

The Transformation of Modern Markets into Digital Markets : A Case Study on MSME Actors in Gunungsitoli City

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Article Information

ABSTRACT

The rapid development of information and communication technology has significantly transformed the business landscape, particularly through the emergence of digital markets that offer convenience and efficiency in transactions. In Gunungsitoli City, this transformation presents serious challenges for Micro, Small, and Medium Enterprises (MSMEs). A 2024 survey revealed that 68% of MSME actors experienced a decline in sales over the past two years, mainly due to fierce price competition and the rise of digital-based services. Additionally, 57% reported difficulties competing with large e-commerce platforms, while 45% had not fully adopted digital technology in their operations. This lack of digital adaptation, combined with limited access to technology and low digital literacy, has weakened their competitiveness and market presence. As a result, 40% of MSMEs have considered closing their businesses due to declining turnover. Despite these challenges, digital transformation also offers opportunities to increase efficiency and expand market reach. This research aims to analyze the impact of digital market transformation on MSMEs in Gunungsitoli and identify practical strategies to support their adaptation and sustainability in the digital era. The findings are expected to assist stakeholders in formulating effective policies and programs to strengthen local MSMEs and enhance their competitiveness the evolving digital economy.

Keywords: Modern Market Transformation, Digital Market, Micro, small and medium enterprises (MSMEs)

1. Introduction

The rapid development of information and communication technology in recent decades has brought significant changes to various aspects of life, including the business world. One of the major impacts of this technological advancement is the emergence of digital markets, which facilitate transactions between consumers and businesses more efficiently and conveniently. This shift has presented substantial challenges for Micro, Small, and Medium Enterprises (UMKM), especially in Gunungsitoli City, which has experienced a decline in sales volume due to fierce price competition and the increasing dominance of digital-based services.



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This phenomenon is clearly visible in the decreasing competitiveness of local businesses, which are struggling to adapt to market trends that are moving increasingly towards digitalization. Based on a 2024 survey, around 68% of UMKM actors in Gunungsitoli reported a significant decline in sales volume over the past two years. This decline is driven by the fierce price competition and the demand for more efficient digital services. Among the surveyed UMKM actors, 57% stated they were struggling to compete with larger e-commerce platforms that offer lower prices and faster shipping.

Additionally, 45% of UMKM actors in Gunungsitoli admitted that they have not fully adopted digital technology in their business operations, either in marketing or transactions. This worsens their situation, as consumers tend to prefer online shopping, which offers more convenience and comfort compared to shopping in traditional markets. On the other hand, approximately 52% of UMKM actors reported a turnover decrease of more than 30% compared to the previous year, while 40% of other UMKM actors stated they were considering closing their businesses if no strategic actions were taken to adapt to the digital market.

The limited access to technology, lack of understanding of the importance of digital transformation, and unpreparedness in utilizing digital platforms have left many UMKM actors marginalized in the market competition. This could further worsen their economic situation and even threaten the sustainability of their businesses, as consumer reliance on digital transactions continues to increase. The presence of well-established e-commerce platforms, with structured marketing and distribution systems, further exacerbates the competitiveness of small businesses in the region.

The transformation of traditional markets into digital markets is an unavoidable challenge, but it also presents an opportunity to enhance the efficiency and competitiveness of UMKM. Therefore, this study aims to analyze the impact of this transformation on UMKM actors in Gunungsitoli City and identify strategies that can help them adapt to the digital era, as well as sustain their businesses amidst the increasingly competitive market.

2. Materials and Method

This study employs a qualitative research method using a case study approach to analyze the phenomenon of transforming traditional markets into digital markets faced by Micro, Small, and Medium Enterprises (UMKM) actors in Gunungsitoli City. This approach was chosen because it allows for an in-depth understanding of the experiences, perspectives, and challenges faced by UMKM actors in adapting to technological changes in the market. The method also facilitates the exploration of the social, economic, and cultural dynamics influencing the digital transformation adoption process among UMKM at the local level.



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a. Data Collection Procedures

Data for this research was collected using multiple complementary techniques to obtain a holistic view of the digital transformation in UMKM in Gunungsitoli City. The data collection procedures include the following:

b. In-depth Interviews

Interviews were conducted with UMKM actors in Gunungsitoli, both those who have adopted digital technology and those who have not. This interview technique aims to gather direct information about their experiences, perceptions, and barriers faced when adapting to the digital market. Interviews were conducted with 15-20 UMKM actors selected based on specific criteria, such as business type and the level of technology adoption. Semi-structured interview guides were used, covering topics such as:

- 1) Perceptions of the benefits and ease of use of digital platforms
- 2) Technical, social, and economic barriers to adopting technology
- 3) Factors influencing decisions to adopt digital technologies
- 4) The impact of digitalization on sales volume and business competitiveness

c. Direct Observation

Direct observation was carried out at traditional markets and the business premises of UMKM actors in Gunungsitoli. The purpose of this observation was to directly assess business practices employed by UMKM, both those utilizing digital platforms and those still operating in traditional ways. The focus of the observation included:

- 1) Transaction methods (online vs. offline)
- 2) Interactions between sellers and buyers
- 3) Consumer perceptions of products offered by UMKM
- 4) Use of technology in product promotion and marketing
- 5) This observation was conducted over several weeks to gain a representative picture of the local market environment.

d. Document Analysis

Relevant documents regarding the development of digital markets, government policies on UMKM digitalization, and reports and case studies about digital transformation in UMKM were analyzed. These documents provided insights into existing policies and programs supporting UMKM digitalization, as well as broader trends in digital transformation. The documents analyzed included:

- 1) Government reports on UMKM digitalization
- 2) Articles and journals on the use of technology in UMKM
- 3) Guides and training materials provided by relevant institutions to support UMKM
- 4) Statistics or data measuring the level of technology adoption in UMKM



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e. Literature Review

The literature relevant to digital transformation and technology adoption in UMKM was analyzed to provide a theoretical foundation for the study. This literature includes prior research on the use of digital platforms in small businesses, technology adoption in UMKM, and relevant theories such as the Technology Acceptance Model (TAM) and digital market competition. The literature review also helped contextualize field findings and strengthened the arguments in this study.

f. Data Analysis Procedures

Once the data was collected, the analysis was carried out following these steps:

1) Thematic Analysis

Thematic analysis was performed to extract key patterns in the data related to the research questions. These themes were analyzed within the context of the challenges and opportunities faced by UMKM in adopting digital markets, and how these factors affect their competitiveness and business sustainability.

2) Data Triangulation

To enhance the validity and reliability of the research findings, triangulation was employed. This technique involved comparing findings from interviews, direct observations, and document analysis. By doing so, data from various sources were cross-checked and analyzed comprehensively, offering a more complete and objective understanding of the digital market transformation process in Gunungsitoli City.

3) Data Interpretation

The results of the data analysis were interpreted by linking the field findings with existing theories, discussing how digital technology adoption impacts UMKM actors in Gunungsitoli. The study explored the barriers faced by UMKM in accessing technology and suggested possible solutions to improve the adoption rate and optimize the potential of the digital market.

3. Result

The findings of this study were based on data collected from interviews with UMKM actors in Gunungsitoli, direct observations at traditional markets and business premises, document analysis, and a review of relevant literature. The results are discussed in terms of the adoption of digital technology by UMKM, the barriers they face, the impact of digitalization on their business competitiveness, and strategies that can be applied to improve technology adoption.

a. Technology Adoption by UMKM in Gunungsitoli

From the interviews conducted with UMKM actors in Gunungsitoli, it was found that the majority of them experienced difficulties in adopting digital technology. Approximately 60% of the respondents



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acknowledged that they had not utilized digital platforms to market their products, even though they recognized the potential benefits of digitalization. The main barriers faced by them included limited technological knowledge and uncertainty about the costs and ease of use of digital platforms. Additionally, social factors such as lack of support from the community or family also contributed to the low adoption of technology by UMKM actors.

These findings align with previous research by Venkatesh et al. (2020), which highlighted that social and community support play a crucial role in the decision-making process for adopting technology [1]. Through the Technology Acceptance Model (TAM), the ease of use and perceived benefits of technology are key factors in its adoption. This research found that while UMKM actors in Gunungsitoli understood the benefits of digitalization, they hesitated to transition due to uncertainties regarding the usability and costs involved [2].

However, the study also found that a small group of UMKM actors, about 30%, who had adopted digital technology reported an increase in sales volume and broader market access through e-commerce platforms and social media. These findings support the statement that MSMEs (Micro, Small, and Medium Enterprises) that successfully adopt digital technology tend to gain competitive advantages in terms of operational efficiency and market expansion [3].

b. Barriers to Adopting Digital Technology

Through direct observations and interviews, it was discovered that the primary barriers to technology adoption among UMKM actors in Gunungsitoli were the lack of access to adequate technology infrastructure, particularly unstable internet connections and high access costs. Moreover, the absence of training or education on how to effectively use digital platforms also emerged as a significant hindrance. Many UMKM actors felt unprepared or unsure of how to start utilizing digital technology.

