

MSMES' Digital Competence and Financial Literacy Analysis in East Java, Indonesia

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Abstract

MSMEs play critical role for Indonesian economy as they make up 99.99% of national business. However, in the current digital era, their digital skills and financial literacy are restricted. This paper's primary objective is to investigate the financial literacy and digital competency of Indonesian MSMEs, specifically in the province of East Java, through the application of a SWOT (strengths, weaknesses, opportunities, and challenges) analysis. The province of East Java's 507 MSMEs that have embraced digitization and are spread across 38 districts/cities (kabupaten/kota) provided survey data for this study. The characteristics of MSMEs, as outlined in four SWOT spectrums, highlight the benefits and drawbacks for MSMEs in East Java with regard to their digital competency and financial literacy. Based on the results of the analysis, 15 strategies can be a reference for stakeholders in improving the digital competence and financial literacy of MSMEs.

Keywords: *SWOT (strengths, weaknesses, opportunities, and challenges) analysis, MSMEs.*

INTRODUCTION

The number of MSME units that make up 99.99% of all businesses in Indonesia shows that MSMEs are critical to the country's economy. MSMEs have also taken on a sizable number of workers, accounting for 96.9% of all national employment. Additionally, MSMEs make up a significant portion of the economy, contributing 60.5% to the GDP (Kemenkop UKM, 2021). MSMEs have rescued the Indonesian economy from catastrophe on multiple occasions. For instance, MSME enterprises were able to survive through the 1997–1998 financial crisis, when the rupiah's value against the US dollar dropped by up to 200% and served as the catalyst for the national banking crisis (Maksum et al., 2020). During the 2008 financial crisis, MSMEs also showed resilience and preserved Indonesia's economic growth (Tambunan, 2018).

On the other hand, in this digital era having qualified digital competence and financial literacy is critical for MSMEs to enhance their business performance as well as to remain relevant and competitive. The adoption of digital technology will have a number of advantages, such as the ability to lessen the impact of external crises and to significantly alter business operations by offering SMEs a better business model (Khalil et al., 2022). Furthermore, digital technologies can significantly and positively impact the economic and social values of SMEs, which ultimately has an impact on SMEs' performance

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(Vrontis et al., 2022). Furthermore, Chege and Wang (2019) stated that utilizing digital technology grants SMEs additional market access both locally and worldwide as well as reduces transaction costs, expands the options available to consumers, and enhances price transparency.

In addition to digital competence, financial literacy also plays a significant role in the performance of SMEs. The success of an enterprise is largely dependent on how the business draws, allocates, uses and manages the funds. According to Agyapong and Attram (2019), owner-managers of SMEs who possess sufficient financial literacy are known for their capacity to comprehend and evaluate their financial needs as well as their capacity to make rational financial decisions. Besides, Kulathunga et al., (2020) stated that financial literacy is one of the crucial knowledge resources since it will elevate an individual's and firm's capacity, skills, and the ability to efficiently employ technology. Furthermore, the research confirms that the convergence of financial literacy and digital competence have direct and positive impact on SMEs performance.

Nonetheless, many MSMEs in Indonesia struggle with digital competency and financial literacy. Indonesia is ranked lowest, coming in at number 51 out of 63 nations worldwide or in the bottom 15 places, according to the IMD World Digital Competitiveness Ranking 2022. Furthermore, Rafiah et al., (2022) discovered that Indonesian SMEs have a low degree of digital readiness. While most MSMEs are aware of the phenomenon of digitalization, they are reluctant to adopt it and need a lot of help from multiple parties in order to comprehend and integrate it into their operations. Besides, Nugroho (2023) revealed that Indonesian MSMEs confront a number of obstacles and challenges. These include limited financial literacy and knowledge, limited access to formal financial services, high cost of financial services, and limited availability of appropriate financial products.

