

National Economic Recovery (PEN) Through Data Strengthening and Digitization of General Trade in Micro, Small, and Medium Enterprises (UMKM) in Indonesia

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Abstract. MSMEs are one of the actors that play a role in the Indonesian economy. The occurrence of Covid-19 greatly impacted the performance of MSMEs. National Economic Recovery (PEN) through strengthening data and digitizing MSMEs is an important thing to do. The aim is to minimize the impact of losses experienced by MSMEs actors if their products are not sold. However, this effort has several obstacles including human resource problems, infrastructure and information systems, network problems and social & behavioral problems.

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are a business group that plays a very significant role in the Indonesian economy, with the number of micro business actors estimated to be mostly engaged in the informal sector. This indicates symptoms of economic informalization. Labor that is not successfully absorbed by the formal sector will shift to the informal sector. Based on data from the Ministry of Cooperatives and MSMEs, the number of MSMEs currently reaches 64.2 million with a contribution to GDP of 61.07% or a value of 8,573.89 trillion rupiahs. The contribution of MSMEs to the Indonesian economy includes the ability to absorb 97% of the total existing workforce and can collect up to 60.4% of total investment (Coordinating Ministry for the Economy, 2018). In addition, MSMEs have also proven to be resilient against economic shocks; during the economic crisis period of 1997-1998, MSMEs – especially micro and small businesses – were far more able to survive compared to medium-sized businesses because large businesses needed longer time to re-manage their production lines (Sulandjari et al., 2000).

The contribution of MSMEs to Indonesia's GDP has continuously increased from 1997-2018 with rapid increases occurring in 2016 and 2018, this is in line with the program by President Jokowi who wants to prioritize MSMEs and introduce small and medium businesses to digital technology. In addition, MSMEs also contribute to Indonesia's current account through exports abroad. The value of this contribution still tends to be very small and does not contribute too much to the Indonesian economy, but it can be seen in Figure 1 that the total export value of MSMEs has increased to reach IDR 293 billion in 2018.



Figure 1. GDP Contribution Growth and MSME Export Value
 Source: Ministry of Cooperative and SMEs of The Republic of Indonesia

The outbreak of Coronavirus Disease 2019 (Covid-19) has become an international problem, including in Indonesia. The Covid-19 pandemic has had economic, social and political implications in almost all countries, including Indonesia (Marginingsih, 2021). The economic impact of the Covid-19 pandemic has also been felt by the MSME sector in Indonesia. Data from Bank Indonesia stated that 87.5% of MSMEs were affected by the co-19 pandemic. Of this amount, around 93.2% of them were negatively affected on the sales side (Saputra, 2021).

A study conducted by ABDSI stated that out of 6,405 MSMEs, 48.3% experienced difficulties in maintaining supply lines, 92.6% required debt restructuring, and 26.6% experienced cash flow problems which resulted in being unable to pay debts (ABDSI, 2020). In addition, a report from the ILO (2020) stated that out of a total of 571 MSMEs as respondents, 68% reported disruptions in business activities due to the Covid-19 outbreak, 65% stopped operational activities, and 3% had gone out of business. About 80% reported having lost a significant amount of income, and 28% had lost half of their total income. It has been estimated that throughout 2020 many businesses will experience a further decline in revenue due to the Covid-19 outbreak.

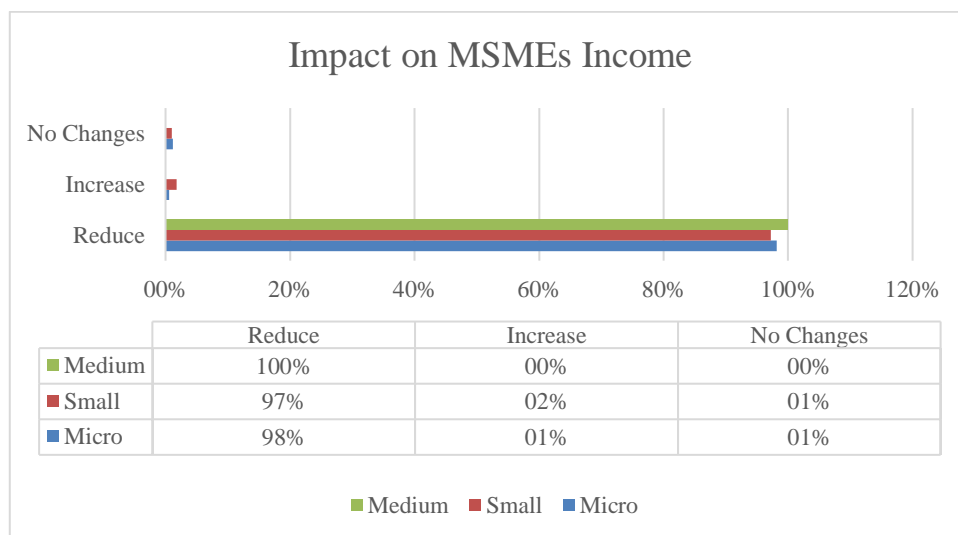


Figure 2. The Impact of Covid-19 on MSMEs Income
 Source: The Ministry of National Development Planning, 2020

The decline in revenue is the main source of business cash flow problems, which are felt by almost all business groups with a very high percentage (97%-100%). Interestingly, there were variations in the percentage of decline in income by business group. The larger the scale of the business, the greater the percentage of decline. The majority of medium-sized businesses have experienced a decline in income of 60% -80%, while the small business group has a lower percentage rate at the level of 40% - 60% and micro businesses have an even lower decline rate in the range of 20% - 40%.

