Digital Economic Education and MSME Assistance Project Bamboo to Improve the Quality and Quantity of Bamboo Products in Pendem Village, Mojogedang District

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Article Info	Abstract		
Article history: Accepted: 05 April 2024 Published: 09 April 2024	This article explores the implementation of digital economy education and mentoring for Project Bamboo's Micro, Small and Medium Enterprises (MSMEs) to improve product quality and quantity located in Pendem Village, Mojogedang District, Karanganyar Regency. This research assessed the impact of the digital platform and mentoring on product improvement, business		
Keywords: Bamboo Crafts Digital Economy Products	efficiency, and market competitiveness. Findings showed improvement, business efficiency, and market competitiveness. Findings showed improvements in product quality and quantity attributed to digital technology and customized mentoring. In addition, the research identified challenges and opportunities encountered during the implementation process. The insights gained from this research contribute to a better understanding of the gained from this research contribute to a better understanding of the utilization of digitalization and mentoring to empower MSMEs and foster sustainable economic development in rural communities.		
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1. INTRODUCTION

Micro, small and medium enterprises (MSMEs) refer to various small and medium enterprises in Indonesia that play an important role in the country's economy, especially in job creation and poverty alleviation[1]The government has been proactive in developing this sector, with a focus on human resource development and financial support[2]However, MSMEs have shown extraordinary resilience, especially in facing the economic crisis[3]Real Work Lectures (KKN) is a community service program that has become an integral part of the curriculum at many universities in Indonesia[4]The aim is to contribute to the development of local communities while providing practical experience to students[5]

Pendem Village is a village located in Mojogedang District, Karanganyar Regency, Central Java Province. The area of Pendem Village itself is approximately 363 hectares and is located at an altitude of approximately 400 meters above sea level. Pendem Village consists of several settlements such as Bamban, Bangunsari, Bendosari, Boneng, Garit, Gombel, Harjosari, Jatirejo, Mranggen, Ngelo, Pendem, Sambirejo, Sidomukti, Sidomulyo, Sukorejo, Sumberbulu, nggulsari and Winong (Wikipedia, 2023). The large amount of potential that exists in Pendem Village has caused many MSMEs to take advantage of this potential to develop their businesses. For example, the Bamboo Project MSMEs started their business because there was a lot of bamboo and wood that was not maintained and even rotted and was only used as firewood in their surroundings. Seeing this, finally the owner of this MSME decided to change the bamboo and wood into other forms that could produce large amounts of rupiah such as glasses, thermos flasks,

coasters, folding ironing tables, goods display racks, wall hangings, study lamps, etc. cashier table.

However, starting a bamboo craft business is not easy, it takes quite a long time to process orders, from felling and cutting the bamboo to the craft being finished and sent to customers. The problems faced by Project Bamboo MSMEs themselves are related to the lack of adequate human resources in managing their business and carrying out online promotions on various social media such as Shopee, Youtube and Tiktok, making it difficult to have enough products ready to sell and not having enough time to do so. merchandise inventory. Apart from that, with no employees and all the business being managed by himself, the owner of the MSME Project Bamboo felt overwhelmed regarding the management of his business itself. The problems that are no less important are the lack of optimal production equipment and work safety which are often ignored.

in a journal entitled Development of MSMEs through Optimizing Branding and Use of Digital Media in Sindangbarang Village, Cilacap Regency, believes that training and assistance in digitally recording finances for MSMEs has proven to be useful and can increase the knowledge and skills of partners. However, partner MSMEs have not yet fully adopted digital financial recording, because there are still problems with human resources who are not yet familiar with internet-based digital tools. Therefore, it is recommended that sustainable methods of mentoring partners can be a solution in increasing added value and business scale. However, to encourage adoption of the innovations offered, it is necessary to support digital literacy training for MSME owners. Apart from increasing digital literacy, it is also necessary to provide further material related to marketing and product digitalization.

Based on the problems above, this article will present the results of research regarding digital economic education and the development and assistance of Project Bamboo MSMEs to improve the quality and quantity of bamboo products in Pendem Village, Mojogedang Subdistrict by Group 53 Real Work Lecture (KKN) Students at Sebelas Maret University, Surakarta. The focus on digital optimization is marketing, increasing production and work safety. It is hoped that these actions will stimulate the growth of MSMEs. It is hoped that the impact will spread to the local economy and provide an inspiring example in efforts to empower MSMEs in Indonesia.