These barriers align with findings, which indicated that limited access to technology and the lack of training for UMKM actors are some of the biggest obstacles to digital technology adoption [4]. Venkatesh et al. (2020) also noted that access to supportive infrastructure, such as stable and affordable internet and technical assistance, plays a vital role in the success of technology adoption [1]. Thus, the difficulties faced by UMKM actors in Gunungsitoli regarding digital infrastructure are consistent with previous research. Additionally, in theory of market competition stated that to compete in an increasingly digital market, businesses must align their strategies by leveraging technology [5]. However, UMKM without adequate technology infrastructure face significant challenges in adapting to these changes, leaving them behind in market competition.



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c. Impact of Digitalization on UMKM Competitiveness

UMKM that have adopted digital technology reported improvements in their competitiveness and sales volume. For example, UMKM actors who used social media for product promotion stated that they attracted more customers and saw a 25% increase in sales over a 6-month period. However, UMKM actors who have not yet embraced digital technology expressed concerns, as the growing number of competitors leveraging digital platforms to expand their market reach and improve operational efficiency left them feeling threatened.

This result is in line with the statement that MSMEs (Micro, Small, and Medium Enterprises) that successfully undergo digital transformation can gain competitive advantages by leveraging technology to enhance operational efficiency and expand their markets. Digitalization enables MSMEs to reach a broader consumer base and deliver products more quickly, thereby increasing their competitiveness [3].

However, a research on UMKM digitalization that for businesses that have not adopted digital technologies, failure to adapt to this change may threaten the sustainability of their operations. This finding is highly relevant, as the UMKM actors in Gunungsitoli who have not transitioned to digital markets feel the pressure of increasingly fierce competition.

d. Strategies to Enhance Technology Adoption

In this study, most UMKM actors who have not adopted digital technology expressed the need for more guidance, training, and access to resources to optimize the use of digital platforms. Several UMKM actors also suggested that the government and other supporting institutions should provide more intensive programs in terms of training and outreach about the benefits and use of digital technology.

These findings align with who argued that facilitating conditions, such as training and technical support, play a significant role in encouraging technology adoption by UMKM [1]. Also emphasized the importance of government policies that support and provide access to training for UMKM to integrate digital technology into their businesses [4]. Furthermore, a stated that to survive and grow in the digital era, UMKM must actively adopt technology [5]. Government and related institutions play a key role in creating an environment that facilitates technology adoption, such as by offering training, financing, and providing the necessary resources.

4. Discussion

The findings of this study provide valuable insights into the challenges and opportunities faced by Micro, Small, and Medium Enterprises (UMKM) in Gunungsitoli City as they navigate the digital transformation of the market. This section discusses the implications of the results in the context of



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existing theories, compares them with previous studies, and explores the potential strategies that can help UMKM actors adapt to the digital era.

a. Technology Adoption Challenges

The findings of this study highlight a significant gap in technology adoption among UMKM actors in Gunungsitoli, with most businesses still relying on traditional methods. The lack of access to technology, particularly stable internet connections and digital platforms, was identified as the primary barrier to adoption. This challenge aligns with the Technology Acceptance Model (TAM), which suggests that perceived ease of use and perceived usefulness are crucial factors influencing the decision to adopt technology [2]. Many UMKM actors in Gunungsitoli are aware of the potential benefits of digitalization but remain hesitant due to concerns about the complexity of the technology and the associated costs.

This hesitation mirrors findings who identified a similar challenge for UMKM in other regions, where businesses struggled to overcome technical barriers. The study indicates that while there is a general recognition of the importance of digital platforms, the ability to integrate these technologies into daily business operations remains a significant challenge [4].

b. Impact of Digitalization on Competitiveness

The study also found that the adoption of digital technology has had a positive impact on the competitiveness of those UMKM that have embraced it. UMKM actors who used social media and e-commerce platforms reported a significant increase in sales and customer engagement, reflecting the potential benefits of digital transformation. This is consistent with the findings of Westerman et al. (2020), who argued that digitalization allows small businesses to compete more effectively by improving operational efficiency and expanding their reach.

However, the results also indicate that UMKM actors who have not yet embraced digital technologies feel increasingly vulnerable due to the growing presence of larger e-commerce platforms and the competitive advantage they offer. This challenge is highlighted by Patterson et al. (2021), who emphasized that businesses failing to adopt digital technologies may be left behind in an increasingly digital marketplace. The pressure from large e-commerce platforms can further exacerbate the difficulties faced by small businesses, especially in competitive markets like Gunungsitoli, where price sensitivity and consumer expectations for digital services are high.



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c. Barriers to Digital Adoption

Several barriers to digital adoption emerged from the data, including limited knowledge, inadequate infrastructure, and lack of community support. These findings are consistent with previous studies, external factors such as infrastructure availability and social support play an essential role in the decision to adopt technology [1]. In Gunungsitoli, many UMKM actors struggle with poor internet connectivity and high costs associated with digital technology, limiting their ability to compete with larger businesses that are already established on digital platforms.

