

Digital Innovation in Subang MSMEs Increasing Productivity and Market Reach

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Abstract— *Micro, Small, and Medium Enterprises (MSMEs) are the backbone of the regional economy, including Subang Regency. Digital transformation is a challenge as well as an opportunity for MSMEs to expand their markets and increase their competitiveness. The importance of digital adaptation for MSMEs in Subang, strategies that can be applied, and the latest theories and practices in the world of digital marketing. Despite having great potential, most MSMEs still face challenges in utilizing digital technology as a tool to increase their competitiveness in the market. This journal also discusses the urgency of digital transformation for MSMEs in Subang Regency, from the importance of being present in cyberspace to relevant digital marketing strategies. By referring to the theory of digital transformation and modern marketing, this journal offers a practical approach to help Subang MSMEs shine in the digital era. This transformation is expected to be able to create new opportunities, increase efficiency, and expand market access, both locally and globally.*

Keywords— *MSMEs Subang Regency, Digital Transformation, Market Opportunities.*

I. INTRODUCTION

Subang Regency has great economic potential, especially through the MSME sector which includes culinary, crafts, and agribusiness. However, the challenges of globalization and technological developments require MSMEs to adapt to the virtual world. Based on data from the Ministry of Cooperatives and SMEs, more than 60% of MSMEs in Indonesia have utilized digital technology, but many have not been optimal in their application, especially in the regions.

MSMEs are the main drivers of regional and national economies, with significant contributions to Indonesia's Gross Domestic Product (GDP) and employment. In Subang Regency, the MSME sector reflects the diversity of culture and regional potential, such as processed specialties, traditional crafts, and the growing agro-tourism sector. However, although the number of MSMEs continues to increase, many business actors face challenges in continuing to grow amidst changes in the increasingly digital global business landscape.

One of the main challenges is the limitations in the use of information and communication technology. Many Subang MSMEs still use traditional marketing approaches, such as direct sales or word of mouth, which tend to limit market reach. In fact, the digital world offers unlimited opportunities

to expand the market, build brand image, and increase sales significantly.

According to the Technology Adoption theory (Davis, 1989), the desire to adopt new technology is influenced by the perception of ease of use and the perception of usefulness. This factor is relevant for Subang MSMEs, who need to be equipped with an understanding of how digital technology works and its benefits for their business. In addition, the Digital Business Ecosystem theory (Nachira et al., 2007) shows that the success of MSME digitalization is also influenced by the support of local ecosystems, such as local governments, technology providers, and business communities.

The increasing internet connectivity in Indonesia, including in the Subang area, opens up great opportunities for MSMEs to connect with consumers not only locally, but also nationally and globally. Digital skills training, utilization of social media, and presence on e-commerce platforms are strategic steps that must be taken. With the right approach, Subang MSMEs can overcome the obstacles to digital transformation and use cyberspace as a tool to compete, grow, and shine.

MSMEs (Micro, Small, and Medium Enterprises) are one of the sectors that play an important role in the Indonesian economy. Based on data from the Ministry of Cooperatives and SMEs, MSMEs contribute more than 60% to Gross Domestic Product (GDP) and absorb around 97% of the workforce in Indonesia. In Subang Regency, MSMEs have a strategic position as the driving force of the regional economy. The diversity of local products, ranging from handicrafts, agricultural products, to culinary specialties, shows great potential for development. However, the challenges faced by Subang MSMEs, such as limited market access, minimal technological literacy, and global competition, require a transformation in the way of doing business.

The digital era has brought about major changes in the way businesses are run. Consumers now rely more on the internet to search for information, compare products, and make purchases. According to a report by Riyanto, 2023, 77% of Indonesia's population are active internet users, with the majority using social media such as Instagram, TikTok, and Facebook to search for products or services. This condition creates a great opportunity for MSMEs to expand their market through their presence in cyberspace. Digital transformation

has become a necessity, not an option, for MSMEs who want to stay relevant and competitive in the modern market.



