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## **Digital Literacy for MSME Actors of Sidoarjo Food and Beverage Association (ASMAMINDA)**

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### **Abstract**

This study aims to investigate the importance of digital literacy in increasing the market competitiveness of Micro, Small and Medium Enterprises (MSMEs) in Sidoarjo Food and Beverage Association (ASMAMINDA). Using qualitative methods and case studies, this research provides insight into how to overcome obstacles that hinder sustainable economic growth and the long-term survival of MSMEs in the digital era. The results show that although digital opportunities exist, the adoption of digital skills among ASMAMINDA MSMEs is still low. The results demonstrate that digital literacy is not only a vital skill set enabling MSME participants to proficiently navigate the digital marketplace, but also a potent instrument for leveraging technological advancements to drive economic growth and sustainability in Sidoarjo District, renowned for its diverse economic activities and entrepreneurial vitality. This research offers a new perspective in the discussion on digital literacy and the application of digital technology in the local scope of MSMEs.

**Keywords:** Digital Literacy, MSMEs, Market Competitiveness, Sidoarjo Regency, Economic Development

### **Abstrak**

Penelitian ini bertujuan untuk mengetahui pentingnya literasi digital dalam meningkatkan daya saing pasar Usaha Mikro, Kecil, dan Menengah (UMKM) di Asosiasi Makanan dan Minuman Sidoarjo (ASMAMINDA). Dengan menggunakan metode kualitatif dan studi kasus, penelitian ini memberikan wawasan tentang bagaimana mengatasi hambatan yang menghambat pertumbuhan ekonomi yang berkelanjutan dan kelangsungan hidup jangka panjang UMKM di era digital. Hasil penelitian menunjukkan bahwa meskipun ada peluang digital, adopsi keterampilan digital di kalangan UMKM ASMAMINDA masih rendah. Hasil penelitian menunjukkan bahwa literasi digital bukan hanya keterampilan penting yang memungkinkan

pelaku UMKM untuk menavigasi pasar digital dengan baik, tetapi juga merupakan instrumen yang ampuh untuk memanfaatkan kemajuan teknologi guna mendorong pertumbuhan dan keberlanjutan ekonomi di Kabupaten Sidoarjo, yang terkenal dengan beragam kegiatan ekonomi dan vitalitas kewirausahaan. Penelitian ini menawarkan perspektif baru dalam diskusi tentang literasi digital dan penerapan teknologi digital di lingkup lokal UMKM.

**Kata kunci:** Literasi Digital, UMKM, Daya Saing Pasar, Kabupaten Sidoarjo, Pembangunan Ekonomi

## Introduction

In Sidoarjo district, situated within East Java province, the economic landscape is marked by a variety of activities and a heterogeneous population. The region has attained national acclaim for its robust entrepreneurial ethos, particularly among micro, small, and medium-sized enterprises (MSMEs). These enterprises are classified into micro, small, and medium categories based on criteria such as net worth, sales, and human resource count. The precise classification of MSMEs is determined by specific parameters, including investments in plant and machinery or equipment, as well as turnover limits (Razorpay, 2024). The collaboration between the local government, the business community, and other stakeholders has earned Sidoarjo the distinguished title of 'Indonesia's MSME City,' signifying its success in fostering local economic growth. This accomplishment highlights Sidoarjo's capability to cultivate a sustainable economic ecosystem, setting a benchmark for other regions in Indonesia. In the rapidly evolving digital era, it is increasingly imperative for businesses, particularly MSMEs, to adapt and flourish within the digital landscape. The advent of digitalization has introduced numerous innovations, presenting unprecedented opportunities for businesses to expand their reach, optimize operations, and enhance customer engagement through interactive and personalized experiences across various digital platforms.

The transition from traditional to digital business practices underscores the essential need for MSMEs to develop digital literacy skills. Digital literacy involves the proficient, safe, and responsible use of technology to access, evaluate, create, and communicate information. These skills are vital for businesses to thrive in a competitive market environment, enabling them to broaden their customer base, improve competitiveness, and achieve sustainable growth. As noted by (McCarthy, 2023), digital literacy encompasses a range of abilities, including absorbing, producing, and effectively sharing digital content. Digital literacy not only enhances daily activities but also plays a crucial role in the business domain. (Umboh & Aryanto, 2023) emphasize that digital literacy serves as an intermediary linking digital marketing competencies with MSME performance. This relationship enables MSMEs to navigate the digital world, implement digital marketing strategies, and enhance their marketing performance (Saragih & Ulum, 2022). The COVID-19 pandemic has further underscored the importance of entrepreneurial skills, financial literacy, and digital literacy in helping MSMEs sustain their operations during challenging times (Yanto et al., 2022).

