ABSTRACT

The Effect of Digital Skills on The Workforce of The Indonesian MSME Sector

Fenda Eldila[1], Monica Pusphita Anggraini[2]

fenda.eldila25@gmail.com[1], monicapusphita@gmail.com[2]

Industrial Relations, Polytechnic of Manpower, Jakarta Timur, Indonesia[1,2]

Abstract. Digital transformation can be marked by the emergence of digital technology and the internet in various sectors of life. This makes all activities carried out conventionally now transition to digital. Technology is used to modernize the world of work. Therefore, all human resources must be able to align themselves in facing the development of an all-digital era. To adapt in this era, humans need to develop their capacity by honing their soft and hard skills. Digital skills are also one of the abilities that must be mastered by many workers, especially in the MSME sector in order to implement digitalization in their business. Then, having digital skills can certainly improve their productivity. However, many MSME workers in Indonesia are not yet fully skilled in using digital technology. Not to mention there are challenges that certainly create gaps in improving digital skills. Therefore, the purpose of this research will be to investigate the challenges and identify strategies related to the effect of digital skills on the MSME sector workforce. The method used is a SWOT analysis to explain the strengths, weaknesses, opportunities, and threats related to the effect of digital skills on the Indonesian MSME sector workforce by taking into account existing external and internal factors. The results of this study are to analyze the challenges and describe strategies that can be applied to improve the digital skills of the Indonesian MSME sector workforce. From this research, it can also be concluded that digital skills are very important to be mastered by workers in the MSME sector.

Keywords: Digital Skills, Workforce, MSME, SWOT

INTRODUCTION

Almost all corners of the world are affected by the effects of digitalization in various sectors of life. Even today, there are still countries that need to adapt to digital transformation, one of which is Indonesia. Then with the presence of the industrial revolution 4.0, the situation in the world of work in Indonesia has changed. All things that are done conventionally are now transitioning to modern. Changes from analog to digital can also be felt, technology is also increasingly in favor of modernizing the world of work. Therefore, all human resources inevitably have to adapt themselves to face the development of an all-digital era. Supported by a statement from Prasetyo, et al (2018), the Industrial revolution has fundamentally changed the way people think, live, and how they relate to one another. This era will renew all human activities in various fields, especially in the economic field of MSMEs. Therefore, humans need to adapt and be responsive, especially in terms of understanding trends and mastering technological devices that are increasingly developing in this condition. Coupled with the emergence of the COVID-19 pandemic in the past two years, there has been a major shift in human activity from offline to online. Due to the limited space for movement during the pandemic. This makes people more accustomed to using digital technology as a medium for their daily activities. In today's world of work, competent human resources are needed in mastering digital technology. This means digital skills are an ability that every individual needs to have to facilitate their work.

Meanwhile, digital skills according to Gartner (2015) include the cognitive abilities and social practices needed to utilize and use various types of media, information, and technology to gain profits in unique and innovative ways and optimize personal and business values. These digital skills must be possessed, at least by mastering the basics of digital skills in order to be able to keep up with developments related to the digital world that will continue to develop. Digital skills can also be used as a benchmark for developing human capacity in increasing their productivity. In other words, digital skills are very important for workers in various work sectors, especially MSMEs. Because it is undeniable that according to Li (2020) since the emergence of the COVID-19 pandemic, most MSMEs have tried to digitize their operations. According to Priyono, et al (2020) digitalization can change the value provided to customers by creating new, more relevant, and adaptable business models in a growing business environment. However, from the statement Rifai, et al (2021) said that MSME actors have not planned a good strategy in implementing digitalization in their business in this transitional era. Therefore, the MSME sector workforce can at least have a strategy, especially in the use of digital technology for their business, and make good use of online platforms as a means to do product marketing and increase sales.

Thus, it is necessary to increase digital skills for workers who run MSMEs so that they can operate digital services in interacting in the business-to-business domain and in the business-to-consumer (Grefen, 2016). Workers in the MSME sector must also be thirsty for knowledge of digital technology so that they are not left behind with advances in science and technology in Indonesia. Awareness is needed for the workforce to learn technology and increase digital literacy as a form of developing their digital competence. Of course, there are many advantages to having digital skills, one of which is increasing labor income because it can reach a wide market share and/or new customers.

Based on the background above, it can be seen that the formulation of the problem is, "What are the challenges and what are the strategies so that the MSME sector workforce has digital skills?". This study aims to investigate the challenges and find strategies to improve the digital skills of the MSME sector workforce. So that it becomes a form of concern for the workforce, especially in the MSME sector to understand digital skills, as well as provide strategies to improve their digital skills.

