

Implementation of the Internet of Things in Increasing The Potential of Pari Pantai Cermin Village MSMEs Through Real Work Lectures

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Abstract

Internet of Things is used to increase MSME income in Pari City Village. The method used in this activity is a participatory approach; KKN students act as drivers and implementers of the program with partners in Kota Pari Village, and the main target is MSME actors in Kota Pari Village. The PKM KKN program begins with identifying the potential of MSMEs, analyzing needs, developing a digital marketing program, implementing the program, and evaluating the resulting impact. The results of this activity show that through the implementation of the digital marketing program in the context of the Merdeka Belajar Campus Merdeka Thematic KKN, the potential of MSMEs in Kota Pari Village, Pantai Cermin, can increase significantly. This program allows MSMEs to utilize digital technology and online marketing strategies to expand market reach, increase visibility, and increase product sales. In implementing the Digital Marketing program, KKN students play an active role in providing assistance and training to MSMEs regarding the use of digital platforms, online marketing strategies, and social media management. Apart from that, collaboration with educational institutions such as universities and local governments is also carried out to provide support and access to the required digital infrastructure. The impact of implementing the Digital Marketing program in the context of the Merdeka Belajar Campus Merdeka Thematic KKN on MSMEs in Kota Pari Village, Pantai Cermin, can be seen in increasing income, increasing product exposure online, and increasing the skills and knowledge of MSME players regarding digital marketing. In conclusion, implementing the digital marketing program in the context of the Merdeka Belajar Campus Merdeka Thematic KKN is an effective approach to increasing the potential of MSMEs in Kota Pari Village, Pantai Cermin, through the use of digital technology and online marketing. This program also provides benefits for KKN students in developing skills and increasing awareness of their role in the development of Indonesian society, especially village communities.

Kata Kunci: Internat of Things; Digital Marketing; KKNT; MBKM; MSMEs.

Introduction



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The economic condition of a country is very dependent on economic conditions in a village (Hariyanto & Wahyuni, 2020; Sebayang et al., 2021; Wahyuni et al., 2021; Wahyuni & Mesra, 2022). Through productive Micro, Small and Medium Enterprises (MSME) activities in villages (Agustin, 2021; Bagi et al., 2019; Mesra et al., 2021; Radjab et al., 2017), they can move the wheels of the economy through competitive market activities.

MSMEs (Micro Small and Medium Enterprises) are businesses run by individuals, households or small business entities. One of the quality local business products arises from developing the potential resources found in a village (Inovasi et al., 2015; Lubis et al., 2022; Siregar et al., 2021). The emergence of businesses and tourist attractions will then increase the absorption of local labor to process this potential into new superior products.

Kota Pari Village is one of 12 villages in the Pantai Cermin District area, which is located 7.5 km to the west of Pantai Cermin District. Kota Pari Village has an area of 1000, Ha. Of the 12 hamlets in Kota Pari Village, several hamlets have potential business units that can grow better if developed and fostered. Through the KKNT program we assist the community to develop MSMEs in Kota Pari Village. The MSMEs being assisted are pandan weaving craftsmen, Kecepe Shrimp, Brown Sugar Home Industry.

Internet of Things (IoT) and digital marketing promotional media is expected to be an effective choice for MSMEs in developing their business and reaching national and international markets. Conventional promotional media (Adawiah et al., 2023; Sulaa & Betoambari, 2020; Wahyuni et al., 2019), which require a lot of money and are much more complicated, are no longer a main concern for MSME players because of digital marketing (Khaliq & Sari, 2022; Mutaqin et al., 2021; Supiyandi et al., 2023; Supiyandi & Zen, 2019). MSME players, by using digital marketing, can reach a wider and wider range of potential customers, not just limited to one promotional area. Digital marketing can reach a wider area than conventional marketing, so this is a solution option for business expansion. MSMEs can use social media as a digital marketing tool. Apart from low costs and no need to have special skills in carrying out initial initiation, social media is considered capable of directly reaching consumers. The lack of knowledge of MSME players regarding digital marketing inspired the Community Service team to provide outreach and provide understanding regarding the use of information and communication technology. If MSMEs understand the importance of digital marketing for their business, it is hoped that they will be motivated to use digital marketing as a means of communication and promotion and can practice it directly by utilizing social media. The focus of the problem program in the village of Kota Pari Pantai Cermin is that MSME actors experience problems in product marketing and branding of UKM products which are still relatively simple and do not use technology so that the application of information technology in promotions, especially digital marketing, is able to increase the marketing of MSME products which has an impact on increasing sales and improving the standard of living of the people of the Pari city village.