The Amarta (2022) survey demonstrate that MSMEs have a reasonably high rate of digital adoption, in terms of smartphone ownership, internet access, and access to social media accounts. This highlights how accustomed Indonesian MSMEs are to the digital sphere, particularly given how frequently they use messaging apps like WhatsApp and social networking sites like Instagram and TikTok. However, the low score for digital commerce utilization suggests that they have not yet used the internet for profitable purposes. The survey also finds that the financial inclusion has the highest score which represents that MSMEs in Indonesia own at least one financial product, such as savings, loans, or other financial products from banks and non-bank financial services, even if they are not actively using them. However, when we look more closely at the financial product usage – which depicts how actively MSMEs use various conventional bank and non-bank financial product and services to support their business – the score remains very low.

Given these circumstances, it is imperative to take into account research problems related to the development of MSMEs, especially in terms of their digital competence and financial literacy. Thus, the main goal of this paper is to explore digital competence and financial literacy of Indonesian MSMEs, particularly in the province of East Java by using a SWOT (strengths, weaknesses, opportunities, and challenges) analysis. Then, key insights from this study will provide recommendation of the relevant policy framework. Policy makers and other stakeholders may find the paper's result useful in their efforts to improve the digital capabilities and financial literacy of national MSMEs.

LITERATURE REVIEW

Policy and SME Development

Small enterprises have constrained resources and capacities, according to the resource-based view (RBV) of a firm. As a result, they frequently find it difficult to compete with

large firms utilizing just its own resources and competencies (Chen et al., 2021). However, SMEs virtually always play a significant part in most economies, thus many governments offer specific programs, funding, regulations, and advice in national economic plans to boost SME growth and assist small enterprises in gaining a competitive advantage (Chen et al., 2021; Eniola & Entebang, 2015). Concerning to digitization, the government can create specific legislation, support and counseling initiatives, tailored training programs, and collaboration ecosystems to boost policies and programs that support SMEs' digital transformation agendas (Chen et al., 2021; Pelletier & Cloutier, 2019).

On the other hand, numerous studies indicate that a multi-stakeholder partnership (MSP) is very beneficial for promoting the development of SME to the fullest extent. The MSP theory suggests that complex issues require collaborative work from a range of stakeholders. MSP is a modern form of collaborative governance that enlists the participation of a number of stakeholders, including civil society, governments, international organizations, media, and academic or research institutions, in the sharing of their perspectives, knowledge, technology, and financial resources in order to find a shared solution (Momen, 2020). MSP proponents are of the opinion that stakeholder cooperation will lead to a shared learning process that will result in the creation of new knowledge. MSP will also lead to a variety of innovations and more intense teamwork amongst the parties involved. The stakeholders' underlying motivation for cooperation will ultimately result in more valuable output (Rosyadi et al., 2020; Dorado et al., 2009; Huxham & Hibbert, 2004).

According to Ceglie and Dinni (1999), cooperative measures including businesses, input suppliers, providers of business services, local and regional governments, and local policy makers aid in enhancing the competitive position of SMEs. In terms of sustainability, Pauw and Chan (2018) reveals a multi-stakeholder partnership (MSP) is crucial for enabling SMEs to adapt to environmental change. MSPs give SMEs access to financial and knowledge resources to raise their level of understanding of adaption. Furthermore, stakeholder engagement enables SMEs to obtain information from their stakeholders since it fosters the growth of teamwork and shared objectives (Gould, 2012). Thus, operations and profitability are positively affected, and value generation may be enhanced (Grama-Vigouroux et al., 2020; Noland & Phillips, 2010). If not in excess, stakeholder collaboration offers SMEs a number of benefits, including the use of outside expertise, enhanced innovation, and lowered failure rates. (Grama-Vigouroux et al., 2020; Klijn, Eshuis, & Braun, 2012).

Due to the constrained resources and capacities, mentoring plays an important role in to the SME development. Mentoring programs help businesses perform better and transmit knowledge from the experienced entrepreneurs to boost management skills (Crompton, 2012). Furthermore, Rosyadi et al. (2020) reveals that multi-stakeholder engagement will result in more effective mentorship. Current experience, knowledge, and entrepreneurial spirit may flow into SMEs as a result of the coordinated role and capabilities of stakeholders. As a result, the research recommends that development for SMEs should combine the influence of the Penta Helix (academic, business, government, community, and media) into a single ecosystem.

