansi Warmadewa*, *7*(1).

Susilawati, N., Puspasari, D., Utami, I. P., Wulansari, N. M., & Semita, N. L. (2025). Pemanfaatan Google Maps dan QRIS sebagai strategi digitalisasi UMKM di Desa Neglasari. *JANNAH: Jurnal Pengabdian kepada Masyarakat*.

Maharati INSTITUTE
BASWASTI PT BATARA SWASTIKA HARATI
CSSD Community Service : Sustainability Development
•P-ISSN : 3030-9697 (PRINT)
•E-ISSN : 3031-3430 (ONLINE)
Community Service : Sustainability Development
Indexed By : GARUDA Google Scholar Crossref ROAD ISJD EBSCO OneSearch OPEN ACCESS

Syafitri, R., Harly, A. Y., & Kurniawan, R. (2024). Sosialisasi dan pelatihan penggunaan QRIS dan Google Maps terhadap pengusaha nasi liwet di Desa Duwet. *Jurnal Abdimas UM Jambi, 1*(2), 93–101. https://doi.org/10.53978/jaum.v1i2.446

Yasa, P. N. S., & Saputra, K. A. K. (2025). A Dynamic For Digital Tourism Ecosystem Development: A Comparative Study Of Bali, Indonesia, And Penang, Malaysia. *International Journal of Energy, Environment and Economics*, *33*(3), 667-687.