Digital literacy is a multifaceted concept encompassing a wide range of skills and knowledge required to navigate the digital environment efficiently. This includes proficiency

in using digital devices to access, evaluate, create content, and engage in communication. The definition of digital literacy has evolved over time, incorporating aspects such as digital usage, competence, and safety (Sá et al., 2021). Proficiency in digital skills is crucial for MSMEs to enhance efficiency and ensure long-term viability. Research by Permadi et al. (2022) and Gunawan et al. (2023) has highlighted the significant influence of digital literacy on the financial well-being and performance of small and medium enterprises. These studies underscore the importance for MSMEs to enhance their digital literacy skills, indicating that digital literacy is critical to driving financial success and improving firm performance (Gunawan et al., 2023; Permadi et al., 2022).

Research by (Zahro, 2019) reveals that digital literacy skills among small businesses in Surabaya City are very high. The study found a positive correlation between online marketing competence and monthly sales turnover, as well as between participation in social media forums and annual net profit. Despite some challenges in fully utilising technology, respondents demonstrated a strong understanding of leveraging digital media for business purposes. This highlights the vital role of digital literacy in enhancing business profitability and advocates for additional training to optimise the use of digital media in small businesses.

Research by (Piu et al., 2023) focused on digital literacy socialisation among MSME operators on Kodingareng Island, South Sulawesi. Given the limited access and technological infrastructure on the island, MSME operators face significant challenges in adopting digital literacy. This study aimed to assist MSMEs in identifying and addressing these challenges and risks. The research findings showed high interest and engagement among the training participants, who responded positively to the proposed collaboration as partners in this community service initiative. This enthusiasm and participation underscore the relevance and importance of digital literacy for MSME actors on the island. The evaluation recommends the implementation of similar initiatives in the future, incorporating advanced materials for a comprehensive understanding and practical skills in digital literacy.

MSMEs, particularly in the food and beverage sector, play a crucial role in the regional economy, contributing to job creation, local economic growth, the preservation of local wisdom, increased competitiveness and investment, community income and welfare, and support for tourism (Sumartan & Wahyuddin, 2023). For instance, culinary complexes such as 'Java Street Food' in Nagari Sungai Duo demonstrate that MSMEs can enhance the income of local traders and create new economic opportunities. This success boosts purchasing power and overall community welfare. Food and beverage MSMEs also bolster the tourism sector by attracting tourists with unique and appealing local cuisine, increasing visitation and spending in the area. The role of food and beverage MSMEs in expanding the variety of cuisines and creating new products is fundamental to Indonesia's economic growth, especially in this rapidly growing industry. Through the concepts of creativity, adaptation, and sustainability, food and beverage MSMEs offer consumers a variety of choices while creating jobs and driving local economic development (Ahmad Kholik & Dewi Rahmi, 2023). The types of food and beverage MSMEs in Indonesia include traditional pastries, frozen foods, regional specialty drinks, regional souvenirs, culinary ice, spice-based drinks, and chips (Digides, 2021).

In Sidoarjo, there exists an organisation dedicated to the development of the food and beverage industry, known as the Sidoarjo Food and Beverage Association (ASMAMINDA). ASMAMINDA is actively involved in training and upgrading the skills of its members, promoting products through exhibitions, and developing marketing networks. ASMAMINDA unites MSMEs in the food and beverage industry with the aim of enhancing their skills and capabilities, promoting the marketing and visibility of members' products, and advocating for policies that facilitate the expansion and long-term sustainability of food and beverage businesses (Chofifah & Rahayu, 2023). In the digital era, ASMAMINDA members have significant opportunities to increase market penetration and optimise operational efficiency by leveraging digital technology. However, challenges such as limited availability of technological resources, inadequate digital capabilities, and intense market competition are barriers to fully utilising this potential.

This research serves as a comprehensive guide for ASMAMINDA members to effectively address these challenges. It aims to motivate members to understand and utilise various digital channels, ranging from social media to e-commerce, to increase market exposure, strengthen branding, and optimise business operations. Additionally, the research emphasises that digital transformation is imperative in the contemporary business environment. By employing a well-designed plan and executing it efficiently, ASMAMINDA members can transform obstacles into opportunities, extend their market reach, enhance operational effectiveness, and solidify their role as leading players in the local and national food and beverage industry. By improving digital literacy, ASMAMINDA aims to drive inclusive and sustainable economic growth for its members and the broader community.

In the contemporary business landscape, proficiency in digital literacy is an essential competency for MSMEs to thrive. By enhancing expertise in digital skills, MSMEs can achieve greater autonomy in business operations, financial stability, and overall efficiency. Investing in projects that promote digital literacy and fostering a culture of digital literacy among MSMEs is critical to ensuring sustainable growth and success in the digital age. MSMEs play a vital role in the Indonesian economy by contributing to state revenues, fostering a more equitable economic structure, and driving enterprise growth (Agung & Oka, 2023).

The Sidoarjo Food and Beverage Association (ASMAMINDA) plays a strategic role in enhancing the skills and capabilities of its members, promoting product marketing and visibility, and advocating for supportive policies. By leveraging digital technology, ASMAMINDA members can increase market penetration, optimise operational efficiency, and compete effectively in the digital economy. The association represents a strategic partnership of MSMEs in the culinary industry, playing a crucial role in shaping their economic future. In the digital age, ASMAMINDA members have significant opportunities to increase market penetration and optimise operational efficiency through digital transformation, which is critical to success in the contemporary business landscape.