SMEs' Digital Competence

Digital competence, according to Ferrari (2013), is the ability to confidently, critically, and creatively use information and communication technologies (ICT) to fulfill goals related to work, employability, learning, leisure, inclusion and/or participation in society. As a transversal key competence, digital competency allows us to develop other key competencies. It is associated with several 21st century skills that all citizens should develop to enable their full involvement in society and the economy.

Meanwhile, Vieru (2015) defines digital competence as the capacity to adopt and use new or existing information technology to analyze, select, and critically evaluate digital information in order to research and solve professional issues and build a collaborative knowledge body while participating in organizational practices within a particular organizational context. Hence, it is considered as a multidimensional concept that is represented by a set of knowledge, abilities, and attitudes required to be effective in an organizational digital environment.

Numerous research imply that digital competency plays a significant effect in SME performance. According to Scuotto et al. (2021), individual digital capabilities positively affect innovation performance, which in turn positively affects MSME growth. Additionally, the research also suggests the significance of employees in business by highlighting how difficult it will be for a firm to advance in the future if its staff lacks digital skills. Likewise, business actors with sufficient digital competence might potentially grow their business and have a significant impact on the competitiveness of their companies (Vieru et al., 2015).

In order to improve their competitiveness, Vieru et al. (2015) also point out that MSMEs must develop new business strategies and procedures involving the use of information and communication technology (ICT). This is highly significant because technology is the driving force behind digitalization (Peillon, 2019) and has a big impact on a company's marketing skills (Foroudi et al, 2017). Through the use of digital technology, businesses will become more agile and adept at researching their consumers, rivals, and the larger market.

SMEs' Financial Literacy

According to Adomako et al. (2016), financial literacy refers to the level of information, insight, and cognitive skills required to manage finances and make wise financial decisions. Based on contemporary business realities, Eniola and Entebang (2017) define financial literacy as the capacity to successfully manage financial resources and constantly interact with financial products and services. Meanwhile, Remund (2010) argues that financial literacy refers to a person's capacity to make decisions and maintain sound long-term finances. It also refers to their understanding of key financial concepts and their confidence in their ability to handle financial issues in a timely manner.

There has been a lot of research done on the impact of financial literacy on MSMEs' success. According to Akhtar and Liu (2018) financial literacy, which includes financial knowledge, financial awareness, and a financial mindset, can aid MSMEs in enhancing the performance of the firms they manage. Thabet et al. (2019) suggest that financial literacy is impacted by financial knowledge, financial behavior, and financial attitude. Financial behavior covers a variety of different elements, including saving behavior, participating in the financial system, and money management techniques.

Adomako et al empirical findings (2016) show that financial literacy is positively confirmed to facilitate/moderate the relationship between access to finance and business growth. It means that more access to finance and higher levels of financial literacy go hand in hand. Hence, this study demonstrates how improving the relationship between financial access and business expansion can assist organizations in implementing solid financial management. Financial knowledge is very important for every MSME to access, understand, and make use of the most recent financial information. This will enable them to run their business more efficiently and with high-end financial services to spur growth.

Furthermore, Hussain et al. (2018) support the idea that financial literacy can be a medium that enables MSMEs to access external finance. In turn, this encourage businesses to perform at their best in order to affect growth. Hussain et al. (2018) added that financial literacy an interconnected resource that can lessen information asymmetry. Increasing financial literacy will lower monitoring expenses, resulting in a significantly

more efficient capital structure for the organization. This condition will also have a positive impact on the growth of MSMEs. Financial management insights have been demonstrated to be important tools that can help MSME owners make wise decisions.

