Digital Marketing Strategy for Empowering the Anchovy Fishermen Community in Pulau Pasaran, Lampung

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ABSTRACT

This Community Service Program (PKM) aims to enhance the knowledge and skills of the fishing community in Pulau Pasaran, Bandar Lampung, in utilizing digital marketing as a strategy to develop local potential-based businesses, particularly anchovy products and other marine-based processed foods. The activity was conducted on May 30, 2024, involving 30 participants from the Nelayan Maju Cooperative, consisting of fishermen, fish traders, and local micro-enterprises. The method used involved participatory, educational, training, mentoring, and evaluative approaches. The stages included preparation, digital marketing training, content creation practice, a six-month mentoring phase, and evaluation through pre-tests and post-tests. The results showed a significant increase in participants' understanding of digital marketing concepts. The average pre-test score was 62.07, while the post-test average rose to 91.72. This indicates that the training methods effectively shifted participants' perspectives and capabilities in utilizing digital platforms to market their products. Additionally, participants actively engaged in creating digital business accounts and relevant marketing content. The success of the program was supported by strong collaboration between the service team, local government officials, and the fishing community, along with a sustainable mentoring strategy designed to maintain long-term program impact. In conclusion, this PKM initiative successfully empowered the Pulau Pasaran fishing community by concretely enhancing their digital competencies, expanding local product competitiveness, and encouraging digital transformation as part of strengthening the people's economy in coastal areas.

Keywords: digital transformation, digital marketing, community empowerment, Pulau Pasaran.

1. INTRODUCTION

Indonesia, as an archipelagic country, possesses abundant natural resources, particularly in marine and fisheries sectors, which hold significant potential for development across various economic areas (Anugrah & Arindra, 2021; Akbar, 2022). One region notable for its distinctive fisheries resource management is Pulau Pasaran, located in Teluk Betung Barat District, Bandar Lampung City, Lampung Province (Noor et al., 2021; Dwintasari et al., 2023). This small island, spanning 12.5 hectares, is home to approximately 1,171 residents, most of whom depend on fisheries, especially the processing and trade of dried anchovies (Noor et al., 2021). The island produces various types of anchovies, such as teri nasi, teri jengki, teri nilon, teri katak, and teri puntiaw, which have become local specialties and prominent regional commodities (Noor et al., 2021; Saleh et al., 2022). Additionally, the island supplies other marine commodities like green mussels, simba fish, grouper, and barramundi (Ali et al., 2015). Fish processing on the island is not only an economic activity but also a deeply rooted cultural practice passed down through generations.

The strategic geographic location of Pulau Pasaran provides a unique advantage, as it is connected to the mainland by a 200-meter concrete bridge. This infrastructure offers easier access for residents to reach broader regional and national markets. However, despite its economic potential, Pulau Pasaran's community still faces major challenges in enhancing product quality and market reach amid increasing competition. One of the primary challenges is the low level of education and digital literacy among local residents. According to the 2018 village monograph data, most inhabitants had only completed elementary education, with 277 people reportedly not having attended school at all. This condition poses a serious obstacle to economic transformation through digital technologies.

In the era of the Fourth Industrial Revolution, characterized by the widespread use of information and communication technology, digitalization has become a pressing need across sectors, including small-scale fisheries

(Puspitasari, 2019; Sirait, 2022). Digital marketing, as a key instrument in this digital age, holds great potential to enhance the competitiveness of local products, expand marketing networks, and increase commodity value (Siregar, 2024; Saragih et al., 2024). However, in fishing communities like Pulau Pasaran, the adoption of digital marketing remains limited (Amir & Irninthya, 2023), due to a lack of knowledge, skills, and supporting infrastructure (Hutajulu, 2023; Amir & Irninthya, 2023; Ngabalin, 2023). In this context, the role of external partners such as educational institutions, social organizations, and local governments is crucial in assisting fishing communities to adapt and innovate in the face of current challenges (Saufiah et al., 2024).

Yet, the capacity of external partners has not been fully optimized. Challenges they face include limited understanding of digital marketing strategies, the absence of structured and sustainable training programs, low community participation in empowerment programs, and a lack of financial and human resources. Therefore, a comprehensive and collaborative approach is needed to strengthen the capacity of these external partners to perform their roles effectively and sustainably. This approach includes designing training strategies tailored to local needs, developing contextual learning media, and applying participatory principles in every phase of the empowerment process.

