

## **SMEs Performance Risk Management in Indonesia: The Impact of the COVID-19 Pandemic Crisis**



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**ABSTRACT:** This research aims to identify and analyze the impact of the COVID-19 pandemic crisis in Indonesia through the risk management of SME performance in Indonesia. The study uses a mixed method analysis that combines qualitative and quantitative. Quantitative methods are used to demonstrate accurate data and phenomena of the impact of the COVID-19 pandemic on SME performance with descriptive statistics. This study uses qualitative methods with literature studies through articles, news from online media, and other documents that explain the impact of the COVID-19 virus on the performance of SMEs in Indonesia and explain the risk management of SME performance. The results of this study explain that the COVID-19 pandemic has a serious impact on business activities, especially SMEs. The impact is indicated by the number of SME losses in Indonesia since COVID-19 appeared (March-May). The main causes of losses are decreased sales and restrictions on operating time. Many SMEs in Indonesia have not implemented good risk management. Management of risks that have been done during pandemics in the form of risk strategies through cultural trends, new normal lifestyles by implementing health protocols. In addition, risk strategies through online SME innovation continue to be encouraged by the Indonesian government.

**KEYWORDS:** SME Risk Management, Impact of Covid-19 Pandemic, Economic Crisis

### **1. INTRODUCTION**

The economic development of countries in the world is often associated with Small and Medium-sized Entrepreneurs (SMEs). Small and medium-sized entrepreneurs (SMEs) play crucial roles for economies worldwide (Brugstaller & Wagner, 2015). SMEs play a role as a sector that can absorb labor, increase income, and alleviate poverty. Martin et al. (2017) stated that small and medium enterprises have a crucial role in several developing countries because they can provide jobs and serve as sources of income for people, including marginalized groups (without skills and poor women). The SMEs sector in Indonesia has absorbed 87.73% of the workforce and contributes more than 60% of the national GDP (Kemenkopukm, 2019).

Therefore, the development of SMEs' performance has always been the government's attention and priority. The sustainability and development of SMEs is the government's top priority to reduce national inequality (Falentina & Budy, 2019).

SMEs are also a sector that is stronger in facing the economic crisis than large industries. Several economic crises that have occurred in Asia and globally in the last decade have proven that SMEs are the sector that can survive. Bourletidis & Triantafyllopoulos (2014) show that in Korea, after the 1997/1998 crisis, SMEs rose faster because they were more flexible in terms of marketing and technology transfer. Likewise, what happened in Europe, SMEs were considered more resilient to the 2008 economic recession because they easily adapted to investment and marketing tactics. SMEs are considered smaller, more flexible in adapting to economic recessions because they are not affected by swings, are less rigid, are more able to exploit markets, focus more on agglomeration than company economies of scale, and do not depend on formal credit so they are not burdened by debt (Bourletidis & Triantafyllopoulos, 2014).

When the Covid-19 outbreak occurred in almost all corners of the world at the end of 2019, it gave terrible turmoil to the economy, both in developed and developing countries, such as Indonesia. Currently, the world faces a simultaneous health and economic crisis that has never happened before in history (Pierre, 2020). The impact of the current crisis is not only on large industries but also on SMEs. According to Hartmann & Lussier (2020), some of the problems faced by the industry when facing the Covid-19 outbreak include lack of supplies, disruption in supply chains, problems in product delivery, difficulties in carrying out daily production operations, new work arrangements (for example online sales, changes in information flow, division of industry roles, etc.) as well as labor issues related to temporary dismissals or permanent dismissals (layoffs).

Research in China, Shicuan Province, (Lu et al., 2020) shows that this covid-19 outbreak has a significant impact on SMEs. Many SMEs have cash flow problems because of the fixed costs that must be incurred while decreasing revenue on the other side. Reduced productivity, due to quarantine regulations for workers, makes them unable to produce, so that it will have an impact on the sales of SMEs products. Especially for export-oriented SMEs, it has stopped due to the closure of many modes of transportation

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among countries to protect their public health. Furthermore, research by McGeever, et al. (2020) in Ireland, the liquidity needed by SMEs is affected by the covid-19 outbreak. The results of this study indicate that most SMEs in Ireland need cash for the next three months to cover their reduced income. This condition occurs in most non-farm SMEs.