METHODS

This study included survey data from 507 MSMEs with digital onboarding that were dispersed over 38 districts/cities (kabupaten/kota) in the province of East Java. Purposive sampling was used to conduct the sampling since it is unknown how many MSMEs in East Java have embraced digitalization (Ratnawati & Soelton, 2022). The survey was carried out from June 11th 2023 to July 7th 2023, with the following respondent criteria:

1. MSMEs have gone digital both in terms of financial management and other digitalization.
2. MSMEs are located in East Java Province.
3. MSMEs have been established for 2 years (Skala, 2019; and Rahmawati & Soelton, 2022).
4. MSMEs have annual sales results criteria in accordance with PP No. 7 of 2021, namely \leq Rp. 2 billion (micro), $>$ Rp2 billion and max. Rp15 billion (small), $>$ Rp15 billion and max. Rp50 billion (medium).

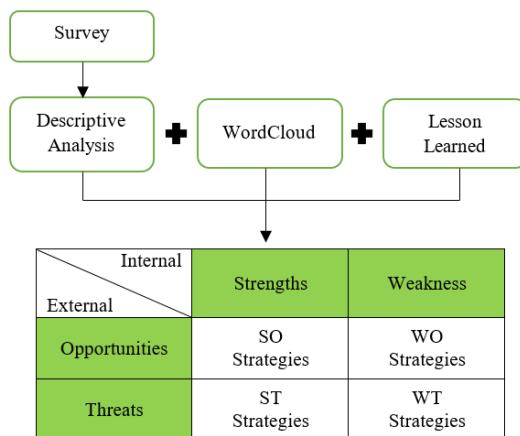


Figure 1. Research Framework

The data obtained through the survey was then analyzed using descriptive analysis method and wordcloud analysis. Descriptive analysis is defined as a method for formulating conclusions based on data analysis, implementation, and evaluation outcomes that are tailored to survey results. The purpose of this descriptive study is to produce a methodical, factual, and precise depiction of the facts, characteristics, and connections between the phenomena under investigation (Sugiyono, 2016). Specifically, this will be accomplished by conducting direct observation of MSMEs in East Java that have already embraced digitalization. Wordclouds, on the other hand, are systems that visualize words by emphasizing how frequently related words appear in written discourse (Qeis, 2015).

In order to strengthen the SWOT strategies, this paper incorporates lessons learned from several ASEAN countries in enhancing MSMEs at the digital era. To gather information on the lessons that ASEAN countries have learned, a review of the literature was done. Furthermore, the information gathered through descriptive analysis, wordcloud analysis, and lessons gained from the members of ASEAN was categorized into one of the following four categories: Strengths, Weaknesses, Opportunities, or Threats. Based on these categories, a strategy matrix will be formed consisting of SO (Strengths-

Opportunities), WO (Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weakness-Threats).

RESULTS

Descriptive Analysis

The survey results shows that the MSMEs who were respondents in this research were dominated by micro-level MSMEs (92.31%) and their main target market was final consumers (B2C). Most respondents' businesses only have 1-2 employees. The majority of MSMEs in this research operate in the food and beverage sector (62.52%), while livestock is the smallest business sector (0.79%). In addition, the number of respondents oriented towards the domestic market is much higher (93.48%) than the export market (6.52%). The majority of respondents used their own capital to open their businesses. In addition, respondents in this study tended to pay less attention to investment for business development.

The use of technology among MSME respondents is quite good with the majority of them having used technology (83.23%), and social media is the most widely used technology. Respondents who have not utilized technology most often have a high school or undergraduate educational background. Most respondents stated that technology adoption had had an impact on their turnover, although some stated that the impact was not very significant. The lack of digital skills is a factor in the less-than-optimal impact of the technology on their turnover.

Financial literacy is the factor that most influences the performance of MSMEs. However, in reality, the financial literacy conditions of MSME players are still far from expectations. It is reflected by low financial knowledge, limited access to capital, and low investment behavior. Many MSMEs cannot record financial transactions, calculate profit and loss, set aside emergency funds, and so on. On the other hand, the majority of the respondents said that capital was the main obstacle felt by MSME players. Limited capital is an obstacle for micro MSMEs to expand their business scale.