Fig. 1. Location of MSMEs Center Subang

However, the adoption of digital technology by Subang MSMEs still faces many obstacles. A study by McKinsey, 2021 stated that the main obstacles to digital transformation in the MSME sector are minimal digital literacy, limited capital for technology investment, and minimal infrastructure support. In addition, many MSMEs still consider digital marketing complicated and expensive, so they are reluctant to start it. In fact, with the right strategy, digital technology can be an efficient and effective tool to increase productivity, expand markets, and strengthen relationships with customers.

From a theoretical perspective, Digital Transformation (Westerman et al., 2014) emphasizes the importance of technology integration in business operations to create efficiency and increase competitiveness. Meanwhile, the Marketing 4.0 theory (Kotler et al., 2017) emphasizes that a marketing approach that focuses on digital engagement can strengthen consumer loyalty. For Subang MSMEs, the application of this theory can be done through practical steps such as utilizing social media, search engine optimization (SEO), and presence on e-commerce platforms such as Shopee and Tokopedia. In addition, the Omnichannel Marketing approach (Suriانشا, 2021) can be an important strategy to provide an integrated customer experience between online and offline channels.

The Subang Regency Government also has an important role in supporting this transformation. Digital training programs, providing incentives for MSMEs that switch to cyberspace, and providing adequate internet infrastructure throughout the Subang area are steps that need to be optimized. Through collaboration between the government, MSME actors, and the private sector, Subang MSMEs can shine in cyberspace, increase competitiveness, and have a positive impact on the regional economy.

By utilizing the digital world, Subang MSMEs can not only maintain their business continuity, but also expand their market reach to the national and global levels. This article discusses the urgency of digital transformation for Subang

MSMEs, strategies that can be implemented, and challenges that need to be overcome so that MSMEs in Subang Regency can shine and become competitive business actors in cyberspace.

The Digital Marketing Funnel Theory (Chaffey & Smith, 2022) shows that digital presence can help MSMEs increase brand awareness, build relationships with customers, and increase sales. However, adopting technology is not only about being present on the internet, but also about a planned strategy, content management, and understanding digital consumer behavior. With support from the local government, technology-based training, and collaboration between stakeholders, Subang MSMEs can make cyberspace a new arena to shine and compete.

II. RESULT AND DISCUSSION

Subang UMKM and Digital Transformation

MSMEs (Micro, Small and Medium Enterprises) have a very vital role in the Indonesian economy, including in Subang Regency, which also contribute to development sector economy local and absorption power work. However, in face global challenges and increasing competition tight, UMKM Subang, such as as in many area others, must do digital transformation for still survive and thrive. In the era of industry 4.0, digital transformation has become a necessary necessity implemented for increase Power competitiveness, efficiency operational, as well as open more market opportunities wide. This article discuss about How do SMEs in Subang cope? challenges and opportunities in the digitalization process, as well as importance adoption technology for progress economy local.

Challenges Faced by Subang MSMEs

Although there is opportunity big for utilise digital technology, many MSMEs in Subang are still face a number of challenges that hinder the digital transformation process. One of challenge main is lack of understanding and skills in utilise digital technology. Many UMKM players in Subang are accustomed to with ways traditional in operate business they, which causes difficulty in adapt with rapid changes in the digital sector. Some challenge main issues faced among others:

1. Limited Access to Technology

Even Though Subang is Located No Far from centers economy big like Bandung, still There is inequality in matter access technology, good from aspect digital infrastructure and availability supported devices business small and medium.

2. Digital HR Limitations Many MSME players in Subang have not... own adequate digital skills. Education and training limited digital skills become barrier for they for utilise technology that can increase efficiency and power compete.

3. Conservative Culture and Mindset Many MSMEs still reluctant do change or innovate with adopt technology new. Changes culture and mindset in the business world be one of the hardest thin faced, especially If added with challenge economy.

4. Limitations Adoption Funding technology need investment the beginning that is not a little. For some large UMKM in Subang, the costs required for purchase device hard, device software, and digital training becomes obstacle big. In addition, access to digital financing is also limited.