In line with the decline in income levels, reduced business profits (margins) were also felt by all MSMEs groups with a fairly high percentage. However, the degree of reduction varied between MSMEs groups, where the majority of micro and small business groups had business margins falling in the range of 40% -60%, while the middle group's business margins fell more sharply (60% -80%).

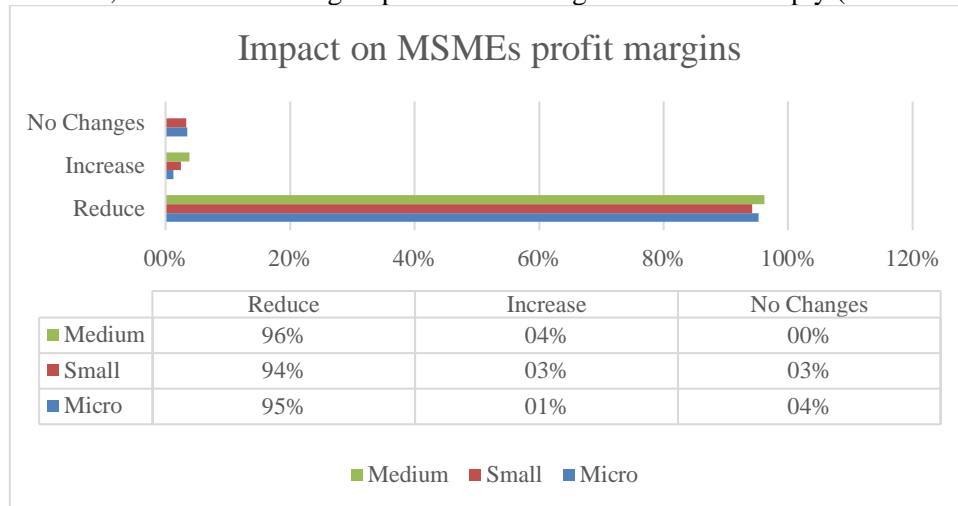


Figure 3. The impact of Covid-19 on MSME profit margins
 Source: The Ministry of National Development Planning, 2020

To revive the business activity of MSMEs actors, mitigation and recovery solutions are needed. The government responded to this pandemic by providing working capital assistance, subsidizing MSMEs credit, and relaxing bank loan interest in order to maintain the MSME sector. Not only from the supply side, the government is also pushing for the demand side so that MSMEs entrepreneurs continue to expand their businesses even though they are still in a pandemic (Marlinah, 2021).

The majority of MSMEs, especially traditional stalls and wholesalers in Indonesia, are still managed traditionally and have not been touched by the digital world (Wijoyo & Widiyanti, 2021). Digitization of traditional stalls and wholesalers is a great opportunity to increase the competitiveness of MSMEs. Through data-based digitization, the management and operation of traditional stalls and wholesalers can provide a competitive advantage to survive and continue to grow. Regarding the development of digital platforms, the management of the MSMEs sector, especially traditional stalls and wholesalers, can be improved professionally with a data-driven concept. Based on the description above, researchers are trying to participate in the National Economic Recovery Program (PEN) through strengthening data and digitizing general trade in micro, small and medium enterprises (MSMEs) in Indonesia.

RESEARCH METHODS

This program collaborates with "PINTAP" partners which is a digital platform in the field of MSMEs. This research method is divided into several stages. The first stage, development and analysis of General Trade market data. In the second stage, algorithms and mathematical models are developed. In the third stage, namely the validation of techniques and methodologies followed by assessment and evaluation of the database. The fourth stage will be continued in the form of upgrading the Pintap application, the fifth stage is the creation of an e-commerce curriculum. The sixth stage is promotion and program socialization.

Promos and socialization of the program were carried out in four cities, namely Bekasi, Madiun, Tasikmalaya and Purwokerto. At this stage, the research team also distributed questionnaires containing questions about digitizing MSMEs and suggestions for the future. Through the implementation of this program it is hoped that it can help realize the scale up impact of digitalization for MSMEs throughout Indonesia.

RESULTS AND DISCUSSION

The result of the first phase of this activity is the development of a digital platform for the management of the MSMEs sector, especially traditional stalls and wholesalers, which can be improved professionally with a data-driven concept. Through data-based digitization, the management and operation of traditional stalls and wholesalers can provide a competitive advantage to survive and continue to grow. The basis for decision making at both the MSMEs level (shop and wholesalers), as well as principals will become more efficient and accurate. From a macroeconomic point of view, accurate data will make the economy more efficient and minimize wastage. Until now, there is no accurate and comprehensive data regarding the General Trade Market (GT Market) in Indonesia. Formulation of an appropriate and state of the art methodology is required to obtain and process data accurately about GT Market.

