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Fostering Village Prosperity: Digital Innovations in Service Information and Uplifting UMKM Marketing Transforming Desa Balongdowo in Indonesia

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ABSTRACT In today's digital era, marketing trends are evolving along with increasingly sophisticated technological changes. Digital marketing comes as a new innovation where the marketing process of a product or service can be done through digital or internet. Digital marketing provides opportunities for businesses of various sizes and types of businesses that want to be marketed, while introducing their products to a wider market at a more affordable price. On the other hand, village development currently requires information technology to improve services to the community. website-based information systems can improve services to the community so that information to the community can be accessed easily and accurately. This Community Service activity is carried out to support the progress of Balongdowo Village through digital marketing and village information systems that can provide benefits to the community and local businesses. Target achievements in terms of Digital Marketing include the achievement of increased sales of processed kupang products and expansion of buyer reach. As well as the achievement in terms of Information System is the better-known profile and potential of Balongdowo village through the village website. Implementation in the field of Digital Marketing is done through seminars and mini workshops to Balongdowo villagers and MSMEs on how to register and market processed kupang products in e-commerce. Implementation in the field of Information Systems includes the creation of an information system portal in the form of a Balongdowo Village website. The method used in this Community services includes the implementation of Forum Group Discussion (FGD) for the initial understanding of the community regarding e-commerce. Followed by digital marketing training and evaluated through the buying and selling process in e-commerce. As for the field of Information Systems, FGD was also conducted, followed by a mini workshop on the operation of the Balongdowo Village Website Portal, as well as assistance in making multimedia documents and uploading them on the village website portal. And the evaluation can be seen in the development of the information system portal. Currently, Balongdowo Village already has a website, as well as the success of several business actors in Balongdowo Village who have accounts on Tokopedia, Shopee and Blibli. Digital marketing assistance provides benefits in improving the capabilities of the digital marketing team and strategy innovation. The creation of the Village Service Information System (SIPD) improved the efficiency, transparency and effectiveness of village services, and enabled better data management.

INDEX TERMS Digital marketing, Service Information System (SIPD), Balongdowo Website Portal

I. INTRODUCTION

Village development is one of the national development goals pursued by the Indonesian government. This is further strengthened by the issuance of various regulations regarding villages and their development, such as Law No. 6/2014 on Desa. The Law also states that one of the objectives of village development in Indonesia is to improve the life and quality of life for the welfare of rural communities. Therefore, various village development

programs are also encouraged by the government so that the results of development can be felt immediately, one of which is through the Village Digitalisation Program[1]. Digital Village is a programme to make villages an area of community empowerment with adequate technological facilities[2]. This programme is important to implement in the midst of technological and communication developments. If implemented optimally, village digitalisation can bring benefits to the development of

village development. According to Yusharto Huntoung, Director General of Village Governance at the Ministry of Home Affairs, one of the benefits of village digitalisation is to advance the regional economy. He also explained that village digitalisation can make it easier for parties from outside the village to find information about the village, especially in terms of tourism and recreation[3]. Unfortunately, there are still villages that have not implemented digitalisation programs in their areas, one of which is Balongdowo Village. Balongdowo Village is located in Candi Sub-district, Sidoarjo Regency, East Java Province. The village is relatively well known as a producer of Kupang sea animals and Kupang preparations. In addition, Balongdowo Village is also rich in other entrepreneurial activities, such as baking cakes, leather craftsmen, and others. However, access to information about Balongdowo Village, including about the village's entrepreneurs, is still a major obstacle. The absence of digital data and information sources makes it difficult for relevant parties to find out the potential and profile of Balongdowo village. In addition, the absence of an updated village map makes the challenge of disseminating village information even more complex. In the context of administration, Balongdowo village also experiences difficulties in terms of disseminating village government data. This is due to the use of conventional methods in storing village government data, such as through laptop or flashdisk storage. As a result, access to general data, such as the total population, becomes difficult. Therefore, in the Community Service activities of the Department of Electromedical Technology, Polytechnic of the Ministry of Health Surabaya in 2023, the topic of village digitalisation was chosen as the right solution to overcome the previous problems and encourage village development, especially for the Balongdowo Village community.