Wordcloud

Through open questions, respondents in this survey provided responses and input regarding digital competence, financial literacy, and MSME performance. The answers to these open questions were then analyzed using the wordcloud method which was classified into 6 categories, namely: 1) respondents' views regarding the obstacles faced when running a business using digital technology; 2) respondents' views regarding future business development; 3) respondents' views regarding business development online and e-commerce in the future; 4) respondents' views regarding strategies in increasing business competitiveness; 5) respondents' views regarding the role of stakeholders in increasing the digital competence of MSMEs; and 6) respondents' views regarding the role of stakeholders in increasing MSMEs' financial literacy.

Based on the frequency of words that often appear from the survey, respondents' views regarding the obstacles faced when running a business using digital technology are very diverse product competition, lack of capital for promotional costs which make them inferior to large-scale sellers, limited technological capabilities in micro MSMEs, lack of capital smartphones, and internet network obstacles. However, respondents have positive confidence in the development of their business in the next 5 to 10 years. Most respondents said that their business/enterprise will develop and progress and be able to compete amidst developments in digital technology because online sales growth is faster than offline and makes things easier for customers.

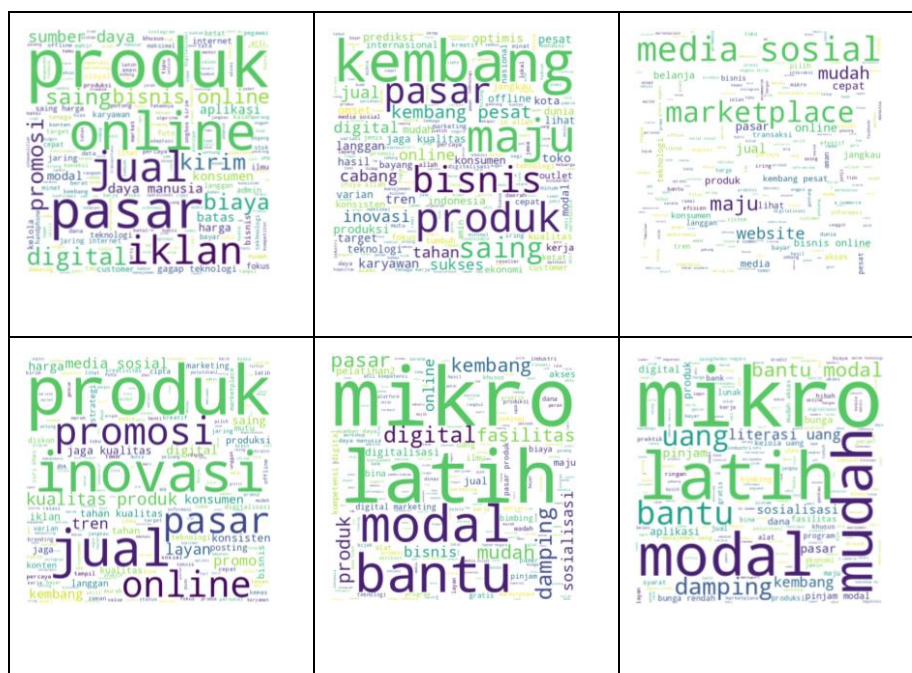


Figure 2. Wordcloud of Survey Results

In addition, according to respondents, social media will develop more rapidly than marketplaces and websites in the next five to ten years (this survey was carried out before the Indonesian government restricted selling activities on social media). Social media allows consumers to see reviews from influencers and also has live session features that increase consumer confidence in products. Furthermore, to survive amidst business competition, respondents considered product innovation, consistent promotion via social media, and product development according to market trends as the solution.

In the end, respondents hope that stakeholders will help improve digital competence through training, capital, mentoring, and socialization in terms of product innovation, digital marketing, digital technology, and access for micro-businesses so that their businesses can go digital and compete in the market. To increase the financial literacy of micro MSMEs, apart from providing training, assistance, and capital, respondents hope that stakeholders will also actively carry out outreach regarding financial management and provide financial applications that are easy for MSMEs to understand and use.