## Methods

This research uses qualitative research methodology. Qualitative research is used to research on natural object conditions, where the researcher is the key instrument. Data collection techniques are triangulated (combined), data analysis is inductive / qualitative, and qualitative research results emphasize meaning rather than generalization (Sugiyono, 2019). The definition of qualitative research according to Sugiyono also includes several important characteristics:

1. Conducted in natural conditions: Qualitative research is conducted directly to the data source, with the researcher as the key instrument.
2. Data is descriptive: The data collected is in the form of words or pictures, so it does not emphasize numbers.
3. Inductive data analysis: Data analysis is done inductively, looking for themes and patterns, and choosing what is important and what will be studied.

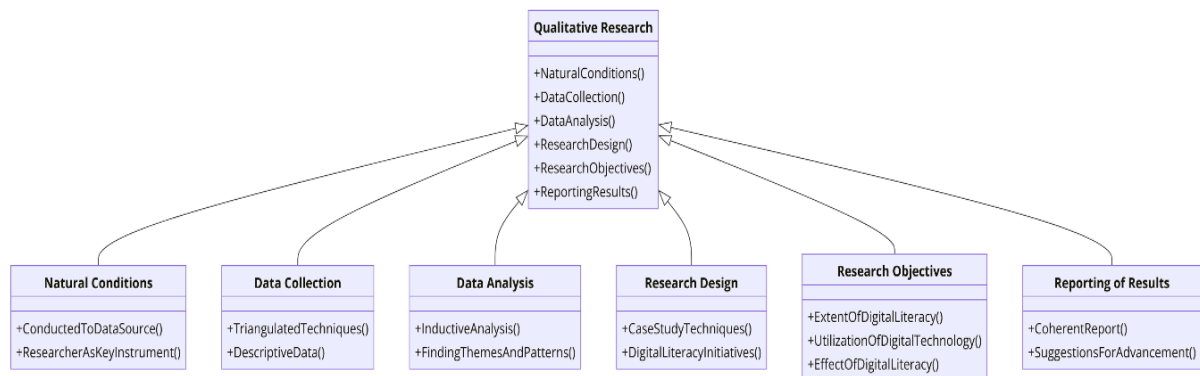


Figure 1. Research Flow Chart

## Research Design

Conducted qualitative research using case study techniques by selecting several ASMAMINDA MSMEs representing different levels of digital literacy. A compilation of case studies showcasing effective digital literacy initiatives in comparable situations was compiled. These case studies provide a framework for identifying successful digital tools and techniques that can be used for the food and beverage industry in Sidoarjo.

## Data Collection

Data was collected by analyzing digital marketing documents, which included social media posts, websites and online campaigns.

## Research Objectives

1. This study aims to determine the extent of digital literacy among MSME players who are members of the Sidoarjo Food and Beverage Association (ASMAMINDA).
2. Understand the utilization and understanding of MSME players in utilizing digital technology to promote their products.
3. Assess the effect of digital literacy on the marketing efficiency of MSME products.

## Reporting of Results

Provide a coherent report on the research results to improve the understanding of digital literacy for ASMAMINDA MSMEs, along with suggestions for the advancement of product marketing plans.

## Results and Discussion

### Development of MSMEs in Indonesia

Micro, Small, and Medium Enterprises (MSMEs) serve as critical economic drivers in developing nations, notably including Indonesia. The substantial contribution of MSMEs to the Indonesian economy is evidenced not only by their enhancement of the Gross Domestic Product (GDP) but also by their significant role in labor absorption. Empirical evidence indicates a consistent growth trajectory in the MSME sector over the past five years, underscoring their capability to invigorate the national economy and foster economic development in Indonesia.

*“The Minister of Finance, Sri Mulyani Indrawati, has mandated that all divisions within the Ministry of Finance enhance the management of financial resources allocated to the MSME sector. Acting in her capacity as the State General Treasurer (BUN), the Ministry of Finance is tasked with optimizing the utilization of these financial resources to achieve a substantial positive impact on MSMEs. “Our objective is to ensure that our efforts expending time, exerting authority, and utilizing the resources of the State Budget yield satisfactory results,” stated the Minister during the opening of the Focus Group Discussion (FGD) titled “Synergy for MSME Empowerment” (Junaidi, 2023).*

According to the Ministry of Cooperatives and Small and Medium Enterprises (SMEs), the number of MSMEs in Indonesia has reached an impressive 64.2 million units, contributing 61.07% to the Gross Domestic Product (GDP), which is equivalent to 8,573.89 trillion rupiah. This substantial contribution underscores the vital role of MSMEs in the national economy, including their capacity to employ approximately 117 million individuals, representing 97% of the total workforce. Additionally, MSMEs account for 60.4% of total national investment (Junaidi, 2023).