Partners in this community service programme are Usaha Mikro Kecil Menengah (UMKM) henceforth we refer to it as Micro, Small and Medium Enterprises (MSMEs) and the Village Office, Balongdowo Village, Candi District, Sidoarjo Regency. Balongdowo Village has an area of 634.38 km² with a population of 1,827,064 (BPS 2021) (Figure 1.1.). Based on the Sidoarjo Regency Statis Agency source (2020) shows that the occupations of Balongdowo village residents are 28.90% fishermen, 25.48% labourers, 24.30% traders, 15.60% farmers, 3.17% civil servants, 1.96% entrepreneurs, and 0.95% military. According to the Central Bureau of Statistics in 2017, there are several MSMEs engaged in the sector of seafood products and others in Balongdowo village, with details of large and medium industries totalling 1 with a workforce of 24 people, and small industries totalling 4 with a workforce of 18 workers. Balongdowo village is known as the largest kupang producing village in Sidorajo district by producing a variety of processed sea catches, especially from kupang products and other products.

Kupang contains exceptional nutrition, with protein, iron, calcium, potassium, selenium, vitamins C and A. So kupang can be used as a substitute food for other animal proteins (chicken and meat). The village community has

processed kupang products into various types of processed foods including kupang rice cake, kupang petis, kupang crackers and other foods made from the main raw material of kupang so that it can become an icon of Sidoarjo Regency, in addition to shrimp and milkfish. The processing of kupang products is carried out by individuals, home industries and MSMEs. Some people in Balongdowo village market their kupang products to local shops and traditional markets, so they have a very limited reach for residents around Sidoarjo or guests who come to Balongdowo village. In terms of human resources, facilities and infrastructure owned by business actors are actually sufficient to be developed. So, this is very potential to be developed in terms of marketing using digital marketing[4].

Marketing kupang products with effective and good management will support the increase in processed kupang products and others so that it can lift the economy of the Balongdowo Village community [2][3]. Nowadays, the digital market has become a culture of modern society, where people can purchase a product without having to visit a local store or market. People simply visit e-commerce such as Tokopedia, Bukalapak, Shopee and others to get the desired product. However, most people are not familiar with digital marketing by utilising available e-commerce[5].

Furthermore, as in the development of digital villages, various sectors including education, economy, health, tourism can be increased in potential by integrating in a village information system portal[4]. This information system portal can accommodate various activities including education, economy, village services, religion and others[3]. However, the information system in the form of the Balongdowo Village website portal has not been formed so that this will be an obstacle in the development of digital villages, especially in improving community services.

The problems faced by community service partners in this community are several things including: Marketing Management Field: where the partners of Balongdowo Village residents in marketing processed kupang products and other souvenir products have not used digital marketing, namely using available e-commerce. So that processed products can only be reached by the local community[2][6]. Field of Village Information System: where the partner does not yet have an information system portal related to activities in Balongdowo village so that the profile and potential of the village cannot be known by the wider community. Referring to the situation analysis and the existing problem points, the problems still faced by partners include marketing management and the unavailability of information systems in Balongdowo Village.

The purpose of this Community Service activity is to increase the sustainability of MSME and home industry businesses in Balongdowo Village, help FGD Participants register and market FGD Participants' products on e-commerce platforms, increase public understanding and knowledge of the profile and potential of Balongdowo village through the village information system portal (website), introduce village potentials to outside communities (national and international). The benefits of

the "Digital Village Pioneering in Balongdowo Village, Sidoarjo" activities are in the field of Digital Marketing: processed kupang products and other products from Balongdowo villagers are registered and available on e-commerce platforms. This provides benefits to MSME and home industry businesses by increasing access to a wider digital market. With this access, FGD Participants can reach more consumers, which in turn can increase sales of FGD Participants' products. Meanwhile, in the field of Information Systems[1][7]: The creation of an information system portal in the form of a Balongdowo Village website that contains the village profile and potentials provides benefits in the form of increased public understanding and knowledge of the FGD Participants' village. This will help introduce the village's potential to the wider community, including the national and international community, which can support the development of the village and its economic potential.

II. METHOD AND IMPLEMENTATION

A. METHOD

The implementation of Community Service activities was carried out as many as 2 different activities but interconnected with each other, namely through the creation of a village service information system and the development of UMKM marketing through digital carried out in parallel (FIGURE 1 and FIGURE 2).

1. STAGE 1: MARKETING FIELD

Starting from organising a Forum Group Discussion (FGD) with home industry players, MSMEs and cadres to capture the problems and initial understanding of the Balongdowo Village community related to e-commerce. FGDs on digital marketing are a very useful platform to promote knowledge, exchange of ideas, and collaboration between digital marketing professionals, thus enabling FGD Participants to stay informed on the latest developments in the industry[8]. The outcome of this FGD was a discussion of the latest trends and developments in digital marketing, such as the adoption of new technologies, or shifts in consumer behaviour. Also gained as a result of the discussion were effective Digital Marketing strategies, including the utilisation of social media[9]. The next step is to prepare materials and organise e-commerce-based digital marketing training to increase sales of Balongdowo village products. In this case inviting experts who can explain the importance of digital marketing, and also the provisions that must be adhered to by market players, including halal certification, the existence of PIRT certification.