LITERATURE REVIEW

2.1 Digital Skills

According to Green, et al (2001) explain that digital skills are a form of ability possessed by individuals who can operate digital technology online. There is another understanding according to Van Laar, et al (2020), digital skills are basic skills needed by everyone in accessing the internet and using digital technology. According to Van Laar, et al (2020) the factors that can affect digital skills include:

(1) Creative digital skills

Technology now supports creativity in various ways, including developing ideas and creating or realizing ideas (Loveless, 2007). This can have an influence on an individual in forming abilities that can generate ideas in the use of technology.

(2) Critical thinking digital skills

Critical thinking has been identified as very important because in the global online environment people participate and resources are created with different intentions and competencies (Starkey, 2011). In this era, online content has to be critically assessed as there is a lot of disinformation and fake news circulating. Therefore, it is necessary to have the ability to filter information.

(3) Digital communication skills

Technology has made it easier to reach a wide audience. As a result, humans can communicate over long distances. Then according to Yu, et al (2010) individuals are able to express themselves, establish relationships, and interact with others at any distance in space and time. So according to Hwang (2011) these skills are needed as a means to generate social interaction and strengthen social relationships.

(4) Problem-solving digital skills

Skills that include that individuals can utilize digital technology in solving problems. So that it can determine a strategy to find the best solution.

(5) Information digital skills

According to Catts and Lau (2008), the abundance of information requires skills to locate, organize, and evaluate information in a digital environment. According to Ananiadou and Claro (2009), information management consists of the ability to clearly describe information needs; identify digital information; and select digital information in an

efficient and effective manner. Once the information is found, the individual certainly needs skills to evaluate how valuable the resource and its content. It takes skills to organize digital information for easy retrieval in digital devices.

The level of digital skills of an individual determines the extent to which the individual is able to achieve certain goals by using digital technology, namely in the process where this digital technology is very important (Grefen, 2021). This means that digital skills are abilities that need to be possessed by each individual because they can provide convenience in all aspects of life. The following digital skills needed by an individual are as follows:

Fig. 1. Digital skills for the digital era
Source: Genner S. (2019)

2.2 Workforce

Workforce is any person who is able to produce services and goods for his own needs as well as the needs of the community according to the Law of the Republic of Indonesia Number 13 of 2003 concerning Manpower. In general, the population in a country can be categorized into two, namely workers and non-workers. Residents aged between 15 and 64 years are categorized into people who have entered the working age. As for residents who are not workers, namely residents who have not reached the minimum age limit for the workforce. Then, the workforce consists of people who are currently working, those who are unemployed, and those who are looking for work. Meanwhile, people who go to school, who take care of the household, and other groups who do not receive income are included in the non-labor force group. Labor itself is the most important factor in production activities because it is responsible for allocating and riding other production factors in order to produce *output* (Mulyadi, 2014).

The workforce in development has the potential to contribute to overall development. The definition of employment contained in the Basic Manpower Law Number 14 of 1990 states that anyone who is able to do a job either inside or outside the employment relationship to produce services or goods to meet the needs of the community.
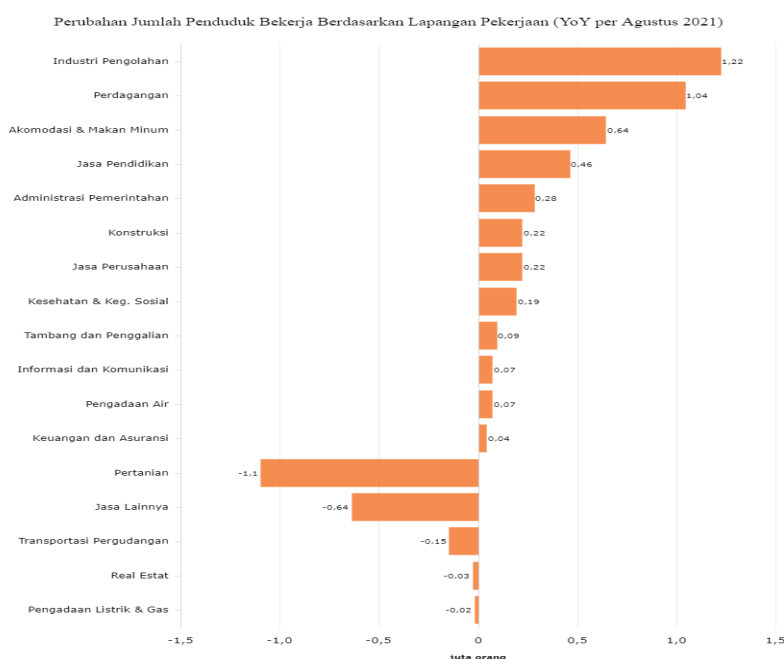