Metode

Using qualitative approach methods such as participating in activities who is at the village office, provides outreach to MSMEs in the village, teaches children lessons, and visits elementary schools. However, the focus of this KKNT work program is digital marketing for MSMEs in the village of Kota Pari Pantai Cermin. In the Merdeka Belajar program, Merdeka Campus, Thematic Real Work Lectures in Kota Pari Village, Cermin Beach, the following method is used:

- **Identify the potential of MSMEs.**
Surveys and research were carried out at the beginning to identify the potential of MSMEs in Kota Pari Village, Pantai Cermin. This stage of the process involves local stakeholders, such as MSMEs, government institutions and the community in this identification process.
- **Needs Analysis.**
Students Collect data and information about the needs and challenges faced by MSMEs in Kota Pari Village, Pantai Cermin in digital marketing and product promotion. Data collection was carried out by means of interviews, observations and literature studies to obtain a comprehensive understanding.
- **Development of Digital Marketing Programs.**
The results of the needs analysis process designed a suitable digital marketing program for MSMEs in Kota Pari Village, Pantai Cermin. This program includes training and mentoring in the use of digital platforms, marketing content creation, social media management, and online marketing strategies.
- **Program Implementation.**
Implementing a digital marketing program involving Independent Campus students at thematic real work lectures as facilitators. Students provide training, assistance and guidance to MSME players in implementing the digital marketing strategies they have learned.
- **Evaluation.**
Measuring the level of success of the impact of the digital marketing program that has been implemented on MSMEs in Kota Pari Village, Pantai Cermin. Evaluation is carried out through surveys, interviews, sales data analysis, and direct observation. The impacts measured include increasing income, increasing product exposure online, and increasing the knowledge and skills of MSME players in digital marketing.
- **Dissemination of Results.**
Disseminate the results of community service programs through scientific publications. Involving related parties, such as MSMEs, local governments and educational institutions, to ensure wide and sustainable dissemination of information.
- **Monitoring and Follow-up.**



Monitoring MSMEs that have participated in the digital marketing program to ensure the continuity and sustainability of the digital marketing strategy that has been implemented. Provide additional follow-up and support as needed.

Work procedures

- Delivery of KKN students.
- Thematic KKN socialization, an institutional approach to the ranks village government such as the village head and his staff.
- Make introductions to the community.
- Preparing a Thematic KKN program plan with the team
- Implementation of additional activities organized by village office.
- Field Supervisors carry out evaluation and monitoring with the aim of recapitulating all the results of program activities and then determining whether the implementation of the program is in accordance with the expected targets or not.
- Pick-up of students participating in the Pari City Village KKN.

Results and Discussion

The results of the MBKM KKN program in Kota Pari village ran smoothly and successfully, as shown by the program achievement indicators as follows:

Activity	Target	Success Indicators
Observation of KKNT activity locations	Pari City Village, Pantai Cermin District, Serdang Bedagai Regency	MSME data in Kota Pari Village
Cooperation Cleans the Mosque	Mosque located in Kota Pari Village	The cleanliness of the mosque in Kota Pari Village
Teaching elementary school children to learn	Pari City Village Elementary School children	Children are able to do homework more easily
Digital Marketing to MSMEs	MSMEs in Kota Pari Village	MSMEs in Kota Pari Village are tough and independent
assisting village officials and the TNI, Polri to carry out outreach regarding the dangerous impacts of drugs	Teenagers in Kota Pari Village	increasing understanding and awareness of teenagers about the dangers of drugs



participate in Farmers in Kota Pari Village
helping farmers
harvest vegetables

building closeness
between KKNT Students
and Sekitra Residents



Figure 1. Digital marketing activities in Kota Pari Beach Cermin Village



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Figure 2. delivery, monitoring and pick-up of field supervisor lecturers





Figure 3. activities to help people harvest vegetables







Figure 3. Provide private tutoring to elementary school children

Conclusion

The student work program is carried out throughout Kota Pari Village, Pantai Cermin subdistrict running smoothly and successfully. Students can socialize and apply the knowledge gained in college and all work programs are planned to develop the potential of the community concerned with Thematic KKN. It also develops competence and grows professionalism, Thematic KKN students as prospective graduates and hopes to have a more meaningful impact on the students themselves. The series of Thematic KKN program activities provides useful experience for Thematic KKN students at Panca Budi Development Universities, the university community and local governments so that they can be used to develop and improve their respective duties and functions.



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