ECONOMIC EDUCATION STRATEGIES FOR IMPROVING MSME INCOME THROUGH DIGITALIZATION

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Abstract. *Micro, Small, and Medium Enterprises (MSMEs) are productive businesses owned by individuals or small business entities with certain limitations in terms of assets and turnover, in accordance with Law Number 20 of 2008 concerning Micro, Small, and Medium Enterprises (MSMEs) which act as the backbone of the Indonesian economy with a large contribution to Gross Domestic Product (GDP) and employment opportunities. Micro, Small, and Medium Enterprises still face various challenges, such as low digital literacy, as well as difficulties in marketing and product innovation. The use of technology can be a solution for Micro, Small, and Medium Enterprises to increase competitiveness and expand the market. This study aims to analyze the role of digitalization and product innovation in increasing the income of Micro, Small, and Medium Enterprises. The research method used is descriptive qualitative with a case study approach on Micro, Small, and Medium Enterprises in the food and service sectors. Data were obtained through interviews, observations, questionnaires, and supporting literature. The results of the study indicate that the application of digitalization, such as the use of e-commerce, social media, and digital payment systems, can expand market reach and improve operational efficiency. This is proven by the research sample of 10 Micro, Small, and Medium Enterprises (MSMEs) significantly increased in terms of income. Thus, digital transformation is an important strategy that needs to be implemented sustainably by Micro, Small, and Medium Enterprises to support inclusive economic growth. Micro, Small, and Medium Enterprises (MSMEs) offer significant benefits in economics education, including enhancing understanding of economic concepts, improving practical skills, raising entrepreneurial awareness, and enhancing analytical skills. Therefore, MSMEs can be a strategy to improve the quality of economics education and prepare students to become successful entrepreneurs.*

Keywords: *"Micro, Small and Medium Enterprises, digitalization, income, Economic Education"*

1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are productive businesses owned by individuals or small business entities with certain limitations in terms of assets and turnover, in accordance with Law Number 20 of 2008 concerning MSMEs. Micro, Small, and Medium Enterprises (MSMEs) play a role as the backbone of the Indonesian economy with a significant contribution to Gross Domestic Product (GDP) and job creation. However, MSMEs still face various challenges, such as limited access to capital, low digital literacy, and difficulties in marketing and product innovation.

In the digital era, the use of technology can be a solution for MSMEs to increase competitiveness and expand markets. Therefore, this study aims to analyze digitalization strategies and product innovation in improving the sustainability and competitiveness of MSMEs in Indonesia. Micro, Small, and Medium Enterprises (MSMEs) act as the backbone of the Indonesian economy with a large contribution to Gross Domestic Product (GDP) and job creation [1,2]. Micro, Small, and Medium Enterprises (MSMEs) play a very strategic role in the Indonesian economy [3,4].

One of their primary roles is as job providers, with MSMEs absorbing approximately 97% of the total national workforce. Extensive community involvement in this sector has helped reduce unemployment in Indonesia. Furthermore, MSMEs play a role in introducing local products to domestic and international markets, opening new market opportunities, and contributing to Gross Domestic Product (GDP) and the balance of payments. MSMEs are a driving force for national economic growth and contribute to a more equitable distribution of income (Hapsari et al., 2024). However, MSMEs still face various challenges, such as limited access to capital, low digital literacy, and difficulties in marketing and product innovation [5].

Based on data from Databoks (2024), the main challenges faced by Micro, Small, and Medium Enterprises (MSMEs) in Indonesia are limited financing and a lack of digital training. It was recorded that 57% of MSMEs experienced obstacles in accessing financing, while another 49% faced obstacles in digital training. Information from the Indonesian Fintech Joint Funding Association (AFPI) in 2020 showed that approximately 77.6%, or 46.6 million of the total 64 million MSMEs, had not yet obtained access to financing from formal financial institutions, both banks and non-banks. Furthermore, data from the Ministry of Cooperatives and SMEs in 2024 showed that approximately 35% of MSMEs had not optimally utilized digital technology in their business operations. Despite a slight improvement from the previous year, the digital divide remains a crucial issue in the development of MSMEs in Indonesia.