In a strategic move to bolster the growth and development of MSMEs, the Indonesian government has introduced tax incentive policies aimed at alleviating the financial burdens faced by MSME employees, particularly concerning Income Tax Article 21 (PPh 21). These policies provide incentives through a final Income Tax (PPh) rate of 0.5%, borne by the government, thereby exempting MSME taxpayers from making tax deposits related to their business and from experiencing tax withholdings or collections upon receiving payments. Furthermore, MSMEs benefit from incentives related to Income Tax Article 22 for imports. These measures form part of a broader governmental strategy to stimulate economic growth, enhance the competitiveness of small and medium enterprises, and improve the welfare of workers within this sector (Sasongko, 2020).

The development of MSMEs in Indonesia is shaped by multiple factors contributing to their expansion. A comprehensive analysis of various studies highlights that significant drivers of MSME growth include the adoption of technology and the utilization of information and communication facilities. Integrating technology into MSME operations not only boosts efficiency but also extends their market reach. Concurrently, the incorporation of information and communication tools enhances access to pertinent information and improves communication with customers and suppliers (Yusri. et al., 2020).

### **The Potential of MSMEs in Sidoarjo Regency**

The potential of Micro, Small, and Medium Enterprises (MSMEs) in Sidoarjo District, East Java, is not merely reflected in their scale but also in their impressive diversity, which mirrors the prosperity and variety of local resources as well as the boundless creativity of the population. Recognized as one of the most dynamic districts in East Java, Sidoarjo harbors substantial economic potential that is deeply rooted in its MSME sector. This potential is significantly bolstered by its strategic geographical proximity to Surabaya, the economic and business epicenter of East Java, along with its accessibility to crucial infrastructure, including the port and international airport. Sidoarjo is celebrated for several key MSME sectors, which include the following (Rahmadani & Subroto, 2022):

1. **Batik Industry:** The district has cultivated a distinctive batik industry, characterized by unique motifs that encompass both written and stamped batik. These motifs often reflect the local culture and wisdom, underscoring the rich heritage and artisanal skills of the region.
2. **Leather Handicrafts:** Numerous villages within Sidoarjo are acclaimed for their leather craft production, which includes items such as bags, shoes, and wallets. These leather products are not only highly sought after in the local market but have also made significant inroads into international markets.
3. **Traditional Food and Beverages:** The culinary sector of MSMEs in Sidoarjo is highly developed, offering superior products like Bandeng Juwana (milkfish without thorns), Sambel Pecel, and Prawn Crackers. These products cater to both local and export markets, showcasing the region's rich culinary tradition.
4. **Agriculture and Fisheries:** There is considerable potential within the agriculture and fisheries sector in Sidoarjo, encompassing activities such as fish and shrimp farming, as well as the cultivation of agricultural products like mangoes and rice. These products support the raw material needs of the food and beverage industry, further reinforcing the economic importance of this sector.
5. **Other Handicrafts:** Sidoarjo also boasts a diverse range of other handicrafts, including ceramics, woven bamboo, and various decorative items. These crafts highlight the rich cultural heritage and creative ingenuity of the local community, contributing to the district's vibrant MSME landscape.

The economic significance of MSMEs in Sidoarjo is amplified by their capacity to tap into both local and international markets, thereby fostering economic growth and diversification. The strategic location and robust infrastructure of Sidoarjo provide a solid foundation for the continued expansion and innovation within its MSME sector, making it a pivotal player in the regional economy (Rahmadani & Subroto, 2022).

## **MSME product marketing system in Sidoarjo Regency**

The marketing system for Micro, Small, and Medium Enterprises (MSMEs) products in Sidoarjo District, renowned for its diverse and unique local products, has experienced a significant transformation in recent years. Driven by the desire to expand their market reach and enhance their competitiveness, MSME entrepreneurs in Sidoarjo have actively embraced contemporary trends and technologies in marketing. The following are key aspects of the marketing system for MSME products in Sidoarjo (Pratama et al., 2023):

1. **Digital Marketing and Social Media:** The increasing penetration of the internet and the widespread use of social media in Indonesia have prompted MSMEs in Sidoarjo to integrate digital marketing into their strategies. Platforms such as Instagram, Facebook, and WhatsApp have become essential tools for marketing products, engaging with customers, and facilitating direct sales to consumers.
2. **E-commerce and Online Marketplaces:** MSMEs in Sidoarjo are increasingly leveraging e-commerce platforms and online marketplaces to broaden their market reach both nationally and internationally. Popular platforms such as Tokopedia, Shopee, and Lazada are commonly utilized to enhance their market presence and drive sales.
3. **Collaboration with Local Government and Institutions:** The local government of Sidoarjo, through its MSME development programs, frequently organizes events, exhibitions, and bazaars that provide MSMEs with opportunities to market their products. Collaborations with government agencies, such as the Ministry of Cooperatives and MSMEs, along with related institutions, facilitate the expansion of MSME marketing efforts.
4. **Brand and Packaging Development:** MSMEs in Sidoarjo are increasingly recognizing the importance of brand development and attractive packaging design to enhance product competitiveness. Efforts to improve branding and packaging are aimed at making products more appealing and distinguishable in the market.
5. **Offline Marketing and Distribution:** Despite the rise of digital marketing, offline marketing through physical stores, traditional markets, and distribution to resellers or agents remains a vital strategy. This approach caters to the preferences of some consumers who favor direct shopping experiences.
6. **Participation in Events and Exhibitions:** MSMEs in Sidoarjo actively participate in various events and exhibitions at different levels to showcase and promote their products. These events provide valuable platforms for networking, brand exposure, and customer engagement.
7. **Loyalty and Promotion Programs:** Some MSMEs implement loyalty programs and promotional activities, such as discounts, vouchers, or gifts, to enhance customer retention and foster long-term customer relationships.