Fig. 2. Changes in the Number of Working Population Based on Employment (2021)

According to the Central Statistics Agency (BPS), there were 131.05 million Indonesians working in August 2021. In terms of employment, the manufacturing industry experienced the largest increase in workers during this period. The number of people working in the manufacturing industry increased by 1.22 million in August 2021 when compared to August 2020. In addition, the number of trade workers increased by 1.04 million in the same time period. Then, accommodation and food and beverage workers grew 0.64 million, education service workers grew 0.46 million, and government administration workers grew 0.28 million. Construction workers and company services experienced the same increase in the number of workers by 0.22 million. Mining and quarrying services increased by 0.09 million people, health workers and social activities increased by 0.19 million people, information and communication 0.07 million people, financial and insurance services 0.04 million people, and clean water 0.07 million people.

2.3 Micro, Small, and Medium Enterprises (MSMEs)

In Article 1 of the Law of the Republic of Indonesia Number 20 of 2008, the definition of MSMEs in Indonesia has been regulated. The article reads that micro-enterprises are productive businesses owned by individuals and/or individual business entities that meet the criteria for micro-enterprises as determined by law.

Then according to Article 6 of the Law of the Republic of Indonesia Number 20 of 2008, the criteria used to define MSMEs are net worth or asset value excluding land and buildings for business premises, or annual sales proceeds. With the following requirements:
a) Micro Business is a business unit that has assets of at least IDR 50 million, excluding land and buildings for business premises, and annual sales of at least IDR 300 million;
b) Small businesses with assets of more than IDR 50 million, excluding land and buildings, and annual sales of more than IDR 300 million, a maximum of IDR 2,500,000, and;
c) Medium enterprises are defined as companies with a net worth of more than IDR 500 million up to a maximum of IDR 100 billion and annual sales of more than IDR 2.5 billion up to a maximum of IDR 50 billion.

Furthermore, the definition of micro-enterprises according to the Central Statistics Agency (BPS) is a business unit with up to four permanent employees, small businesses with 5 to 19 employees, and medium-sized businesses with 20 to 99 employees. Large businesses have more than 99 employees. Micro, Small and Medium Enterprises are the main drivers of economic activity in Indonesia. Empowerment of Micro, Small and Medium Enterprises (MSMEs) is very important to strengthen the structure of the national economy. The number of labor data originating from MSMEs is as follows:
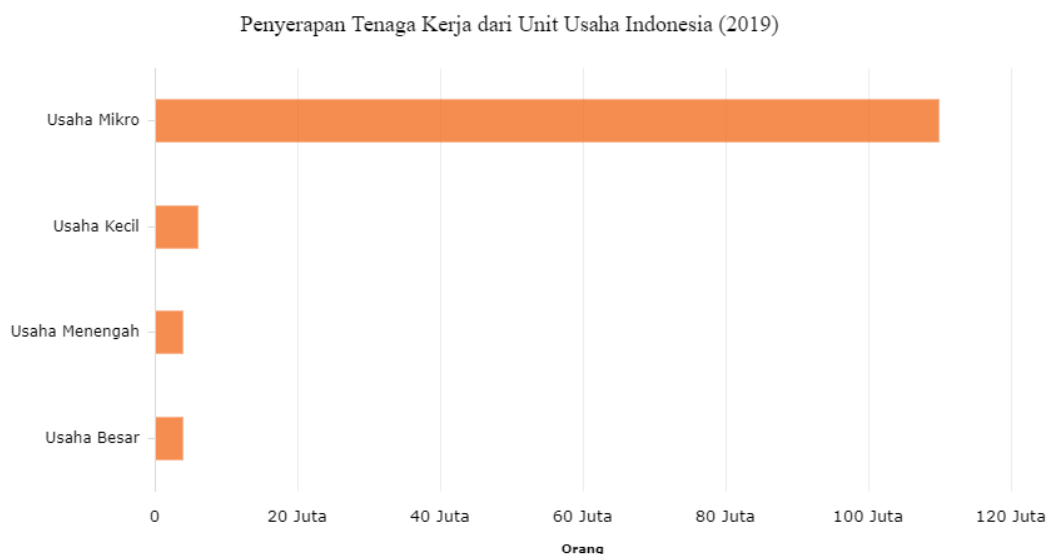