Lessons Learned from ASEAN Countries

Several countries in ASEAN are also focusing on digitalizing MSMEs. Highlights of country policies in ASEAN based on comparative studies conducted by researchers and which may be relevant for implementation in Indonesia are as follows: 1) policies that focus on empowering MSMEs to empower themselves in reading the needs they need to digitalize their business as done by Singapore; 2) forming special bodies to both encourage MSMEs to go international and provide the necessary training, for example Vietrade in Vietnam and Osmep in Thailand; 3) establishing an incubation center in collaboration between stakeholders, such as associations, agencies, ministries and universities such as in Singapore. These policy models will enable an effective digitalization process through the involvement of various stakeholders including MSMEs themselves, which will ultimately improve the performance and contribution of MSMEs to the economy.

Table 1. Grand Policy of MSME Digitalization in ASEAN Countries

Country	Major Policy	Outline
Indonesia	UMKM Go Online; UMKM Naik Kelas	Targeting 30 million MSMEs to enter the digital ecosystem by 2024; stimulate MSMEs so they can move up from micro to small and so on (Kominfo, 2020).
Malaysia	MyDigital Initiatives	Building agile and competent digital talent which was issued in February 2021 with 13 strategies earmarked to be implemented in the next 5 years (MyDigital Corporation, 2023).
Singapore	SMEs Go Digital Initiatives	Help SMEs adopt advanced digital solutions to go digital, use digital technologies, and build stronger capabilities to seize growth opportunities in the digital economy (IMDA, 2022).
Thailand	The Thailand 4.0 Policy	To scale business practices and develop digital skills so that Thai companies, especially SMEs, are prepared to compete successfully in the digital economy (OSMEP, 2020).
Vietnam	Small and Medium Enterprises in Digital Transformation (SMEdx)	Aim to help Vietnamese enterprises improve their capacity to dominate the markets in Vietnam and abroad (Nhat, 2021).
Filipina	Strengthening Private Enterprise for the Digital Economy (SPEED)	Expanding SMEs' participation in the digital economy by helping them to innovate and adopt digital technology solutions that are safe, reliable, and affordable (Chenomics, 2022).

SWOT Analysis

The main goal of this paper is to explore Indonesian MSMEs, particularly in the province of East Java. To achieve this goal, the assessment model of strengths, weaknesses, opportunities, and threats of the MSMEs was carried out by using SWOT analysis. This analysis is the final analysis stage in this research, where the composition to build it comes from descriptive analysis, wordcloud analysis, and lessons learned from ASEAN countries. The data used in the descriptive and wordcloud analysis is primary data from the results of a survey of 507 MSMEs in East Java that have gone digital. Meanwhile, lessons learned from ASEAN countries come from a literature review conducted by the author. The SWOT analysis results are available in Table 2 below.

Table 2. SWOT Analysis

Internal		External	
Strengths	Weaknesses	Opportunities	Threats
1. The majority of MSME actors are of productive age (the majority 27-57 years), and	1. Most of the MSMEs in East Java are micro-scale. 2. Constraints in terms of capital both for	1. The respondent's business sector is dominated by the food and beverage sector, so	1. Some respondents stated that they experienced difficulties

<p>are high school and bachelor graduates so they have sufficient educational provisions.</p> <p>2. Most MSME players who use digital technology can return on investment relatively quickly.</p> <p>3. Most MSMEs have used digital technology, especially social media, simply.</p> <p>4. High desire to learn from MSME players, especially regarding investment and finance, the importance of having an emergency financial plan or reserve fund, and long-term financial goals.</p> <p>5. Most of the MSMEs in East Java Province are dominated by women, especially those aged between 40-57 years.</p>	<p>developing the business and digital promotion costs as well as for access to a wider market.</p> <p>3. Lack of access to markets.</p> <p>4. Limited technological and management skills or financial management (recording transactions and financial reports, taxation, profit calculations, etc.).</p> <p>5. Availability of human resources who have knowledge and skills for business digitalization.</p> <p>6. Expensive technology costs, and limited network connections in some areas.</p> <p>7. MSMEs are still oriented towards the domestic market.</p>	<p>opportunities for MSMEs in the non-food and beverage sector are still very wide open.</p> <p>2. The export market share still tends to be low, this could be an opportunity that must be exploited optimally to increase added value.</p> <p>3. The application of technology has an impact on increasing the turnover of MSMEs, although some state that the increase is not significant due to the use of digital technology.</p> <p>4. Operating basic technology is quite easy for most respondents.</p> <p>5. The majority of MSMEs still use their own capital to open a business.</p>	<p>adapting to technology. If there are no steps to mitigate this, business digitalization will be difficult to achieve.</p> <p>2. Fields other than food and beverages are not of much interest to MSME players.</p> <p>3. Investment in business development has not yet become a priority.</p> <p>4. Tight competition with goods sold in the marketplace.</p>
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The key insights from the SWOT analysis above will then become a reference for formulating policy strategies that can be adopted by stakeholders to increase the digital competence and financial literacy of Indonesian MSMEs. The matrix below is a policy strategy formed from the SWOT analysis above, which consists of SO (Strengths-Opportunities), WO (Weaknesses-Opportunities), ST (Strengths-Threats), and WT (Weaknesses-Threats).