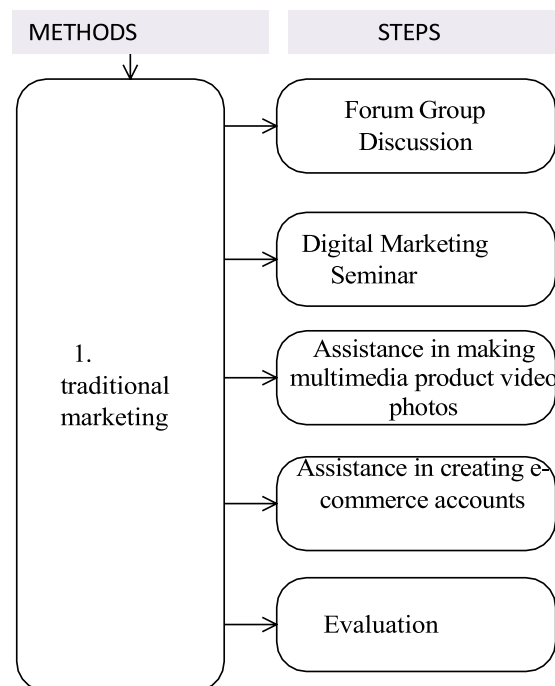


FIGURE 1. Method of implementation of community service activities

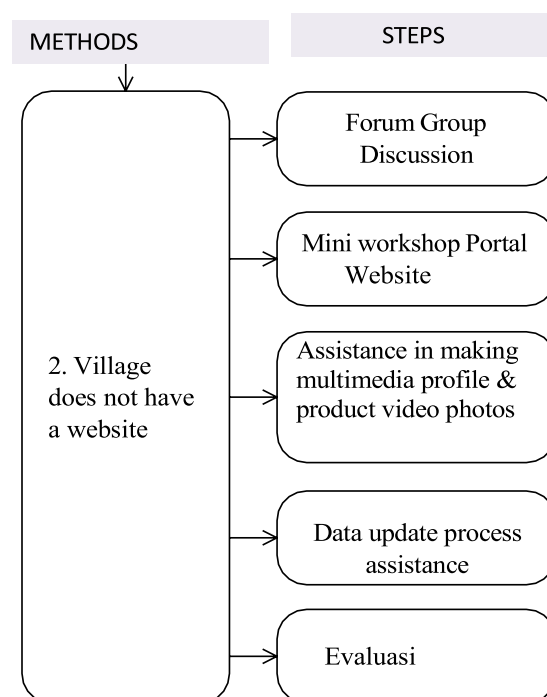


FIGURE 2. Method of implementation of community service activities

So that experts were also invited in the management of Halal and PIRT Certification from the Sidoarjo Health Office. Followed by the implementation of assistance with PPDM members and students in producing multimedia documents (photos and videos) of processed products that can attract consumers. Presentations were given on procedures for submitting proposals for Halal certification

and PIRT Certification. And also, presentations in digital marketing with material Digital marketing includes various strategies to promote products, services or brands using digital platforms and media. Here are some things that are generally conveyed in digital marketing regarding the creation, dissemination, and promotion of relevant, informative, and interesting content to attract audience attention[10][11]. Types of content include blogs, videos, infographics, podcasts, and others. And also, the use of Social Media Marketing where businesses can promote products or services through social media platforms such as Facebook, Instagram, Twitter, LinkedIn, and others[8]. As well as in managing and publishing content in accordance with the characteristics and needs of the audience on each platform. In this activity, the manager of the online marketing business from Blibli was also invited. Furthermore, assistance was provided to partners by the pengabmas team for the account registration process, uploading products, and handling the sales process in several e-commerce. The last step is to evaluate the buying and selling process in e-commerce during the PPDM activity period together with partners, lecturers and students to see the independence of residents in developing digital marketing.