In the digital era, utilizing technology can be a solution for MSMEs to increase competitiveness and expand markets, especially since many traders are still reluctant to digitize products and transactions due to technological illiteracy [6]. Therefore, this study aims to analyze digitalization and product innovation strategies to improve the sustainability and competitiveness of MSMEs in Indonesia. In the context of economics education, MSMEs can serve as a concrete example for students to understand economic concepts such as entrepreneurship, management, and marketing. However, many educational institutions still do not include MSMEs as part of their economics curriculum. Therefore, this study aims to analyze the role of MSMEs in economics education and how they can be a strategy to improve students' understanding of economic concepts.

2. RESEARCH METHODS

This research uses quantitative and qualitative methods, Creswell [7] states that a study that uses an approach with a qualitative model will focus on constructive results, whether it strengthens existing theories or actually finds something new from a theory, a research approach with a qualitative model is an interpretative result in which there are multiple interpretatives of various related issues, researchers in a qualitative approach cannot rely on themselves, but also explore the deep meaning of various participants in their research. The sources used can also vary, ranging from observation, interviews and history.

The purpose of research using qualitative methods is to gain a deep understanding of the research's focus, described objectively or as is, rather than based on what should be. To obtain comprehensive data, a limited trial or FGD (Forum Group Discussion) was conducted with the following flow:

Figure 1: Data Collection Flow

The research will be conducted on MSMEs in the Bojonegoro region with a sample size of 10 MSMEs. Data Collection Techniques:

1. Questionnaire: To measure the level of digitalization and product innovation in MSMEs.
2. In-depth interviews: With MSMEs, government, and digital economic experts.
3. Field Observation: To directly observe the implementation of digitalization in MSME operations.

Qualitative data were analyzed using SWOT analysis to evaluate the strengths, weaknesses, opportunities, and threats faced by MSMEs. SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. SWOT analysis is a method used to evaluate the strategic position of a business or project by identifying these four factors (Robinson and Pearce, 2013). 1) Strengths: These are positive internal aspects possessed by a business or project, such as human resources, technology, or competitive advantages.

2) Weaknesses: Negative internal aspects that can hinder a business or project, such as lack of capital, lack of skills, or outdated technology. 3) Opportunities: Positive external aspects that can be utilized to develop a business or project, such as market changes, industry growth, or technological developments. 4) Threats: Negative external aspects that can threaten a business or project, such as competition, regulatory changes, or economic crises.

SWOT analysis helps in planning strategies, making decisions, and improving business or project performance by understanding the strengths, weaknesses, opportunities, and threats faced. The initial digitalization mechanism is carried out by transferring technology to MSME actors such as downloading, registering and using digital payment systems (Barcode, QRIS). Training involves formal partners such as MSME communities or the Cooperative Office to strengthen the collaborative and sustainable side.