Opportunities and Benefits of Digital Transformation for Subang MSMEs

Although challenge the real, Subang UMKM has various opportunity big in the digitalization process that can utilized for overcome problems and improve performance business they. Some benefit main thing that can obtained from digital transformation includes:

1. Increase Efficiency Operational
With use system management based on technology, UMKM can automate Lots aspect operational, start from management inventory until system payment, which can increase efficiency and reduce cost operational.
2. Expanding Adoption Market Access digital technology opens up access for MSMEs to reach a wider market wide, both domestically and internationally international. E-commerce platforms, social media, and websites can used for market product in a way more extensive and effective.
3. Development Digital Technology Products and Innovations
provide chance for do more market research effective, understanding need consumers, as well as create product newer one relevant. Innovation This can create superiority competitive for MSMEs.
4. Improvement Experience Customers
Digital transformation enables MSMEs to increase service customer they through online platforms, systems more shipping fast, and more personal interaction with customers. This can increase loyalty customers and expand the customer base.
5. Access to Financing
Through digital technology, MSMEs can more easy access source financing, such as through crowdfunding platforms or digital loans that can help they in do investment for digital transformation.

Steps to Take to Drive Digital Transformation in Subang MSMEs

For ensure that UMKM in Subang can utilise potential digitalization, various party—good government, sector private, as well as institution education—must Work The same for push digitalization of MSMEs. Some steps that can be taken taken among others:

1. Digital Education and Training Government and institutions education must play a role in provide training and education more digital skills spacious and affordable for UMKM actors. Training This Can covering use of e-commerce platforms, social media, digital marketing, and systems management business cloud based.
2. Development Government Digital Infrastructure regions and sectors private must collaborate in develop adequate digital infrastructure, including fast and stable internet

network, and provision device technology that can accessed by MSMEs.

3. Financing for Digitalization
is Necessary There is policy or financing programs that make it easier for MSMEs to obtain the required capital for implement digital technology in business they. Financing This Can given with flower low or with more access easy.
4. Facilitating Access to Global Markets
for Governments and Institutions related Can help Subang UMKM to access global markets through provision of e-commerce platforms and digital promotions that are more integrated. In addition, the mentoring program in market overseas products are also very necessary.
5. Build A Collaborative Digital Ecosystem for Accelerate the digitalization process, it is important for create collaborative digital ecosystem between SMEs, government, companies big, and sector technology. Partnership This can cover various aspects, of training until provision infrastructure.

III. CONCLUSION

Digital transformation for MSMEs in Subang is steps that are not can avoided for ensure sustainability and power competition they are in an increasingly competitive market competitive. Although there is various challenges, benefits that can be obtained through digitalization is very big. Therefore, that's important for all over stakeholders interest For Work same and create supportive environment adoption technology, use encourage Subang MSMEs to more develop and innovate. Digitalization No only question technology, but also about change culture and mindset that can assisting Subang UMKM in to achieve success in this digital era.

1. Portrait of Subang UMKM

Subang Regency has advantages in the tourism, agriculture, and traditional crafts sectors. Unfortunately, many MSMEs still rely on conventional marketing. This is an obstacle in attracting the interest of young consumers who tend to use the internet to search for products. The number of micro and small enterprises (MSMEs) in Subang Regency in 2021-2022 was 18,014 units in 2021 and 16,958 units in 2022.

Integrated MSME data can help program implementers to find out the location and identity of business units, their business development, and the programs that have been accessed.

It is estimated that by 2024, the number of MSMEs in Indonesia will reach around 66 million and contribute 61% to gross domestic product (GDP).

2. The Importance of Digital Transformation

The Customer Journey 4.0 theory (Kotler et al., 2017) shows that consumer decisions today are heavily influenced by the information they find online. Thus, MSMEs that are not digitally present will have difficulty competing.

Strategic steps that can be taken by Subang MSMEs:

- Social Media Optimization: Creating engaging content on platforms like Instagram and TikTok.