Fig. 3. Manpower Absorption from Indonesian Business Units (2019)
Source: databoks.katadata.co.id

Based on the above data obtained by the Ministry of Cooperatives and Small and Medium Enterprises (KUKM), there were 119.6 million workers in the MSME sector in 2019. That number increased by 2.21% compared to 2018

which amounted to 117 million people. Then, that number is equivalent to 96.92% of the total workforce in Indonesia. The rest comes from big businesses. Specifically, as many as 109.8 million or 89% of the workforce are recorded as working in micro-enterprises. A total of 5.93 million or 4.81% of the workforce came from small businesses. Then 3.79 million or 3.7% of the workforce came from medium-sized businesses. This means that the MSME sector is the choice of many workers in Indonesia to earn a living. Meanwhile, MSMEs are one of the sectors that play an important role in the country's economic growth (Sofyan, 2017). This is because the presence of MSMEs is quite dominant in the national economy. Thus, MSMEs have their own position in helping the country.

METHOD, DATA, AND ANALYSIS

The method used is SWOT analysis. According to Galavan (2014), SWOT analysis is a form of analysis to obtain an effective strategy and then apply it according to the current situation, where opportunities and threats are used to determine the external environment; then the strengths and weaknesses obtained through internal analysis. Then, according to Setyorini, et al (2016) of the four strategies can be described as follows:

1. SO (Strengths-Opportunities) strategy, which is a strategy that utilizes internal strengths in capturing existing opportunities.
2. WO (Weaknesses-Opportunities) strategy, which is a strategy that improves weaknesses by taking advantage of existing external opportunities.
3. ST (Strengths-Threat) strategy, which is a strategy that will use the strengths possessed by the organization to deal with threats that arise from external.
4. WT (Weaknesses-Threat) strategy, which is a strategy that is directed to reduce internal weaknesses while avoiding external threats.

This method is also supported by theory and reliable previous research data, both from literature, journals, books, mass media, and other reference sources. The entire information collected is used to get a picture that is in line with carrying out this analysis. Therefore, a SWOT analysis can be made regarding the effect of digital skills on the workforce of the Indonesian MSME sector by identifying strengths, weaknesses, opportunities, and threats that may occur related to these problems. According to Idah and Pinilih (2020), the analysis can be detailed as follows:

1. Strength
- Improving the digital skills of the MSME sector workforce.
- Improving the performance of the MSME sector workforce.
- Have high resilience to survive in the MSME sector.
- Having digital skills makes MSMEs more competitive.
- As a form of workforce capacity development for sustainable productivity growth.

2. Weakness
- Many workers in the MSME sector are not yet digitally skilled.
- It is difficult for some workers to learn quickly, so it takes a long time to adapt.
- It costs more.
- Some MSMEs that are run in rural areas have limitations in accessing the internet.
- There is a workforce that is not yet digital-literate.

3. Opportunity
- Accelerate economic growth.
- Ease of accessing the digital market.
- Increase labor income.

4. Threats
- Most of the MSME sector workers are comfortable with conventional conditions.
- Limitations of getting digital training.
- There are still many MSME workers who consider safety in the use of technology.

SWOT ANALYSIS

	Strength (S): 1. Improving the digital skills of the MSME sector workforce. 2. Improving the performance of the MSME sector workforce. 3. Have high resilience to survive in the MSME sector. 4. Having digital skills makes MSMEs more competitive. 5. As a form of workforce capacity development for sustainable productivity growth.	Weaknesses (W): 1. Many workers in the MSME sector are not yet digitally skilled. 2. It is difficult for some workers to learn quickly, so it takes a long time to adapt. 3. It costs more. 4. Some MSMEs that are run in rural areas have limitations in accessing the internet. 5. There is a workforce that is not yet digital-literate.
Opportunity (O): 1. Accelerate economic growth. 2. Ease of accessing digital markets. 3. Increase labor income.	SO Strategy: - Increase market share from within to abroad through the use of technology. - Increase the capacity, performance, and endurance of the workforce in running MSMEs. - Improving the process of digitizing MSMEs and economic growth. - Increase self-awareness to have digital skills.	WO Strategy: - Make proposals to local governments to improve telecommunications infrastructure in areas that have not been accessed by the internet. - Cooperating with the government in terms of increasing empowerment for MSME managers as a whole by conducting training and development on digital skills and marketing online.
Threats (T): 1. Most of the MSME sector workers are comfortable with conventional conditions. 2. Limitations of getting digital training. 3. There are still many MSME sector workers who consider security in the use of technology.	ST Strategy: - Able to improve skills in the field of technology by participating in training, development, and constantly doing digital literacy. - Aware of the lack of ability and high willingness to learn technology.	WT Strategy: - Motivate the workforce to continue to develop their MSMEs. - Conduct training funding for MSMEs as a form of developing MSME digitization. - Carry out a digital literacy movement so that the MSME sector workforce can understand the use of digital technology wisely. - Increase the knowledge of MSME workers in the fields of production, marketing, marketing, and technology.