The urgency of this development program lies in the need to integrate local potential with digital technology as a pathway toward economic independence for coastal communities. An inclusive and participatory digital transformation will not only improve productivity and production efficiency but also unlock new market opportunities previously unreachable. The program is also expected to enhance the welfare of fishing communities, reduce economic inequality, and reinforce local product identity as part of the nation's cultural and economic assets.

Given this background, it is essential to design and implement an integrated empowerment strategy, starting from capacity building for external partners, mapping the training needs of the community, providing adequate digital infrastructure, to ongoing evaluation of the program's impact. This approach positions the fishing community not only as objects but also as the main subjects in the process of technology-based socio-economic transformation.

2. METHOD

The methodology of the community service program in Pulau Pasaran Fishing Village utilized a participatory, educational, training, mentoring, and evaluation-based approach. The entire process was carefully designed in a phased and integrated manner. The initial preparation phase included coordination with partners and preliminary discussions through focus group discussions (FGDs) to agree on the activity structure and schedule.

The training phase was implemented through three workshop sessions, each lasting 45 minutes, covering topics related to entrepreneurship and digital marketing. Participants were introduced to modern marketing strategies and learned to create promotional content such as product photos, short videos, and engaging captions for social media.

The mentoring phase was conducted over six months through regular site visits and online consultations. This phase aimed to ensure participants could apply the knowledge gained and troubleshoot technical obstacles encountered during digital marketing implementation.

Evaluation of the program was conducted using pre-tests and post-tests to assess the participants' knowledge improvement and field monitoring to evaluate the tangible impact of the activities. Program success was determined by the percentage of participants able to adopt digital marketing strategies; if 85% or more showed progress, the program was considered successful.

The program involved a collaborative team from the Faculty of Economics and Business at the University of Lampung, village officials of Pulau Pasaran, and community groups—especially women involved in MSMEs. The active participation of partners, both in training sessions and in providing facilities, was a crucial foundation for the program's success. With this collaborative implementation model, the initiative is expected to drive the transformation of local businesses from conventional to digital marketing in a sustainable and independent manner.

3. RESULTS AND DISCUSSION

Community Service Activities (PKM) were held on May 30, 2024, located in Pasaran Island, Bandar Lampung. This location was chosen based on initial observations that indicated most of the community, especially members of the fishermen's cooperative, still rely on traditional marketing patterns and lack adequate understanding and skills in utilizing digital technology as a medium for marketing fishery products, particularly anchovies and other marine products.

3.1 Stages of Implementation

The PKM activity was structured into four main stages: preparation, training, mentoring, and evaluation. In the preparation stage, the implementation team identified partner issues through informal discussions, field observations, and Focus Group Discussions (FGD) with representatives of the cooperative and fishermen community. From this process, it was found that the main obstacle faced was limited knowledge in using digital technology, ranging from creating business social media accounts, composing promotional content, to utilizing marketplaces and other digital platforms. These findings served as the basis for developing a training module tailored to partner needs.

The next stage was training, which focused on strengthening participants' capacity in digital marketing. The training materials were divided into three main sessions: (1) basic understanding of entrepreneurship and digital marketing; (2) strategies for digital marketing of fishery products; and (3) creating creative content for social media and digital platforms. Each session was conducted in the form of interactive workshops using lectures, Q&A, and hands-on practice.

After the training, the program entered the mentoring stage. In this stage, participants were actively accompanied by the PKM team to begin applying the strategies they had learned, such as creating Instagram or Facebook business accounts, setting up digital storefronts, and producing simple content like product photos and promotional captions. Mentoring was carried out through periodic visits and online consultations via WhatsApp groups, providing technical guidance and real-time assistance to overcome challenges.

The final stage was evaluation, conducted through pre-tests and post-tests, as well as direct observation of participant activities after the training. This evaluation aimed to measure the increase in participants' knowledge and skills in digital marketing and assess the overall impact of the PKM activity.

3.2 Evaluation Results: Pre-test and Post-test

One of the key indicators of the PKM program's success is the increase in participants' understanding of the material delivered. To measure this, a pre-test was administered before the training and a post-test afterward. A total of 30 participants took both tests.

The pre-test results showed that most participants had not yet understood the basic concepts of digital marketing. Many of them did not even have social media accounts for business purposes. This was reflected in the average pre-test score of 62.07, with scores ranging from 40 to 80.

Table 1 Participant Pre-test Results

Number	Score	Number	Score	Number	Score
1	70	11	70	21	80
2	50	12	50	22	70
3	70	13	70	23	50
4	50	14	50	24	70
5	80	15	80	25	50
6	70	16	40	26	80
7	50	17	70	27	40
8	70	18	50	28	50
9	50	19	70	29	70
10	80	20	50	30	60

Source: Processed by the Community Service Team (2024)

Average Pre-test Score: 62.07

After the training, participants showed a significant improvement in their understanding and skills. In the post-test, the average score increased to 91.72, a rise of more than 29 points. This indicates that the training method used was effective in enhancing participants' capacity in digital marketing.