3. RESULTS AND DISCUSSION

This study involved 10 MSMEs operating in various sectors, such as culinary, fashion, handicrafts, and services. These MSMEs operate in Bendo Village, Kapas District, Bojonegoro Regency, East Java Province, Indonesia, and have been established for at least 2 years. The majority of MSMEs have secondary or higher educational backgrounds and have tried to utilize digital technology in their business activities. From the results of in-depth interviews, the 10 MSMEs that participated in the FGD (Forum Group Discussion) with the theme Strengthening MSME Competitiveness Through Digitalization and Product Innovation in Improving the Local Economy fully understand the importance of digitalization as shown in the diagram below:
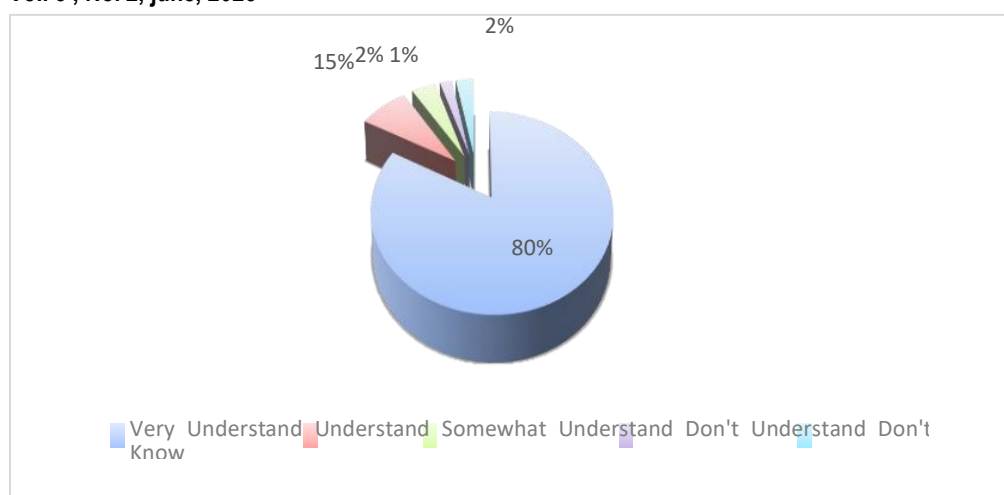
Figure 2: Understanding of MSME Actors

After participating in the Focus Group Discussion (FGD), they began to be willing to use digitalization in the form of digital payments, namely QRIS (Quick Response Code Indonesia Standard) as a promotional tool and to increase the number of potential customers. Eight out of 10 MSMEs admitted to having implemented product innovations, whether in terms of packaging, flavor/color variations, or developing services based on customer needs. Innovations were made based on direct customer feedback or through social media. However, only four MSMEs implemented innovations regularly and in a structured manner.

Most MSMEs reported increased revenue and market reach after implementing digitalization and product innovation [8]. For example, all 10 respondents saw an increase in revenue, and three culinary MSMEs managed to increase daily transactions by 40% through QRIS. Another fashion MSME managed to reach buyers from outside the region after uploading a product catalog to the marketplace. Increased MSME activity has had a positive impact on the surrounding environment, such as absorbing local labor, using raw materials from local producers, and creating a more active supply chain [9]. Two MSMEs even collaborated with village youth groups for production and distribution [10].

A descriptive quantitative approach was employed, collecting data through interviews and questionnaires from 10 MSMEs from various sectors (culinary, fashion, services, and retail) that had been using QRIS for at least six months. The list of MSME respondents is as follows:

List of names of Micro, Small and Medium Enterprises:
1. Bu Tini's Food Stall
2. Nusantara Coffee Shop
3. Bandung Creative Distro
4. Sari Bandung Souvenir Shop
5. Fast Clean Laundry
6. Ayu Beauty Salon
7. Jaya Motorcycle Workshop
8. Advanced Electronics Store
9. Saung Sunda Restaurant
10. Literacy Bookstore

Descriptive quantitative research results

No.	MSME Name	Revenue Before QRIS (Rp)	Revenue After QRIS (Rp)	Increase (%)
1	Village Tea Shop	8,000,000	10,500,000	31.25
2	Adit Stores	12,000,000	15,600,000	30.00
3	Bendo Distro	9,500,000	12,000,000	26.30
4	Meatball Boss	14,000,000	17,800,000	27.10
5	Rudi Cincau	7,000,000	9,500,000	35.70
6	Ayu Beauty Salon	6,500,000	8,700,000	33.80
7	Motorcycle Repair Shop	10,000,000	12,800,000	28.00

8	Luska Net	20,000,000	25,600,000	28.00
9	Lily Ice Cream	18,000,000	23,400,000	30.00
10	Oen Bookstore	9,000,000	11,800,000	31.10

The following are the results of research using SWOT analysis:

Strengths

1. Unique and locally based products: Most MSMEs offer products with strong local characteristics, such as traditional foods and culturally based handicrafts.