2. STAGE 2: INFORMATION SYSTEMS FIELD

Organising a Forum Group Discussion (FGD) with home industry players, MSMEs and village officials to capture the problems and initial understanding of the Balongdowo Village community related to the importance of village profiles to introduce the potential of the village to the outside community (national and international). Followed by preparing materials and organising a mini workshop on the operation of the Balongdowo Village Website Portal based on Wordpress CMS for operators at Balongdowo Village Hall. The next step is to provide assistance with PPDM members and students in producing multimedia documents (photos and videos) to develop village information systems including profiles, processed products, and village activities. The next step was to provide assistance to partners by the community service team for the upload process on the alongdowo village website portal. The process of evaluating the development of the information system portal during the PPDM activity period and after the activity together with partners, lecturers and students to see the independence of residents in developing village information systems.

This community service activity was carried out from May to October 2023 in Balongdowo Village, Candi District, Sidoarjo Regency. The partner of this activity is Balongdowo Village which includes the Village Head, Village IT staff, business people and all Balongdowo Village Community to participate in this activity. Partners participated in determining participants and facilitating the venue.

B. IMPLEMENTATION

The implementation of Community Service was carried out in the hall of Balongdowo Village Hall, Candi District, Sidoarjo Regency, East Java. The implementation of Community Service activities is carried out as many as 2 different activities but are interconnected with each other, namely through the creation of a village service information system and the development of UMKM marketing through digital carried out in parallel.

1. MARKETING FIELD

Starting from holding a Forum Group Discussion (FGD) on 25 April 2023 with home industry players, MSMEs and cadres to capture the problems and initial understanding of the Balongdowo Village community related to e-commerce. FGD on digital marketing is a very useful platform to promote knowledge, exchange of ideas, and collaboration between digital marketing professionals, thus allowing FGD Participants to stay informed about the latest developments in the industry[12]. The outcome of this FGD was a discussion of the latest trends and developments in digital marketing, such as the adoption of new technologies, or shifts in consumer behaviour. Also obtained as a result of the discussion were effective Digital Marketing strategies, including the utilisation of social media[10][5]. The FGD activities were documented in the form of meeting minutes.



FIGURE 3. Some Participants of the Forum Group Discussion of Community Service activities in Balongdowo Village

The next step is to prepare materials and organise e-commerce-based digital marketing training to increase sales of Balongdowo village products. In this case, we invited experts who could explain the importance of digital marketing, and also the provisions that must be adhered to by market players, including halal certification, the existence of PIRT certification. So that experts are also invited in the management of the steps taken are to determine the date, time, and place of training. Followed by submitting a request to the resource person. it is in accordance with the availability of the invited experts, and the material that will be taught to the participants. This should include the importance of digital marketing and the provisions that must be adhered to by market players, such as halal certification and PIRT certification.

The Community Service Team ensures that the FGD participants have relevant materials and can explain comprehensively about the importance of digital marketing and the provisions that must be adhered to [13]. Cooperation with Sidoarjo Health Office: to invite experts in Halal management and PIRT Certification, and the expert can provide relevant and useful information for the training participants [14]. They created promotional materials for the training, including posters, brochures, and online announcements. Open registration for Balongdowo villagers and business owners who want to join the training before the training day. After the training, the experts and speakers have access to the FGD participants to measure the success of the training and to gather feedback from participants. After the training, there is good documentation of the event, including the notes provided in the training to all participants. After the training, it is expected that business actors will stay in touch with the invited resource persons to answer questions and provide additional support if needed.

On 16 May 2023, assistance was provided with PPDM members and students in producing multimedia documents (photos and videos) of processed products that can attract consumers. Presentations were given on procedures for submitting proposals for Halal certification and PIRT Certification. And also, presentations in digital marketing with material Digital marketing includes various strategies to promote products, services or brands using digital platforms and media [15].



FIGURE 4. The opening of the Digital Marketing seminar and workshop at the PKK Room in Balongdowo Village, Sidoarjo.

Here are some things that are generally conveyed in digital marketing regarding the creation, dissemination, and promotion of relevant, informative, and interesting content to attract audience attention [3]. Types of content include facebook, blogs, videos, infographics, podcasts, and others. And also, the use of Social Media Marketing where businesses can promote products or services through social media platforms such as Facebook, Instagram, Twitter,

LinkedIn, and others. As well as also in managing and publishing content in accordance with the characteristics the needs of the audience on each platform. Assistance to partners by the pengabmas team for the account registration process, uploading in this activity, the manager of the online marketing business from Blibli was also invited.



FIGURE 5. Implementation of Digital Marketing seminars and workshops in the PKK Room Balongdowo Village, Sidoarjo



FIGURE 6. Delivery of material from Blibli digital marketing resource persons, and handling the sales process in several e-commerce.