2. RESEARCH METHOD

The research method used is descriptive qualitative using interview techniques with MSME owners. Implementation of this activity begins with the first step, namely conducting interviews with MSME partners to identify various obstacles and controls that are still faced in Project Bamboo MSMEs. The next step involves an in-depth analysis of the problems expressed by the partner, then continues with designing appropriate solutions to resolve each identified problem. Finally, a comprehensive evaluation of the implementation of activities is carried out to ensure that the solutions implemented have a positive impact and meet the needs of MSME partners. The flow of this process can be seen clearly in the flow diagram presented in the following image.



Figure 1. Flowchart for MSME Development and Assistance.

3. RESEARCH RESULTS AND DISCUSSION

Digital economic education is a comprehensive option to optimize the businesses of the Pendem Village community because it needs to adapt to current developments. Several studies have highlighted the importance of digital marketing, especially through social media, for Micro, Small and Medium Enterprises (MSMEs)[6]The role of digital marketing in increasing sales notes the positive impact that social media platforms such as Instagram have[7]Social media content marketing is also very important in the context of global competition[8]Overall, these studies confirm the potential of digital and content marketing, especially through social media, in improving the performance of MSMEs.

The Marketing Content Optimization Program for MSMEs Project Bamboo is a strategic step taken to increase brand awareness and expand market reach through social media. In this program, a series of activities are carried out starting from planning the video concept, taking pictures at the production location, to the editing and publishing process of the content.

One of the supporting factors for the success of this program is the enthusiasm of Project Bamboo MSME owners in creating marketing content. They are actively involved in the video creation process, which provides added value in introducing their products to potential consumers. However, the inhibiting factor faced is the lack of a stable internet network for uploading videos to social media, which can hinder the efficiency of the publication process.

However, this program succeeded in increasing the brand awareness of MSME Project Bamboo, as evidenced by the increase in Instagram insights after the marketing content video was uploaded. Apart from that, this program also provides sustainable benefits by providing MSME owners with understanding and skills in creating marketing content, so that they can hopefully do it independently in the future.

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Figure 2. Instagram Insights @antonprojectbamboo

Community participation, especially Project Bamboo MSME owners, in this program is very positive. They not only support the running of the program by providing facilities and other assistance, but also feel helped by this program to overcome human resource constraints and understanding related to marketing content creation. It is hoped that active participation and appreciation from the community can be a motivation to continue developing the Project Bamboo MSME business.

The use of e-commerce in marketing MSME products has been proven to increase their competitiveness significantly[9]The Anton Project Bamboo MSME product marketing optimization program through e-commerce aims to increase the digital knowledge and skills of MSME owners and increase product visibility through the Shopee and Instagram platforms.

Supporting factors for the success of this program include the enthusiasm of MSME owners in optimizing product marketing through e-commerce and the availability of tools such as smartphones that support marketing optimization. However, there are inhibiting factors such as complicated understanding of e-commerce features which require more precision and weak internet signals which slow down the product input process.

The results achieved from this program are that Anton Project Bambu products can be ordered by consumers via e-commerce, increasing product accessibility to a wider market. Content can also be marketed via Instagram with a significant increase in the number of accounts reached. Using the Shopee and Instagram Ads features also helps increase the percentage of clicks on products on Shopee. MSME owners themselves admitted that their sales increased by 7% after implementing this program.

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Figure 3. Optimizing Product Marketing Through E-commerce Project Bamboo

For follow-up, MSME owners can continue to add new products through the Shopee feature and expand their business outside the region using the e-commerce platform. Community participation, especially MSME owners, in this program is very positive, as can be seen from their willingness to learn to use digital platforms in marketing Anton Project Bambu products. It is hoped that this active participation can continue and have a wider positive impact on the development of MSMEs in Indonesia.

The importance of creating product catalogs for bamboo craft MSMEs is confirmed by several studies. Good financial management can be facilitated with a product catalog[10]In addition, the role of technology in increasing productivity can be achieved through digital product catalogues[11]Therefore, creating a catalog of bamboo craft MSME products is very important to improve financial management, productivity and record keeping.

The product catalog creation program for Project Bamboo is an initiative that aims to provide support to SME owners in facilitating the marketing and promotion process of their products. Through this activity, we aim to create a product catalog that is not only efficient in providing a comprehensive overview of the products available at Project Bamboo, but also effective in attracting the interest of potential customers.