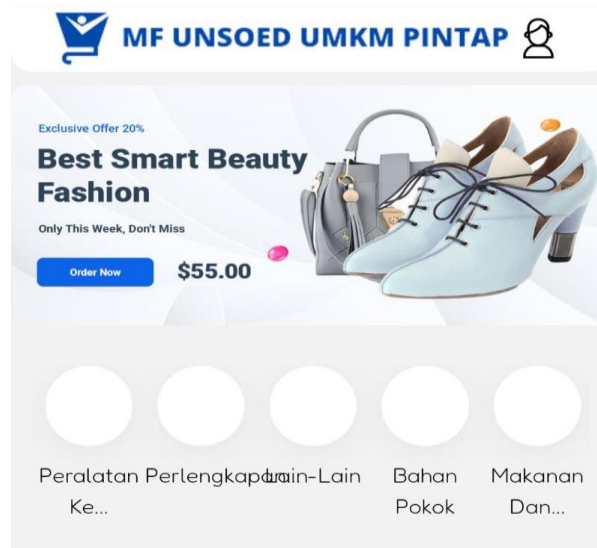


Figure 4. Upgraded Pintap App

The purpose of developing this platform is to (1) provide an overview to General Trade MSMEs actors regarding the ranking of products that are most in demand by the public. (2) Display various market information such as product sales of various categories and brands, market share, distribution intensity, and others. (3) Minimizing the risk of unsold merchandise, logistics costs, transaction costs and opportunity costs of unsold inventory and (4) MSMEs can develop the business they manage and can directly support problem solving and increase the competitiveness of the national industry.

After developing the system, the next step is to promote and socialize the application. This socialization was carried out in four cities, namely Bekasi, Madiun, Tasikmalaya and Purwokerto with a total of 160 MSME General Trade participants.

Table 1. Number of Cities and Socialization Participants

City	Amount
Bekasi	40
Madiun	40
Tasikmalaya	40
Purwokerto	40
Total	160

The socialization was carried out by introducing digital platforms to the participants. In addition, participants were taught how to use digital platforms, starting from the account registration stage, the

process of inputting goods, and processing transactions. The last stage of this socialization is distributing questionnaires, interviews and observations of the participants. From this activity, it can be seen that the Digitalization process in MSMEs still has many obstacles, including, i.e:

1. Human resources problems (human intellectual capital). Most MSMEs do not yet have the readiness of the resources to use information technology. With the majority of people's education levels still being dominated by three groups: elementary school graduates, elementary school graduates, and not attending school, MSME digital literacy is a fundamental issue that must be addressed immediately. Without readiness in human resources for digitization, MSMEs will still experience difficulties in capital and in marketing, even though opportunities are getting higher in the pandemic era, especially in terms of the habit of using digital transactions.
2. Infrastructure and information systems problems (structural capital). Not all MSMEs have the necessary infrastructure for digitization due to limited capital, bearing in mind the distribution of digital infrastructure such as internet access is not evenly distributed in Indonesia, even in Java and the price of smart devices is still considered too expensive for the lower middle class.
3. Network problems (relational capital). MSMEs that are able to take advantage of the network are still very few. They don't even realize that networking is very important, be it networking with fellow entrepreneurs, professional associations, government, or banking.
4. Social and behavior problems (social capital). MSMEs actors already have internet facilities, but it is still relatively rare to use them to obtain useful information for the progress of the company. Most of the use of the internet is still for entertainment media. In this case, not many MSMEs have been able to seize digital opportunities.

To solve various kinds of problems, the government needs to formulate several effective steps to encourage MSMEs in Indonesia to market their products online. The first step that must be taken by the government is to make maximum use of broadband which has been installed in 400 regencies and 114 regions. Utilization of this technological infrastructure must also be accompanied by efforts to increase the capacity of MSMEs in the regions through collaboration that is built between the technical ministries at the center with regional offices and district or city governments. Several dimensions that often-become content in strengthening MSME organizations include strengthening management and financial planning, marketing, product development, production, strengthening knowledge for entrepreneurs, to strengthening technology-based management (Harmawan, 2018).

The next step that can be taken by the government is to expand access to finance for MSMEs as capital for capacity building. Providing easy access to credit must also be accompanied by setting cheap taxes for MSMEs that market their products digitally. The government should equate online MSME income taxes with conventional ones of 0.5%. If this scheme can run optimally, go-digital MSMEs can make a significant contribution to the economy (Delloite, 2015).

CONLUSSION

MSMEs are one of the actors that play a role in the Indonesian economy. In the context of National Economic Recovery (PEN), the Government of Indonesia encourages MSMEs to go digital. MSMEs are considered to need to adopt digitalization to maintain productivity and maintain their income in the midst of Covid-19. Digital sales penetration can be their main strategy because this strategy can expand market reach. However, this effort has several obstacles including human resource problems, infrastructure and information systems, networking problems and social & behavioral problems.

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