Seminar and workshop activities provide the best opportunity for participants to be actively involved in the process of making photos and videos of processed products. FGD participants were given guidance and practical training on photography and videography techniques. The resulting multimedia documents are expected to be able to promote processed products well and attract consumers' attention. In this activity, a presentation was also held on the process of submitting proposals for Halal Certification and PIRT Certification regarding the procedures for submitting proposals for Halal certification and PIRT Certification. Participants get an in-depth understanding of the requirements and process of applying for certification required for processed products. In the Digital Marketing presentation session, participants were taught about digital marketing, including strategies and to promote products and

services through digital platforms and media[10]. The speakers explained the importance of relevant, informative, and engaging content in digital marketing, as well as the types of content that can be used such as facebook, blogs, videos, infographics, and others[6]. Participants were also taught about the utilisation of Social Media Marketing, which is how businesses can promote products or services through social media platforms such as Facebook, Instagram, Twitter, LinkedIn, and others. Another resource person, an online marketing business manager from Bibli, provided insight into the experience and best practices in managing and publishing content that is in accordance with the characteristics and needs of the audience on each platform.

This activity was very useful and provided valuable insights to participants in terms of product development, certification, and digital marketing[16]. Participants are expected to apply the knowledge gained in supporting the development of processed products in Balongdowo Village. The documentation of the activity is at the following link: <https://urlis.net/fotopengabPPDM>



FIGURE 7. Presentation of material from the Sidoarjo Health Office at the Digital Marketing seminar and workshop.

In the evaluation stage, the buying and selling process in e-commerce is carried out during the PPDM activity period together with partners, lecturers and students to see the independence of residents in developing digital marketing.



FIGURE 8. Submission of material from the Halal Certification Team



FIGURE 9. Halal certificates produced after seminar and workshop activities



FIGURE 10. Picture of mihro-based business licence certificate (known: NIB)

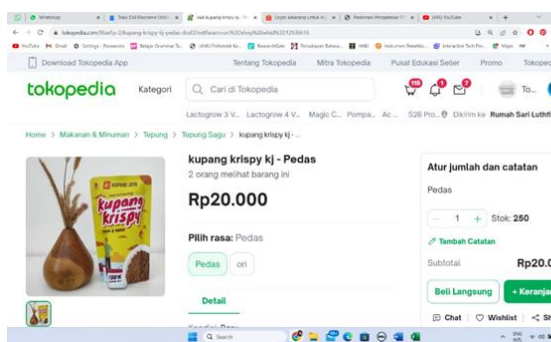


FIGURE 11. An online account in TOKOPEDIA e-commerce that can be registered

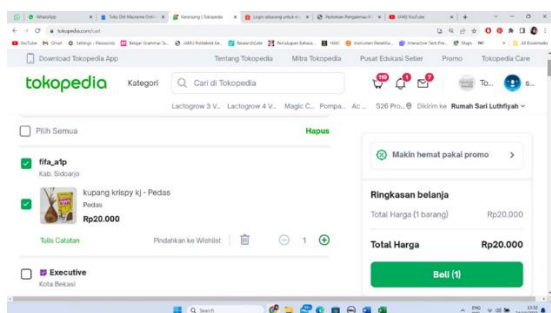


FIGURE 12. Picture of the online account shopping process that can be registered online accounts

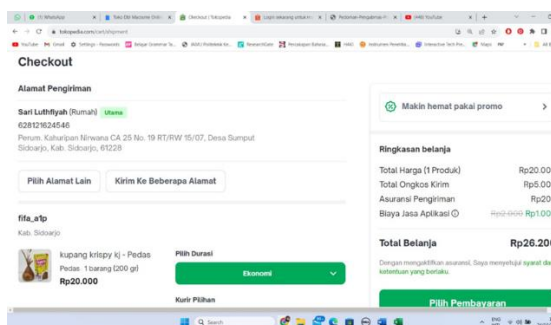


FIGURE 13. Picture of shopping check out process

A problem survey was conducted to find the core problems surrounding digitalisation in Balongdowo Village. This activity was conducted through an interview method with the Village Head and Village Apparatus. Based on the method, several fundamental problems were found in the context of digitalisation, such as:

- 1) Inaccessibility of Balongdowo village website
- 2) The absence of a digital platform that provides access to information about Balongdowo.
- 3) The use of conventional methods in storing village government data