- Registration on E-commerce Platforms: Utilizing marketplaces such as Shopee and Tokopedia to reach the national market.
- Leverage SEO and Digital Advertising: Make your business easier to find through Google or other advertising platforms.

3. Obstacles and Solutions

The main obstacles faced by Subang MSMEs in carrying out digital transformation are limited digital literacy, internet infrastructure, and capital. However, digital-based training such as the Digital Entrepreneurship Academy program from Kominfo can help overcome these challenges.

IV. CURENT THEORY DISCUSSION

A. Digital Transformation Theory (Westerman et al., 2014)

Underlines the importance of technology integration in business operations to improve efficiency and competitiveness.

B. Omnichannel Strategy (Suriانشa, 2021)

Referring to the integrated management of various marketing and sales channels, MSMEs in Subang can adopt this strategy to create a consistent consumer experience in both the virtual and physical worlds.

C. Social Media Engagement Theory (Mishnick & Wise, 2024)

Emphasizing that activeness and interaction on social media can increase customer loyalty and expand market reach. Digital transformation is key for MSMEs in Subang Regency to survive and thrive. Strategic steps such as utilizing social media, e-commerce platforms, and digital advertising must be a priority. Local government support, training, and collaboration with various parties are also needed to ensure the success of digital adaptation of MSMEs in Subang. With the right strategy, Subang MSMEs can shine in cyberspace and compete in the global market.

V. CONCLUSION

Digital transformation has become A inevitability for development of MSMEs in Indonesia, including in the Subang area. Adoption digital technology does not only increase efficiency operational, but also strengthens Power MSME competitiveness in face increasingly challenging market competitive. With utilise the right technology, SMEs can expand market access, improve experience customers, as well as increase productivity and quality product or services offered.

However, for can optimize potential digital transformation, MSMEs in Indonesia, including in Subang, are facing a number of challenges. Limitations in access technology, lack of digital skills adequate, and funding constraints become obstacle the main thing that needs to be done overcome. Therefore that, is needed collaboration between government, sector private, and institutions education For give training digital skills, support development infrastructure technology, and provide incentive for MSMEs to digital transformation.

With the right approach, support from various parties, and

integration effective technology, UMKM in Subang and throughout Indonesia can utilise opportunity digital transformation for increase Power competition they, reach sustainable growth, and become part important in global digital economy.

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[2] MSME participants in Subang

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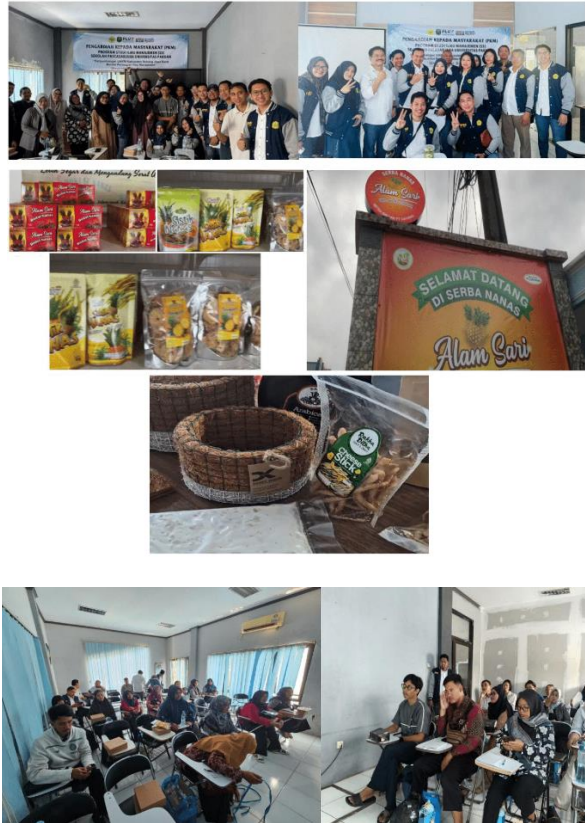


Fig. 2. Documentation of Comunity Services

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