These strategic initiatives underscore the dynamic and adaptive nature of the marketing system for MSME products in Sidoarjo, enabling these enterprises to thrive in an increasingly competitive market environment (Pratama et al., 2023).



## **The role of MSMEs selling food and beverages in economic growth in Sidoarjo**

Among the 206,000 Micro, Small, and Medium Enterprises (MSMEs) in Sidoarjo, a significant portion is devoted to the food and beverage industry, which has become a beloved aspect of the community's culinary ventures. Food and Beverage Centers, dispersed across various sub-districts in Sidoarjo Regency, including Sedati, Tanggulangin, Buduran, Tarik, and Wonoayu, host 14 MSMEs, exemplifying the region's rich and diverse culinary heritage. Of these, 10 MSMEs concentrate on food production while 4 specialize in beverages, highlighting the critical role of the food and beverage sector in Sidoarjo's local economic ecosystem. This sector significantly contributes to culinary diversification, economic growth, and job creation.

The products from these MSMEs not only cater to local tastes but also possess the potential to appeal to broader markets. The food products offered are varied, encompassing traditional snacks, processed fish and meat, as well as cakes and sweets that reflect the richness of local recipes and culinary traditions. Beverage-producing MSMEs provide a range of options, including health drinks made from local ingredients, traditional fruit syrups, and innovative refreshing beverages. According to Tjadra (2018), the growth of food and beverage MSMEs as a culinary business has increased annually by approximately 10 percent, driven by higher market demand. This growth has led to the proliferation of food and beverage businesses throughout Sidoarjo Regency, offering superior products sought after by many consumers. Examples of popular items include lontong kupang, rujak cingur, lontong balap, shrimp crackers, rawon, taro chips, mixed ice, ice dawet, and other local food and beverage specialties (Rahmadani & Subroto, 2022).

The development and promotion of MSMEs in the food and beverage sector are vital not only for bolstering the local economy but also for preserving culinary heritage and supporting the sustainable use of local raw materials. Initiatives aimed at enhancing the production, marketing, and distribution capacities of these MSMEs are essential for ensuring their competitiveness in broader markets and capitalizing on export opportunities.

### **ASMAMINDA is utilised as a method for fostering the expansion and long-term viability of MSME participants in the food and beverage industry in Sidoarjo**

The Sidoarjo Food and Beverage Association (ASMAMINDA) is a consortium that unites Micro, Small, and Medium Enterprises (MSMEs) operating in the food and beverage industry within Sidoarjo, East Java. ASMAMINDA's primary objectives encompass enhancing the skills and capabilities of its members, promoting the marketing and visibility of their products, and advocating for policies that support the growth and long-term sustainability of food and beverage businesses in the region. Additionally, ASMAMINDA aims to improve product quality, broaden market presence, and strengthen the digital skills of its members through collaboration, training, and joint projects, thereby enabling them to compete effectively in the digital economy (Chofifah & Rahayu, 2023). Members of ASMAMINDA produce a diverse array of food and beverage items that exemplify the culinary heritage of Sidoarjo. The following are some of their notable products:

#### Food Products:

1. Fish Crackers: A signature product, available at approximately Rp 30,000 for a 500-gram package.
2. Prawn Petis: A traditional Javanese condiment priced at Rp 200,000 for a 200-gram jar.
3. Kuping Gajah: A traditional snack sold in 300-gram packs for Rp 38,000.
4. Terasi: A 60-gram box of shrimp paste, essential in Indonesian cuisine, retailing at Rp 8,000.
5. Smoked Milkfish: Milkfish preserved through smoking, commonly served as a side dish.
6. Kupang Crispy: Crispy fried shellfish offering a distinctive flavor.

#### Beverage Products:

1. Beras Kencur: An herbal drink available in various bottle sizes, priced at Rp 20,000 for large bottles and Rp 6,000 for small bottles.
2. Kunir Asam: Another herbal drink, available in both large and small bottles, priced similarly to beras kencur.
3. Processed Salted Eggs: These are available in various processing methods such as smoked, oven-baked, fried, and steamed, with a production capacity of 30,000 eggs.