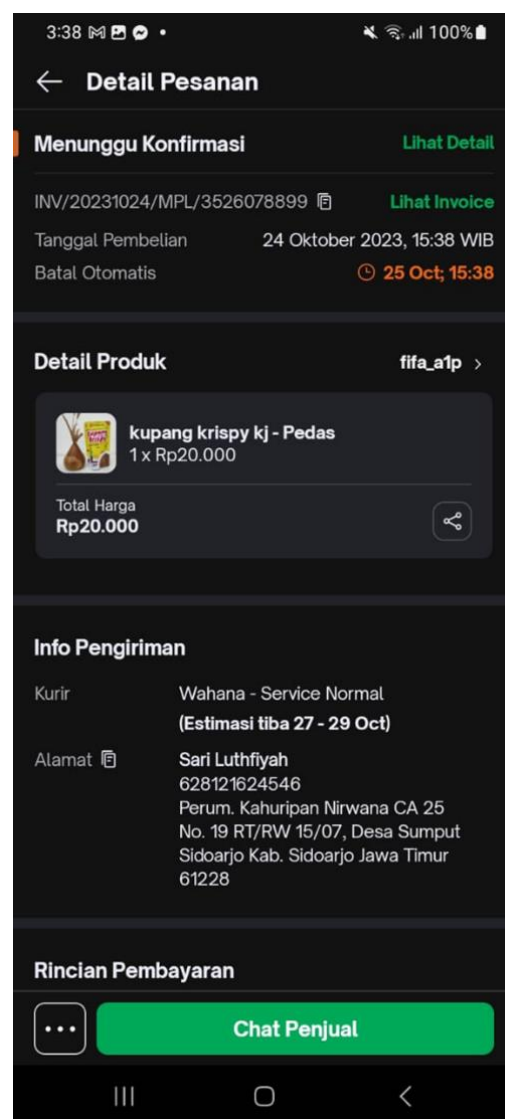


FIGURE 14. Picture of shopping check out process

2. The Information System field

The implementation of this Community Service was carried out through several steps, such as Licensing, Problem Survey, Socialisation of work programs, Process of Website Development and Village Administration and Information Systems, and Village Operator Training.

a. Explaining and asking for permission

This is the main stage in Community Service activities carried out in order to obtain permission to carry out activities in Balongdowo Village, especially from the Village Head and Village Apparatus. This is done so that important formulations related to the digitalisation of village information can be carried out optimally [17].

The method used is a direct discussion between the Community Service Team in Balongdowo Village and the parties involved, such as the Lurah and kelurahan staff, and the general village community.

b. Problem Survey

After obtaining the problems surrounding digitalisation, the Balongdowo Village Community Service Team designed in detail the implementation of the program. The creation of a Forum Group Discussion (FGD) was carried out through a discussion method between the Balongdowo

Village Community Service Team. Through these discussions, the Digital Village Program was created as a solution to the problem of digitalisation in Balongdowo Village. Later, the main actors of the Digital Village will be directed to village officials, especially in the village operator section. Some of the key activities of this programme include integrating population census data, road maps, and village profiles into a digital platform, and training village officials for programmed sustainability.



FIGURE 15. Photo with Lurah Balongdowo after explaining and asking for permission to create a Desa Balongdowo website.

c. Website Development Process and Village Administration and Information System

The next stage of the Digital Village work programmed is the creation of the Village Website and information system. Both platforms have different functions and levels of information confidentiality[3]. The village website is a platform that can contain a collection of village information in the form of text, images, sound, or video. The information can range from village profiles to entrepreneurial potential[18]. However, the easy access to this platform that can be done by the entire community makes certain information such as the NIK data of residents cannot be entered due to data confidentiality[13]. Meanwhile, service information system is a platform to manage, analyse, and present village data and information based on information technology. It contains specific data on villagers, such as members per family, the NIK of all family members, data on recipients of government assistance, and so on. Therefore, the level of confidentiality of information in service information system is relatively high and access to this platform is also limited to village officials only[19].

d. Desa Balongdowo website operator training

At this stage, the Community Service Team provides teaching or socialisation to village officials (Village operators) in the management of the latest village website that has been created by us, where the socialisation of village website management aims to make village officials more advanced, considering that this Balongdowo village where the officials themselves have very little knowledge in information especially related to technology issues. The enthusiasm of Balongdowo village operators themselves tends to be high, where they hope to use the website so that Balongdowo village itself can be more advanced and can be seen transparently by Balongdowo village residents themselves especially and for the entire community.

The training was conducted using the online method at one of the village officials' residences. Some of the things that were explained in this stage were about

- a. Login steps to the website and service information system platform of Balongdowo Village.
- b. Mechanisms for editing the Balongdowo Village website 2.
- c. Mechanisms for using the Balongdowo Village website and informatic system.