Table 2 Participant Post-test Results

Number	Score	Number	Score	Number	Score
1	100	11	100	21	90
2	80	12	90	22	100
3	80	13	100	23	100
4	100	14	80	24	80
5	90	15	90	25	100
6	80	16	100	26	80
7	100	17	90	27	80
8	100	18	90	28	100
9	80	19	100	29	100
10	100	20	80	30	90

Source: Processed by the Community Service Team (2024)

Average Post-test Score: 91.72

3.3 Discussion

The PKM activity held in Pasaran Island on May 30, 2024, yielded positive and significant results in increasing participants' understanding of digital marketing. This is evident from the increase in the average pre-test score from 62.07 to 91.72 in the post-test, with most participants scoring above 80 and many achieving perfect scores. Prior to the training, most participants had no understanding of digital marketing concepts and had not created business social media accounts. They relied on conventional methods of selling products. However, after receiving materials on creative entrepreneurship, digital account creation, and marketing content, their understanding increased sharply. The interactive and hands-on educational methods greatly helped participants absorb the material in an applicable way.

The success of the program was also supported by a participatory approach, intensive mentoring, and a communicative and comfortable training atmosphere. Participants became more confident and enthusiastic about adopting digital strategies. The program not only improved individual capabilities but also opened opportunities for the formation of a future digital fishermen community. Overall, this activity demonstrated that digital marketing education, when delivered with the right methods, can genuinely empower coastal communities, both in terms of knowledge, skills, and preparedness in facing modern market challenges.

Furthermore, the success of this program was strongly influenced by the participatory and humanistic approach applied during its implementation. The PKM team did not just act as instructors but also as mentors who actively interacted with the participants. Emotional closeness and two-way communication during training and mentoring sessions encouraged participants to feel comfortable asking questions and not be ashamed to express the difficulties they faced. This became an important aspect in building trust and ensuring the sustainability of the program.

In terms of long-term impact, this activity provided benefits not only in improving individual capabilities but also opened the door for the development of a digital-based fishermen community that supports each other in promotion, business collaboration, and sharing information about markets, prices, or product distribution opportunities. The online communication group (such as WhatsApp Group) established after the training became a follow-up discussion space between participants and the service team. This is a positive signal for the sustainability and potential growth of a local digital MSME ecosystem in Pasaran Island.

In terms of challenges, some participants from older age groups or with lower educational backgrounds experienced difficulties at the beginning of the training. However, personal approaches and hands-on practice helped them to keep up. This shows that with inclusive and patient teaching methods, digital literacy challenges can be gradually overcome.

In conclusion, the main lesson from this activity is the importance of designing empowerment activities based on the real needs of the community, delivered with appropriate methods, and conducted with a participatory and communicative approach. The combination of training, mentoring, and continuous evaluation has proven to significantly improve participants' competencies and opened new potential for coastal communities to become economically empowered in the digital era.

4. CONCLUSION

The Community Service Program (PKM) held on May 30, 2024, at Pulau Pasaran, Bandar Lampung, successfully achieved its primary goal, which was to enhance the understanding and skills of the local fishing community in digital marketing. Based on the evaluation results through pre-test and post-test, there was a significant improvement in participants' knowledge, with the average score increasing from 62.07 to 91.72 after the training. This indicates that the training content and methods were effective in transforming the participants' mindset and knowledge from conventional marketing methods to digital marketing.

The implementation process, which involved a participatory, educational approach, intensive training, and mentoring, contributed positively to creating a communicative and inclusive learning environment. Participants not only understood the basic concepts of digital entrepreneurship but also began to practice creating marketing content, using social media, and formulating marketing strategies that are more relevant to the current digital era.

Additionally, the success of this program was also supported by the synergy between the community service team, the local government, and the partner community groups. This collaborative commitment enabled the activities to run effectively and efficiently, laying the groundwork for the program's sustainability in the future.

Overall, this PKM activity had a tangible impact in empowering the Pulau Pasaran fishing community. Moving forward, it is expected that the program's sustainability can be developed through continued mentoring, the formation of a digital community for small businesses in the fishing sector, and the integration of digital marketing with broader e-commerce platforms, so that the fishery products and processed fish products from Pulau Pasaran can gain recognition nationally and even internationally.

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