RESULT AND DISCUSSION

The existence that can be felt from the emergence of digital transformation at this time is the changes that occur in the world of work. According to Danuri (2019), this can be seen in the method of handling a job using information technology to make it more efficient and effective. By utilizing technology, it will certainly facilitate all activities to

be agile. But the presence of technology also cannot be ascertained that humans are fully skilled in this matter. Therefore, it is necessary to have basic to special skills to be able to operate the technology properly.

Digital skills are a form of ability related to technology. Where a person can explore various information and do work in it through the skilled use of technology. Of course, digital skills are needed because technology will always develop in the future. Meanwhile, many sectors are now turning to digital. One of them is MSMEs, as a result of digital transformation, this sector has changed. Digital technology is needed so that MSMEs can survive in this era. The key is in the workforce itself. MSME sector workers need to be aware that as the times progress and the entry of increasingly advanced technology, they must be able to adapt as quickly as possible if they do not want to be left behind. Therefore, to prevent this, what the MSME sector workforce needs to do is increase their digital skills. By adding these capabilities, the MSME sector workforce will benefit from the use of technology itself, such as being able to reach a broad market share and last a long time in the MSME sector as the times develop, and so on.

To prepare and ensure that the MSME sector workforce has digital skills and is involved in digital marketing, it is certainly not easy. There are many challenges that need to be faced so that the MSME sector workforce has digital skills. Limited infrastructure is one of the challenges for MSME actors in improving their digital skills. Infrastructure that has not been fully evenly distributed in Indonesia has an impact on MSMEs that run their businesses in rural areas. As a result, they find it difficult to get internet access. Then, the MSME sector workforce who is comfortable with the conventional system is also a tougher challenge. Adapting to technology takes a long time to become fully skilled. So, many MSME actors think that the emergence of technology can actually make it difficult for themselves because they need to make new movements in their business, from conventional to digital. Therefore, they are more comfortable with the previous conditions, where they are more skilled than starting from scratch. As for the unwillingness to learn new things and the low interest in literacy, some workers are trapped in the conventional system. Furthermore, to make a business change from conventional to digital it requires no small amount of money, starting from attending special training on digitalization according to the field, changing traditional tools to digital, paying fees for internet access such as Wi-Fi, internet quota, electricity, etc. These things eventually gave birth to the digital skills in the Indonesian MSME sector workforce.

Then there are strategies that can be realized for the workforce to improve digital skills, namely:

1. Increasing Self-Awareness About Digitalization

Awareness is a factor that supports a person in taking the initiative to face a new challenge. Where that affects the awareness itself is the presence of a strong sense of will to change in itself. Therefore, it is necessary to have a self-aware attitude towards the changes that occur in this era so that it does not dissolve in the conventional zone. The workforce must be willing to change in a more advanced direction. If there is no self-awareness to change, then it can be detrimental to himself and his business. As a result, nothing develops from itself or its business, it can even be left behind by people who are aware and willing to learn about what is changing in this era. Whereas self-awareness can certainly make a person have the will to learn and adapt to new things, especially digitalization. This will make it easier for them to defend themselves and their business in this era. And with self-awareness to learn something new, it can also increase a human capacity for self-development in a more productive direction.

2. Increasing Interest in Digital Literacy

Based on the book Framework for Digital Literacy Indonesia, digital literacy is the basic ability to use Information and Communication Technology (ICT) in finding, creating, utilizing, evaluating, and communicating information with cognitive and technical skills. The MSME sector workforce needs to be aware of the importance of digital literacy as a basic skill if they want to practice digital business in their business development. So it is important for the MSME sector workforce to use digital technology such as smartphones to explore factual and educational information, as well as attend education related to strengthening digital literacy. Then the MSME sector workforce should hone their digital literacy skills, including their soft skills and hard skills. That way their digital literacy skills can increase and add to the value of digital skills in the MSME sector. So with the skills they can digitize their business effectively. Where it is useful to maintain their business in this era, encourage productivity and innovation, and can get more benefits because they can access new customers that have not been reached before.