FIGURE 16. Desa Balongdowo website operator training.

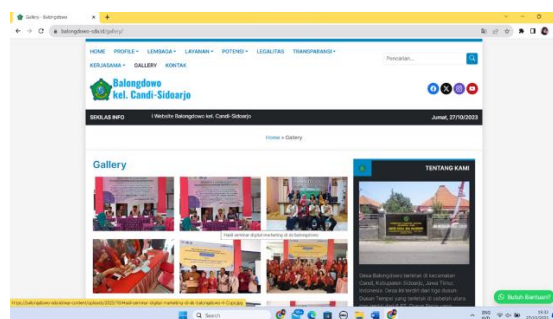
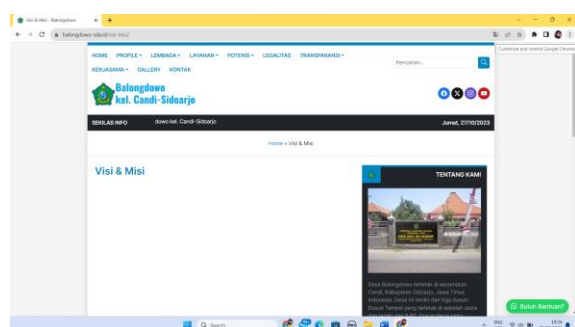
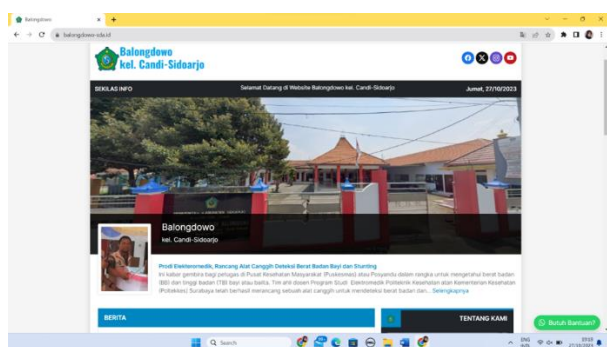
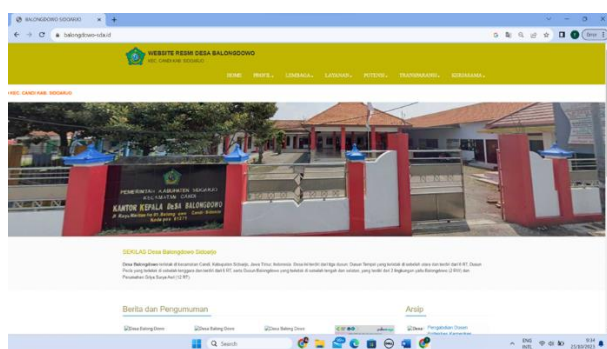


FIGURE 16. View of the Desa Balongdowo website portal

Evaluate the development of the information system portal during and after the PPDM activities together with partners, lecturers and students to see the independence of the community in developing the village information system[20]. This evaluation should be a tool to enable the development of a more effective village information system portal and increase community independence in the use of information technology. It can also help assess the positive impact of the PPDM programme on the overall development of the village. After the trial use of the Balongdowo village website portal, the PPDM team and the Balongdowo village website operators discussed the findings, identifying the achievements and challenges faced by the villagers in developing the village information system. The Pengabmas team also provided recommendations and suggestions for improvements based on the evaluation results, making recommendations for improvements if needed. This could include suggestions for further training or additional support to the website operators. Here we also receive feedback to the villagers on the evaluation results, provide explanations of achievements and provide encouragement to continue to improve self-reliance in the development of the village information system[21].

IV. DISCUSSION

Seminars and workshops on digital marketing have inspired many businesses to improve their marketing efforts[12]. Marketing success and being recognised by more and more people will allow more products to be sold[9]. One of the factors that support success in online marketing is determined by how businesses understand the behaviour of their customers[6]. Online marketers need to have a fundamental understanding of the importance of understanding customer behaviour, and the first step to understanding it can be done by attracting customer attention. In online marketing, customers do not see the product directly, therefore it needs attractive packaging or product photos to attract potential customers[5]. The need for an understanding of successful online marketing is an ongoing process. It requires a mix of strategies, adaptability, and a customer-centric approach. Continuously monitor your results and be willing to adjust your tactics as needed to

improve and sustain your online marketing efforts for selling products[22]. Provide excellent customer support to ensure a positive buying experience. Happy customers are more likely to become repeat buyers and refer others.