Activities begin with the product selection stage that will be included in the catalog, where we try to select superior products that have the potential to sell well on the market. After the product selection is made, it continues with the product photography process on January 18 2024, which is carried out at the home of the UKM owner. Photography is carried out carefully to ensure that the resulting product images clearly show the quality and uniqueness of each item. The next step is the product image editing process, which will be carried out from 22 to 30 January 2024 using the Canva application. Even though this process was a little hampered by limited internet signals which affected the speed of the editing process, we still tried to complete the task carefully and thoroughly.

However, we faced several challenges during the implementation of this program. One of them is the limited number of products that can be included in the catalogue, considering that SME owners only have a few items available at their production site. Apart from that, technical obstacles such as limited internet signals also slow down the editing process.



Figure 4. Project Bamboo MSME Product Catalog

The results achieved from this program are very satisfying. SME owners now have a complete and professional product catalog, which makes it easier for them to promote their merchandise. This catalog also provides flexibility for SME owners to update their own product lists, because it is created using the easy-to-use Canva application.

Apart from that, the active participation of SME owners in providing information about products that can be included in the catalog, as well as full support from the regional government which will include product catalogs in various exhibition events in the sub-districts, has been a big boost to the success of this program. Thus, the product catalog creation program for Project Bamboo not only provides direct benefits for SME owners, but also has the potential to have a wider positive impact on local economic development in the region.

The program for handing over production support equipment and K3 to Project Bamboo MSME Partners is a strategic step to increase production efficiency and awareness of work safety for these MSMEs[12]Optimizing production equipment is very important for small and medium bamboo craft businesses (Bamboo Craft MSMEs) to increase their productivity and quality (Ryka et al, 2017). This can be achieved through the use of appropriate technology, such as the concept of bamboo splitting for basket weaving (Wahid et al, 2022). Apart from that, the role of K3 can improve skills and knowledge, as well as create a safe work environment[13]This activity was carried out by providing several production support tools, such as portable mini chainsaws, wooden prayer beads drill bits, and board clamps, as well as work safety equipment, such as safety glasses, safety masks, and safety earmuffs.

Factors supporting the success of this program include the expertise of MSME owners in operating various production machines, their enthusiasm for optimizing production, and their awareness of the importance of occupational safety and health. However, there are several inhibiting factors, such as the search for bamboo raw materials which is still done manually, a lack of precision in production results, and a lack of complete work safety equipment.

The results achieved from this program are increasing understanding of MSME partners about the importance of equipment in increasing productivity, as well as providing concrete solutions in the form of modern tools that support the production process. It is hoped that the use of production support tools can open up new opportunities and improve the quality of products produced by MSMEs. In addition, a better understanding of occupational safety and health is expected to reduce the risk of work accidents and ensure a safe work environment for MSME

workers. The participation of MSME owners in this program is very good, as can be seen from their enthusiasm and willingness to learn and receive assistance in improving production and work safety. It is hoped that this active participation can continue and have a wider positive impact on the development of MSMEs in Indonesia.

4. CONCLUSION

Efforts to increase quality and quantity Project Bamboo MSMEs, through digital economic education and production assistance by the Sebelas Maret University (UNS) Group 53 KKN team, succeeded in identifying a number of problems faced by these MSMEs. The main problems identified include limited adequate human resources to manage

business, lack of time to stock merchandise, difficulties in business management because it is done alone without employees, and less than optimal production equipment and work safety which are often ignored

In the solution implementation stage, the KKN team actively assisted Project Bamboo MSMEs in creating attractive and effective marketing content to increase product visibility on the E-commerce platform. They also provide assistance with more modern and efficient production tools, as well as provide training on the use of these tools. In addition, outreach on work safety is carried out periodically to increase awareness and understanding of MSME partners about the importance of K3 in the workplace.

The results of the program evaluation show a significant positive impact in increasing production efficiency, product quality and awareness of work safety. Apart from that, an increase in the number of orders is also seen every day. MSME owners admitted that the number of sales had increased by up to 7% from before, apart from that, the quality of the goods they produced was getting better after being provided with production support equipment. The active participation of MSME owners in learning and receiving assistance shows a high level of satisfaction with the KKN program. A thorough sustainability plan, such as maintenance and use of production support equipment as well as further training and outreach, is expected to be able to maintain the continuity and improvement of these MSMEs in the future.

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