In the digital era, members of the Sidoarjo Food and Beverage Association (ASMAMINDA) have significant opportunities to enhance market penetration and optimize operational efficiency through the adoption of digital technology. However, ASMAMINDA has not yet fully leveraged this potential. The inability to keep pace with the latest digital advancements can place MSMEs at a disadvantage compared to more adaptive and innovative competitors, thereby diminishing their market share and limiting their growth prospects. This gap in digital expertise can also adversely affect their reputation and brand image, as modern consumers often view businesses without a robust digital presence as less professional or trustworthy. Over time, this deficiency in digital skills may exacerbate the digital divide between MSMEs and larger enterprises, creating further barriers to market entry and hindering efforts at product or service diversification (Chofifah & Rahayu, 2023).

Addressing the deficiency in digital understanding and skills is a multifaceted endeavor that necessitates a comprehensive and organized approach. This challenge must be addressed with utmost seriousness and collaborative efforts from various stakeholders, including business associations such as ASMAMINDA, educational institutions, and the Micro, Small, and Medium Enterprises (MSMEs) themselves. A deep understanding of digital literacy is essential; by enhancing this understanding, MSMEs can be thoroughly trained to utilize digital technology more effectively. This training should extend beyond the use of social media or e-commerce platforms and encompass the integration of digital technology into all facets of business operations, including inventory management, accounting, marketing, and customer service. Such a holistic approach is critical for ensuring that MSMEs can fully leverage digital tools to improve efficiency, competitiveness, and growth potential.



Figure 2. Documentation of the activities of the academics of Dr. Soetomo University Surabaya in collaboration with Surabaya Communication and Informatics Office (Dinkominfo Surabaya)

Dr. Soetomo University is a premier institution in Indonesia, has garnered numerous accolades across various domains, including research, student achievements, and community service. In its commitment to fostering digital awareness and enhancing digital marketing capabilities among MSMEs, Dr. Soetomo University Surabaya collaborates with Surabaya Communication and Informatics Office (Dinkominfo Surabaya) to deliver comprehensive training on Digital Literacy and Marketing to ASMAMINDA administrators as part of its community service initiatives. This program aims to equip participants with advanced digital literacy and marketing skills, thereby improving the overall quality and competitiveness of their businesses and organizations. Through these efforts, it is anticipated that the participants will be better prepared to integrate digital technologies into their operations, driving business growth and organizational development.

By enhancing digital literacy, MSME participants within ASMAMINDA can significantly extend their market reach beyond traditional geographical limitations, thereby unlocking opportunities to attract new customers at local, national, and even international levels. This expansion can lead to increased turnover and profits for MSME operators, as well as inspire more entrepreneurs to engage in the MSME sector. Furthermore, by leveraging appropriate digital tools and applications, these businesses can enhance operational efficiency, reduce costs, and boost productivity. These improvements are crucial factors in enhancing competitiveness and profitability (Sudrajat et al., 2021).

## Discussion

At present, food and beverage MSME operators in Sidoarjo, who are affiliated with ASMAMINDA, have the capability to leverage social media platforms such as Facebook and Instagram for product promotion. ASMAMINDA facilitates opportunities for these MSME operators across various regions within Sidoarjo Regency to advertise and market their processed products. However, research indicates that the number of followers and the level of engagement on these social media accounts remain significantly low. The following are examples of MSME products uploaded via ASMAMINDA's social media platforms:



Figure 3. Kupang Krispi products of ASMAMINDA MSME members

Figure 3 above depicts a snack product processed by one of ASMAMINDA's MSME members. The snack, kupang krispi, is made from small mollusks commonly found along the beach. The production of kupang krispi not only offers a delectable alternative snack but also bolsters the local economy by utilizing indigenous natural resources. The following section outlines some of the challenges encountered from a digital literacy and marketing perspective:

1. Image Sharpness: The visual aesthetics of the posts are compromised by insufficient clarity and resolution, potentially failing to capture consumers' attention and encouraging interaction with the content or prompting clicks on links.
2. Engagement: The product received minimal engagement, evidenced by only one or two likes and the absence of comments, indicating a lack of consumer interaction.
3. Content Strategy: The current approach of incorporating direct links in posts may not be the most effective strategy. Employing captivating visuals and engaging descriptions within the feed is likely to be more successful in attracting and retaining consumer interest.

The following are essential procedures concerning comprehensive marketing knowledge that can be implemented to address the issues depicted in the figure through the application of digital literacy:

### **Image Sharpness**

1. Capture new images of the product using a high-quality camera or smartphone under optimal lighting conditions to achieve superior definition. Ensure that the focus is adjusted accurately to prevent blurry photos.
2. The current image exhibits a degree of blurriness. High-resolution and clear photos are crucial for effective product representation. Utilize a camera with a high resolution and maintain optimal lighting conditions to clearly capture product details and create an appealing visual presentation.

3. Provide a compelling narrative that connects the product to its origin or destination. Arranging food products, such as fish and nuts, against the backdrop of a dining table or kitchen can enhance their visual appeal.
4. Ensure that brand colors, fonts, and logos are consistent and easily recognizable. Although existing images incorporate brand features, they generally lack prominence.
5. To improve photo clarity, utilize editing software such as Adobe Photoshop or photo editing apps on smartphones (Schulte et al., 2022).