3. Attending Training and Development of Digital Skills

The Ministry of Cooperatives and SMEs said that MSMEs in Indonesia that have gone digital as of February 2022 there are 17.25 million participants from the total MSMEs in Indonesia which amount to more than 60 million. Meanwhile, the Government of Indonesia is targeting 30 million MSMEs to join the digital ecosystem by 2024. This shows that the MSME sector workforce with digital capabilities is still relatively small. Looking at these conditions, training and development can be the main targets in advancing human resources and digitizing MSMEs in this digital

transformation era. Meanwhile, according to Purwana, et al (2017), the ability to master digital devices and the internet is an absolute thing that must be owned by the workforce so that they can survive for a long time in the competition for MSMEs. Therefore, with this training and development, the workforce can hone and improve their digital skills skillfully.

Regarding training and development carried out virtually, adequate infrastructure support is needed in all regions of Indonesia. It is intended that MSME sector workers in various regions, especially in small areas, can benefit from equitable infrastructure. That way they can conduct training and development without complaining about the poor telecommunication infrastructure used.

4. Conducting Socialization in the Form of Seminars, Webinars, or Workshops on Digital Skills

Socialization of the importance of mastering digital skills needs to be encouraged by the Indonesian government in this era of digital transformation. Many MSME sector workers still do not understand this because of limited information. Therefore, by conducting socialization in the form of seminars, webinars, and even workshops can provide insight and knowledge to MSME actors about digital skills in depth. They can easily receive information, both theory and practice, according to the form of socialization held by the government. Through seminars, MSME sector workers can hold direct meetings and actively discuss digital skills together with experts. Then the socialization of the webinar can also be an alternative for MSME sector workers who cannot attend direct teaching. Both forms of socialization can be intensified through brochures, advertisements, and social media. The goal is that this socialization activity is evenly distributed and can be known by all MSME actors.

On the other hand, socialization in the form of workshops can also help MSME sector workers who are still not educated in using technology. Through workshops, they can join together to discuss understanding digital skills in theory to doing hands-on practice with professionals. This socialization can be said to be more effective. Then from the workshop, training and development can be continued to accelerate the digitization of MSMEs in Indonesia. But from all of that, the most important thing is that the government must be able to disseminate evenly in all areas of Indonesian MSMEs so that workers can find it easy to improve their digital skills.

CONCLUSION

Digital transformation can be marked by the emergence of digital technology and the internet in various sectors of life, especially MSMEs. Its existence is used as a human tool to make all activities more efficient and effective. However, most of the workforce has not been able to apply the use of technology properly for their business. So, it takes a skillful ability in using technology. Therefore, based on the results of the SWOT analysis, it can be concluded that digital skills are very important to be mastered by every workforce in the MSME sector to make it easier for them to defend themselves and their business in this digital transformation era. However, there are challenges that must be faced by them including: (1) infrastructure that is not yet fully distributed in Indonesia; (2) some workers in the MSME sector are comfortable with the conventional system; (3) it takes a long time to adapt to digital technology so that they are fully skilled; (4) a sense of unwillingness to learn and the low literacy interest of the MSME sector workforce; (5) and requires a lot of money to move business changes from conventional to digital.

From the challenges mentioned above, there are strategies that can be carried out by the MSME sector workforce to improve their digital skills, namely in the following ways: (1) increasing self-awareness about digitalization, (2) increasing interest in digital literacy, (3) attending training and development of digital skills, and (4) conducting socialization in the form of seminars, webinars, or workshops on digital skills.

IMPLICATION/LIMITATION AND SUGGESTIONS

Based on the results of the discussion above, there are several things that can be suggested, namely it is hoped that the MSME sector workforce can properly implement the strategies that have been submitted, always understand and follow changes or developments that will continue to occur in this digital transformation era, increase interest in digital literacy and increase self-awareness that digital skills are important to learn because they provide many benefits for themselves and their businesses in the MSME sector. Then, the government is expected to continue to promote socializations in the form of seminars, webinars, or workshops on digital skills evenly throughout Indonesia in order to accelerate the digitization of MSMEs in Indonesia.

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