Table 3. SWOT Strategies

SO Strategies	WO Strategies	ST Strategies	WT Strategies
<ul style="list-style-type: none"> - S1S4O3 Training and education related to digital competency for business people who are beginners using digital technology and related to financial management to provide adequate cognitive provision. - S2S3O4 Digital technology for sales and marketing needs to be optimized which can be used by MSMEs to expand access to consumers to reach the entire market. - S2O3 Digital technology makes communication, payment transactions, and access to customers easier so the use of digital technology is important for all MSMEs to use. - S1O1O3 Human resources in MSMEs do not have to come from over 27 years of age but those under 26 years old have a lot of potential creative young talent who can be encouraged to open a business with training. 	<ul style="list-style-type: none"> - W2W3O5 Limited capital is an obstacle for micro MSMEs to expand their business scale. Capital assistance, especially for micro MSMEs, will help them improve product quality, promotion, and access to markets. - W1W6 Develop the East Java MSME ecosystem in an integrated and sustainable manner with the support of the role of government, accelerators, educational institutions, incubators, cellular operators, and financing institutions. - W7O2 Encouraging exports of Indonesian MSME players to global markets. - W2O5 Development of alternative financing through fintech, crowdfunding, and funding subsidies/grants from the government. 	<ul style="list-style-type: none"> - S1S5T1 Aspects of convenience, knowledge, and security are the main factors in increasing the confidence of MSME players in using digital technology so these things need to be used by developers to develop business/sales applications. - S4T2 Forming a special agency to both encourage MSMEs to go international and provide the necessary training, especially in sectors that have the largest global market and sectors that have not yet been entered by many local MSMEs. - S1S5T3T4 Establishing collaboration between universities and MSME players bridged by the government to accommodate the lack of innovation, number of human resources, and capital. - S5T1T4 Encourage women, especially 	<ul style="list-style-type: none"> - W2W4T1 Increasing the financial literacy of MSMEs, especially micro, things that can be done by stakeholders include providing training, mentoring, and socialization related to financial management as well as assisting with capital and the availability of applications that are easy for MSMEs to understand and use. - W5T4 Create an assistance program for MSMEs related to promotion and publication via social media to support local MSME exports to global markets. - W2T3 The government provides facilitation for MSMEs regarding investment development and ways to obtain income from third parties through collaboration with the government or the private sector.

		mothers, to become MSMEs with digital and financial skills.	
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DISCUSSION

The results of the analysis show that East Java MSMEs have relatively varied strengths, weaknesses, opportunities, and threats. The conditions of MSMEs which have been described in four SWOT spectrums show the strengths and weaknesses of East Java MSMEs in their digital competence and financial literacy. Based on the results of the analysis, 15 strategies can be a reference for stakeholders in improving the digital competence and financial literacy of MSMEs. This research found that a significant number of MSMEs in East Java have used technology, but limited digital skills mean they are unable to optimize technology for their business. So, even though their turnover increased after using digital technology, the low level of digital skills resulted in an insignificant increase in turnover. This is in line with Vieru et al., (2015) who stated that the success of MSMEs in business digitalization depends on MSMEs having expertise and the appropriate competencies to maximize the technologies.