## **Engagement**

To enhance user engagement, encourage responses by posing questions in product posts or sharing intriguing information about the product that stimulates consumer comments (Frohock et al., 2022).

- Example question sentences:
  1. What's your favorite nighttime snack? Have you tried adding Kupang Krispy Snacks to your popcorn mix? Share your favorite snack combination with us!"
  2. What's the most unusual way you've incorporated Kupang Krispy into your favorite meal? Ever tried sprinkling it on ice cream? Let us know in the comments section!"
- Sample sentence of interesting facts about Kupang Krispy snacks:
 

"Fun Fact: Our Kupang Krispy snacks are not only delicious but also rich in protein. It's a crunchy way to get essential nutrients for your body. How do you creatively incorporate Kupang Krispy into your diet?"

Hosting giveaways, contests, or polls that require active audience participation. Businesses can leverage social media strategies such as giveaways and relevant content publishing to actively engage their followers and boost overall user interaction. By utilizing digital technology and social media platforms, companies can effectively engage with clients, build connections, and foster stronger relationships with consumers (Kurniawan et al., 2022; Tacheva et al., 2022).

- Examples of giveaway sentences:
  1. We are hosting a giveaway of delicious hampers from Kupang Krispy Snacks for one lucky winner! To enter, like this post, share it to your story, and comment with #KupangSnackTime, telling us why you love Kupang Krispy Snacks!"
  2. Enter our giveaway! Win a month's supply of Kupang Krispy Snacks! How to enter: Like this post, tag 3 friends, and tell us your favorite way to enjoy our crispy snacks in the comments section below!"

## **Content Strategy**

1. Develop clear, concise, and persuasive product descriptions that accurately reflect the content of each image. These descriptions can provide context and engaging information, encouraging consumers to learn more about the products (Putri, 2023).
  - An example of a short, clear, and engaging product description:

"Kupang Crunchy Snacks: Where health meets deliciousness. Our crunchy peanuts are not only a treat for your taste buds but also a nutritious source of calcium and iron. Enjoy them straight from the pack or get creative and sprinkle them on your food for an extra crunch!"

- Call-to-action sentence:  
"What are you waiting for? Hit 'like' if you're ready to add some crunch to your day with Kupang Crispy Snacks. Order now and satisfy your healthy snack cravings!"
2. Utilize the photo album feature to categorize product images effectively, ensuring that users can navigate through them easily without confusion.
  3. Enhance the visibility of your posts by employing SEO tactics such as incorporating relevant keywords or hashtags into the product descriptions (Caldeira, 2023).
- Examples of SEO strategies for crispy snack products:
    - a. Target health-conscious consumers seeking nutritious options by using phrases such as "healthy snacks," "crunchy nuts," and "traditional delicacy." Regional mentions like "Sidoarjo Istimewa" help connect shoppers looking for local specialties or goods.
    - b. Use hashtags to increase the likelihood of being discovered in Facebook searches and participate in broader discussions or trends related to food, health, and local cuisine. Descriptions can include hashtags like #HealthyFood, #SnackTime, #CrunchySnack, #IndonesianFood, #KupangKrispy, and #SidoarjoDelights.



Figure 4. Milkfish products of ASMAMINDA MSME members



Figure 5. Chili products of ASMAMINDA MSME members

Figures 4 and 5 above depict ASMAMINDA members' MSME products, specifically barbecued milkfish without thorns and smoked milkfish sauce. The unique feature of this thornless fish product can significantly enhance its brand reputation. However, the visual appeal is diminished due to its simple plastic packaging, which reduces the product's attractiveness, and the lack of information on usage or consumption, which is crucial for effective food marketing.

The photograph of the fish lacks vitality and organization, negatively impacting the product's visibility. Additionally, the image exhibits some blurriness, which compromises the effectiveness of food marketing. The social media post garnered a few likes but no comments, indicating insufficient consumer engagement and highlighting the need for improved digital literacy to enhance the product's marketing effectiveness. The following is a breakdown of appropriate strategies to address these issues (Putri, 2023):

### **Product Presentation:**

1. Position the fish in the center of the frame, preferably on a plate or wooden cutting board, to provide context and indicate that it is ready to be enjoyed.
2. Include decorative embellishments or accessories relevant to the preparation or consumption of the product. To enhance the perception of freshness and flavor, one can strategically place lemon wedges, herbs, or spices around the fish.
3. If the packaging design on the left is very important, ensure that it is displayed in a more prominent and distinct manner. Ensure that the brand name and other important text are clearly visible. Consider positioning the packaging in an upright or horizontal orientation within a clear line of sight.
4. Instead of choosing a plain white surface, opt for a background that harmonizes with the goods. An understated and complex surface can increase the dimension of the image without distracting from the product being displayed.
5. Utilize natural light or soft artificial lighting to create a comfortable and welcoming atmosphere. To enhance the visual appeal of the product, it is important to minimize harsh shadows and achieve uniform lighting.
6. Utilizing a camera with a high level of resolution to accurately capture the intricate features of the product, ensuring that the texture of the fish, the chili sauce and the color of the fish and red sauce packaging are sharp and attractive.