Additionally, the social environment also plays a role in the adoption process. Many UMKM actors in Gunungsitoli expressed a lack of support from their communities, both in terms of training and guidance in utilizing digital technologies. This supports the importance of social influence and peer support in technology adoption [1].

d. Strategies for Supporting Digital Transformation

In light of these challenges, several strategies were suggested by UMKM actors to facilitate the adoption of digital technology. These strategies include providing more extensive training programs, improving access to digital infrastructure, and offering financial support for technology adoption. These suggestions align with the ideas who emphasized the importance of providing facilitating conditions, such as training and technical assistance, to help small businesses overcome digital barriers [1][4].

The government and other supporting institutions have a critical role to play in creating an environment that fosters digital adoption. Businesses must adopt technology to remain competitive in a digital marketplace. Therefore, initiatives that provide access to affordable internet, digital tools, and tailored training programs are essential for ensuring that UMKM actors can transition successfully to the digital market [5].

Furthermore, digital transformation should be viewed as an opportunity for innovation, not just a challenge. UMKM actors who embrace this mindset are more likely to succeed in adapting to digital platforms and finding new ways to enhance their products and services. By focusing on customer experiences and leveraging digital technologies for personalized services, UMKM can differentiate themselves in the market and build long-term relationships with customers [6].

e. Implications for Policy and Future Research

The findings of this study have significant implications for policymakers, business support organizations, and researchers. Policymakers in Gunungsitoli and similar regions should prioritize policies that address the digital divide, ensuring that UMKM have access to the tools and resources they



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need to adopt digital technologies. Additionally, further research is needed to explore how digital transformation impacts UMKM across different industries and regions, providing a deeper understanding of the factors that influence successful digital adoption.

5. Conclusions

This study provides a comprehensive analysis of the digital transformation of traditional markets into digital markets, focusing on the impact this change has on Micro, Small, and Medium Enterprises (UMKM) in Gunungsitoli City. The findings highlight both the challenges and opportunities that UMKM actors face as they attempt to adapt to an increasingly digital market environment.

a. Key Findings:

Adoption of Digital Technology: While many UMKM actors in Gunungsitoli recognize the potential benefits of digitalization, the adoption of digital technologies remains limited. A significant portion of UMKM actors still rely on traditional methods, with barriers such as lack of access to technology, limited technical knowledge, and uncertainty about the costs and benefits of digital platforms. **Competitiveness and Digitalization:** UMKM actors who have adopted digital technology, such as using social media and e-commerce platforms, reported positive results, including increased sales and broader market reach. However, those who have not embraced digital platforms are at risk of losing their competitive edge due to the growing dominance of larger, more established digital platforms.

Barriers to Digital Transformation: The primary barriers to digital adoption include limited internet access, high costs of digital tools, and insufficient support from the local community. These barriers significantly hinder the ability of UMKM to integrate digital technologies into their business operations effectively. **Strategies for Supporting Digital Transformation:** To overcome these barriers, UMKM actors suggested the need for more extensive training, improved access to digital infrastructure, and financial support to ease the transition to digital platforms. These suggestions align with the theories of Venkatesh et al. (2020) and Rahayu et al. (2021), emphasizing the importance of providing facilitating conditions such as education, resources, and community support.

b. Recommendations:

Policy Support: Policymakers in Gunungsitoli and similar regions should prioritize initiatives that improve digital infrastructure, such as affordable and reliable internet access, and offer training programs that help UMKM actors gain the necessary skills to effectively use digital platforms. **Institutional Support:** Business support institutions should collaborate with UMKM to provide practical digital tools, training sessions, and access to financial resources, ensuring that small businesses can successfully transition to digital operations.



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Further Research: Future research should explore how digitalization impacts UMKM in different sectors and regions, identifying more granular factors that influence technology adoption and digital competitiveness.

c. Conclusion:

In conclusion, the digital transformation of the market presents both challenges and opportunities for UMKM in Gunungsitoli. The study reveals that while many UMKM are aware of the benefits of digitalization, the lack of resources, knowledge, and infrastructure has slowed their adoption of technology. By providing the necessary support and creating an environment conducive to digital transformation, UMKM can enhance their competitiveness and ensure long-term business sustainability in the digital era.

6. Patents

This study does not involve any new patents or patentable technologies. However, the transformation of traditional markets into digital markets and the adoption of digital technologies by UMKM (Usaha Mikro, Kecil, dan Menengah.) may involve the development or use of proprietary tools, software, or systems that could be subject to patent protection in the future. Future research in this area may explore the potential for patenting innovative solutions developed by UMKM as they adapt to the digital marketplace. These innovations could include new e-commerce tools, digital marketing strategies, or supply chain solutions that improve efficiency and competitiveness in the digital economy.

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