This research also found that the financial literacy level of MSME players in East Java is still low. This is reflected in low financial knowledge, limited access to capital, and low investment behavior. (Carragher and Van Auken, 2013) which states that MSMEs who have good financial knowledge will be more proficient in using financial reports. Financial knowledge plays an important role so that MSMEs can understand the financial system (Akhtar and Liu, 2018). Capital is the main obstacle felt by MSMEs in East Java, especially those on a micro-scale, which makes it difficult for them to expand advertising and expand their business scale. This is in line with Addo and Asante (2023) who stated that the level of financial literacy of MSMEs has a positive and significant relationship with access to finance. Meanwhile, Baihaqqy et al., (2020) stated that the level of financial literacy influences MSMEs' decisions to invest. MSME players with minimal literacy levels tend to pay less attention to investment, even though investment with the aim of business development is very important for the development of their business.

Even though the digital competence and financial literacy of East Java MSMEs is still relatively lacking, they have a desire to learn and are optimistic that their businesses will develop further in the future. Because they feel that the presence of technology is enough to accelerate their business performance. Apart from that, they also realize the importance of having adequate financial literacy so that they can record financial transactions, calculate profit and loss, set aside emergency funds, and so on. It's just that because of limited financial literacy, they don't have the financial competence.

Collaboration between universities and MSME actors bridged by the government needs to be considered to accommodate the minimal number of human resources with qualified digital and financial skills and to overcome capital problems. Developing alternative financing through fintech, crowdfunding, and funding subsidies/grants from the government can be an alternative for MSME capital in East Java Province. Apart from that, the government can also provide facilitation for MSMEs regarding investment development and ways to obtain income from third parties through collaboration with the government or the private sector.

Most of the MSMEs in East Java Province are micro-scale and currently, the majority are in food and beverages, so exports of food and beverages can be encouraged because they have the potential to increase economic activity both domestically and globally. Because the export market share still tends to be low, this could be an opportunity that must be utilized optimally to increase added value. The formation of a special agency is good for

encouraging MSMEs to go international and providing the necessary training, especially in sectors that have the largest global market and sectors that have not yet been entered by many local MSMEs. Developing the East Java MSME ecosystem in an integrated and sustainable manner with the support of the government, accelerators, educational institutions, incubators, cellular operators, and financing institutions is needed to optimize MSMEs in East Java Province. Furthermore, the majority of MSME actors in East Java Province are women, especially mothers. Women entrepreneurs can be supported to become MSMEs with digital and financial skills. With the potential for a large number of female MSME actors, training in digital promotion and financial management skills for them will be very effective, especially with programs with approaches that are tailored to the character and psychology of women. Innovation for product development, both food and beverage and non-food, will be effective in increasing the potential for better performance of MSMEs and overcoming intense competition in the business world because they are more resistant to existing challenges.

CONCLUSIONS AND RECOMMENDATIONS

Through the SWOT analysis that has been carried out in this study, several conclusions can be presented. The source of the strength of MSMEs in East Java is the abundance of human resources of productive age and the majority of them have used digital technology in their businesses. Meanwhile, the main weakness is the lack of skills in both technology and financial management which results in the resulting business output not being optimal even though they have used technology. Apart from that, opportunities that must be maximized are taking advantage of opportunities in the non-FnB sector and entering the export market because currently there are still relatively few MSME players there. Meanwhile, many MSME players find it difficult to adapt to technology, very tight competition, and low awareness of investing as a threat profile. Solid collaboration between stakeholders ranging from government, accelerators, educational institutions, incubators, cellular operators, and financing institutions is needed to optimize MSMEs in East Java Province.

This research was conducted by using respondents from various SMEs in East Java, along with more generated variations in the study. Similar research can also be done in another province in Java, Sumatra, Kalimantan, etc., which is not only in East Java in order to provide more objective results and also to examine the generalization of the results. Future work also can dig deeper into the strategies provided in this study to gain more complex, comprehensive, and applicable policy strategies or frameworks.

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