The following is an example of a product photo that can be used to enhance the brand image and marketing of Bandeng Kripsi combined with its chili sauce product:



Figure 6. The example of good product photo

Figure 6 above features bright lighting, ensuring that all elements of the dish are clearly visible. Effective lighting enhances the appeal of the food, making it appear fresh and

appetizing. The image composition is balanced and visually pleasing. The food items are arranged to highlight the main dish (grilled fish) while complementing it with side dishes and sauce. The use of natural props, such as wooden bowls and cutting boards, contributes to a traditional and authentic aesthetic, appealing to customers who value traditional cuisine and home-cooked meals. The overall arrangement of this image creates an inviting and appetizing atmosphere, potentially encouraging prospective customers to try the product.

## Engagement

1. Crafting engaging captions that encourage active participation from your followers can significantly enhance social media platform engagement. Consider posing questions on topics of interest or soliciting opinions on specific subjects. This approach not only elicits reactions but also increases consumer interaction with the content (Harrison & Kwon, 2023).
  - Below are some text suggestions to foster engagement with consumers:
    - a. "Fresh out of the oven! How do you season your Bandeng Krispi? Share your secret seasoning with us! #CookingTime #FoodieTalk".
    - b. "Crispy milkfish is even more delicious with the right side dish. What would you pair with crispy milkfish? Let's hear your best culinary combinations! #FoodIdeas #YourTurn".
2. Maintaining a regular posting schedule and selecting times when the majority of followers are active is crucial for optimizing reach and interaction on social media platforms. Consistency in posting, along with understanding and adjusting the timing of posts to align with peak follower activity, is imperative. This can be achieved using Social Network Analysis (SNA) tools provided by social media networks, which allow users to observe the times when followers are most active and engaged. By publishing during these periods of high user engagement, the likelihood of receiving increased views, likes, and comments is enhanced, thereby boosting the visibility and impact of the content (Aji Pranaya, 2023).
3. For instance, the optimal time to share food and grocery content on Instagram is during weekday afternoons between 2 and 3 pm, when consumer engagement is highest. Thursdays and Fridays are particularly effective, while Saturdays and Sundays can still yield significant engagement despite a general decline over the weekends (Shareablee, 2021).

## Captions and Hashtags:

To enhance product marketing on social media, it is essential to craft a compelling narrative that emphasizes the unique benefits of the product (Jin et al., 2019). Employ relevant hashtags to broaden the reach of your content, combining both popular and niche hashtags to target specific audiences effectively. Popular hashtags increase visibility, while niche hashtags attract more specialized groups with a higher interest in the product. Additionally, provide a contact person for placing orders.

- An example of a concise, engaging product description:

"Discover the rich and authentic flavors of Sidoarjo with BANDENG CRISPY WITHOUT THORNS, oven-baked to perfection and paired with spicy and delicious *sambel bandeng asap*. Enhance your dining experience with a tradition in every bite. Our milkfish is



meticulously prepared to offer the best of Indonesian flavors. Don't miss out on this culinary delight! Order Now."

#TasteofSidoarjo #IndonesianFood #BandengCrispy #OvenRoastedDelicacy  
#IndigenousTaste #KulinerTradition #FishLovers #LocalCulinary

## Conclusion

This study underscores the critical role of digital literacy in enhancing the market competitiveness and long-term sustainability of Micro, Small, and Medium Enterprises (MSMEs) within the Sidoarjo Food and Beverage Association (ASMAMINDA). The results demonstrate that digital literacy is not only a vital skill set enabling MSME participants to proficiently navigate the digital marketplace, but also a potent instrument for leveraging technological advancements to drive economic growth and sustainability in Sidoarjo District, renowned for its diverse economic activities and entrepreneurial vitality. The findings of this study highlight several important conclusions as follows:

1. **Enhancing Digital Literacy:** MSME participants in ASMAMINDA demonstrate a wide range of digital skills, which directly influence their market performance and growth potential. Improved digital literacy can facilitate more effective use of modern marketing tools and platforms, leading to significant enhancements in operational efficiency and consumer outreach.
2. **Barriers to Digital Adaptation:** Despite the clear benefits, many MSMEs encounter significant challenges in adopting digital technology. The primary obstacles include inadequate access to technological resources and a lack of comprehensive digital training programs. These deficiencies hinder their ability to fully exploit the opportunities offered by the digital market.
3. **Strategic Implications for Economic Development:** The report underscores the necessity for coordinated efforts from various stakeholders, including local governments, educational institutions, and business associations, to cultivate a robust digital environment. It advocates for the development of tailored educational programs and the provision of adequate resources to enhance the digital literacy of MSME participants.

ASMAMINDA has implemented a digital literacy program specifically for MSMEs, partnering with technology companies to upgrade digital tools, improve infrastructure, and offer financial incentives to encourage adoption. This initiative aims to address digital challenges and foster a more inclusive and technologically proficient MSME environment in Sidoarjo District.

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