2. Strong proximity to local markets: Emotional and social ties with local consumers foster customer loyalty.

3. Flexible decision-making: Simple organizational structures enable MSMEs to respond quickly to market changes.

4. High innovation motivation: MSME actors show strong enthusiasm for business development despite resource constraints.

Weaknesses

1. Limited digital literacy: Most MSMEs lack the skills to optimize digital platforms such as e-commerce, SEO, and digital advertising.

2. Limited business capital: Insufficient access to capital constrains product development and digital transformation.

3. Limited human resources and multitasking: Business owners handle multiple roles (production, marketing, finance), resulting in suboptimal management.

4. Lack of continuous innovation: Innovation is often reactive, occurring only when sales decline rather than as an ongoing process.

Opportunities

1. Government and private sector support: Increasing availability of digital assistance, training programs, and mentoring for MSMEs.

2. Growth of internet users and e-commerce: Rising online shopping behavior expands market access for local products.

3. Collaboration with digital communities: Opportunities to partner with influencers, creative communities, and technology startups.

4. Preference for local and handmade products: Growing consumer demand for local, organic, and handmade goods.

Threats

1. Competition from external and imported products: Cheaper mass-produced goods from outside the region or abroad threaten local MSMEs.

2. Rapid changes in consumer behavior: Dynamic digital market trends are difficult for MSMEs to continuously follow.

3. Dependence on third-party digital platforms: Changes in social media algorithms or marketplace policies can negatively affect MSME performance.

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4. CONCLUSIONS

Digitalization and product innovation have been proven to increase the competitiveness of MSMEs in the Bendo Region, Bojonegoro Regency. Although implementation is not yet evenly distributed, initial results show an increase in turnover, market expansion, and a positive contribution to the local economy. Most MSMEs stated that there was an increase in turnover and market reach after implementing digitalization and product innovation. For example, three culinary MSMEs managed to increase 40% of daily transactions through QRIS. Another fashion MSME managed to reach buyers from outside the region after uploading a product catalog on the marketplace. The results of the SWOT analysis show that: 1. Strengths Unique and locally based products, Proximity to the local market: Emotional and social relationships with local consumers create customer loyalty. High enthusiasm for innovation. 2. Weaknesses Limited digital literacy: Most MSMEs do not yet understand digital platforms such as e-commerce and digital payments. 3. Opportunities Growth of internet and e-commerce users: Increasing online shopping

behavior opens new markets for local products. 4. Threats (Threats) Competition from products from outside the region or abroad: Cheaper mass products from abroad can threaten the local market.

Appropriate training and policy support will accelerate the overall digital adaptation of MSMEs. MSMEs in Bendo Village, Bojonegoro Regency, have significant potential for growth through digitalization and product innovation. However, strategic interventions are needed to address limitations in digital literacy and access to capital. Digital market opportunities and external support must be maximized, while threats must be mitigated through human resource capacity building and long-term business strategies. Increased MSME activity has a positive impact on the surrounding environment, such as absorbing local labor, using raw materials from local producers, and creating a more active supply chain. Two MSMEs even collaborate with village youth groups for production and distribution. Descriptive analysis shows that 1) MSMEs that actively use social media and carry out product innovation show better business performance.2) Digitalization and innovation make a real contribution to increasing turnover, expanding markets, and local competitiveness.3)Digitalization training and ongoing product development support are still needed to maximize the impact. Some of the obstacles that arise are: 1) Lack of ongoing digital training, 2) unequal access to technology and the internet, 3) limited capital for product development and digital advertising. MSMEs expect: 1) Regular training from the government or private sector regarding digital marketing and product innovation, 2) Special capital assistance for digital transformation, 3) Continuous mentoring in digital business management. MSMEs offer significant benefits in economics education, including enhancing understanding of economic concepts, improving practical skills, raising entrepreneurial awareness, and enhancing analytical skills. Therefore, Micro, Small, Medium Enterprise (MSMEs) can be a strategy to improve the quality of economics education and prepare students to become successful entrepreneurs.

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