The need for encouragement and motivation from the seminar speakers for online traders to remain enthusiastic about running their business online while online marketing has its weaknesses, it's important to note that many of these challenges can be addressed through effective strategies, continuous learning, and adaptation. Businesses that are aware of these weaknesses and actively work to mitigate them can still find success in the online marketing landscape. Challenges that are often experienced by online merchants include the online marketplace is highly competitive. There are often numerous businesses offering similar products or services, making it challenging to stand out and capture the attention of the target audience, websites and online marketing tools may experience technical issues such as downtime, slow loading times, or glitches, which can negatively impact user experience and conversions, and In some regions, inconsistent internet connectivity can limit the effectiveness of online marketing campaigns, particularly for businesses targeting global audiences.

The next stage of the Digital Village work programme is the creation of the Village Website and service information system. Both platforms have different functions and levels of information confidentiality[23]. The village website is a platform that can contain a collection of village information in the form of text, images, sound, or video. The information can range from village profiles to entrepreneurial potential. However, the easy access to this platform that can be done by the entire community makes certain information such as the NIK data of residents cannot be entered due to data confidentiality. Meanwhile, service information system is a platform to manage, analyse, and present village data and information based on information technology[24]. It contains specific data on villagers, such as members per family, the NIK of all family members, data on recipients of government assistance, and so on. Therefore, the level of confidentiality of information in service information system is relatively high and access to this platform is also limited to village officials only[25].

Village Operator Training the Community Service Team provides teaching or socialisation to village officials (Village operators) in the management of the latest village website that has been created by us, where the socialisation of village website management aims to make village officials more advanced, considering that this Balongdowo village where the officials themselves have very little knowledge in information especially related to technology issues. The enthusiasm of Balongdowo village operators themselves tends to be high, where they hope to use the website so that Balongdowo village itself can be more advanced and can be seen transparently by Balongdowo village residents themselves especially and for the entire community.

The training was conducted using the online method at one of the village officials' residences. Some of the things that were explained in this stage were about login steps to the website and service information system platform of Desa Balongdowo, mechanisms for editing the Desa Balongdowo website, and mechanisms for using the Desa Balongdowo website and service information system. Improving the skills of a website operator is an ongoing process. By combining technical knowledge with content creation and user engagement skills, you can help ensure that "Desa Balongdowo" has an effective and up-to-date online presence. Encourage the operator to stay updated on the latest web development trends, tools, and technologies. Consider providing opportunities for continuous education and training. Regularly review the website's performance, gather user feedback, and make improvements accordingly. Ensure that the operator understands how to back up the website and has a recovery plan in case of unexpected issues.

Evaluate the development of the information system portal during and after the PPDM activities together with partners, lecturers and students to see the independence of the community in developing the village information system. This evaluation should be a tool to enable the development of a more effective village information system portal and increase community independence in the use of information technology[26]. It can also help assess the positive impact of the PPDM programme on the overall development of the village. After the trial use of the Desa Balongdowo website portal, the PPDM team and the Desa Balongdowo website operators discussed the findings, identifying the achievements and challenges faced by the villagers in developing the village information system. The Community Service team also provided recommendations and suggestions for improvements based on the evaluation results, making recommendations for improvements if needed. This could include suggestions for further training or additional support to the website operators. Here we also receive feedback to the villagers on the evaluation results, provide explanations of achievements and provide encouragement to continue to improve self-reliance in the development of the village information system[3].

V. CONCLUSION

The purpose of this Community Service activity is to increase the sustainability of MSME and home industry businesses in Balongdowo Village, and market products on e-commerce platforms, and aims to increase public understanding and knowledge of the profile and potential of Balongdowo village through the village information system portal (website), introducing village potentials to outside communities (national and international). The result of this PPDM scheme Community Service is that the online shop of Balongdowo Village residents has been produced in various e-commerce: namely Blibli and Tokopedia. As well as the successful availability of the Desa Balongdowo website which contains many features of community service information features in

the village, information about potential places and can be developed together. The presence of the Digital Village pilot requires the full support of all Balongdowo Village managers, staff and personnel in the village. There are several challenges that will be faced in the future to maintain the pilot, namely the implementation of Digital Village and digital marketing in Balongdowo Village or similar villages are often faced with a number of obstacles that need to be overcome. Some of the key barriers that may be faced include limited Internet access, limited Digital Skills in digital understanding and skills, low awareness of the benefits of digital. Strategic steps in overcoming these challenges include improving technology infrastructure and regular training for medical personnel, optimising budget allocations, and extension campaigns to increase community awareness and acceptance.

VI. REFERENCES

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