Such cases also certainly occur in Indonesia and impact the performance of the national SMEs sector. The current condition clearly illustrates that SMEs cannot escape the impact of the crisis. Risk management is needed to help SMEs be successful and continue to exist in driving the economy. Risk Management may help SMEs identify risks and improve efficiency performance to be successful and experienced (Falkner & Hiebl, 2015). Therefore, this study intends to identify and analyze the risk management of the impact of the Covid-19 outbreak on the performance of SMEs in Indonesia.

Brustbauer (2014) said that risk management is the implication for competitiveness by developing a strategy to reduce potential losses while exploiting windows for opportunity. Zoghi (2017) said that today's risk management is not anymore only financial, extending its focus on operational and strategic levels, identifying critical business risk, measuring impact on the business outcome, priorities for allocating resources, and communicating the most important criteria. Belas et al. (2015) said that financial risk management has a significant influence on the business operation, financial performance, and long-term sustainability of any firm. Risk management on the financial side is not yet popular with SMEs, especially SMEs with small business scales, because SMEs often lack assistance on the financial side and are less able to access the financial resources needed to deal with cash flow problems (Husain & Windsperger, 2010).

Brustbauer, J. (2014) classifies risk management in SMEs into three categories, namely: 1) risk identification, 2) risk assessment, 3) risk monitoring. Identification of risks related to reporting as well as professional consultation related to the problems at hand. The next stage, the risk assessment, is creating a business plan, designing, and comparing products with competitors. The last stage is risk monitoring, namely monitoring work realization and comparing it with planning. This strategic orientation to risk management is divided into three main categories: regular investment in new products and technology transfer processes, seeking or expanding new markets, introducing new products to the market regularly. Risk management has a positive effect on the competitiveness and success of SMEs because SMEs cannot identify all related risks. This method helps them to get better understand in identifying, assessing, and monitoring risk, and raises their awareness of all related risks.

On the other hand, He & Lu (2018) based on the Casualty Actuarial Society (2003) classification of the four types of risk management: hazard risk, financial risk, operational risk, and strategic risk. Hazard risks are property damage, wisdom and other natural perils, theft and other crime, business interruption, disease and disability, and liability claims. Financial risks are price, liquidity, credit, inflation/purchasing power, hedging / essential risk. Operational risks are business operations (e.g., product development, human resources, supply chain management), empowerment and IT, business planning and accounting (budgeting), strategic risks are reputation damage, competition, customer wants, socio cultural trends, technological innovation, capital availability, regulatory and political.

## **2. METHODOLOGY**

The design of this study uses mixed methods analysis, which combines quantitative and qualitative research. Mixed Methods analysis involves collecting, analyzing, and interpreting quantitative and qualitative data in one study investigating the same phenomenon (Onwuegbuzie & Nancy, 2006). The purpose of using mixed methods analysis is to avoid inconsistent conclusions because it only focuses on quantitative or qualitative analysis (Creswell & Plano, 2007). The use of mixed methods with different methods can deepen and broaden the scope of research. According to Arnoult & Fetters (2011), combining quantitative and qualitative (mixed-methods analysis) is used conceptually to increase depth, breadth, and knowledge with different question components. Thus, this method is also helpful in strengthening the findings of the phenomena that occur.

This research mixes descriptive statistical methods quantitatively with a literature study to find phenomena related to SMEs' performance during the Covid-19 outbreak in Indonesia. The process is done through the collection, presentation, and analysis of quantitative data combined with comparing theories and experiences of individuals or groups. Millington & Wainwright (2016) suggest that mixed methods analysis through an interactive process of data collection, presentation, analysis, and critical reflection combined with qualitative to find the meaning of existing phenomena and build new knowledge. First, quantitative data are collected through online questionnaires aimed at several SMEs samples on each island in Indonesia. Second, it aimed to interpret and broaden the explanation of the findings of statistical results and risk management qualitatively through literature studies that show the phenomena, experiences, and activities that occur in SMEs at this time. Quantitative samples were taken randomly from SMEs affected by the Covid-19 outbreak on each island in Indonesia. Questionnaires are distributed to companies or individuals who run businesses following the criteria for SMEs according to Law No. 20 of 2008 about Small and medium-sized enterprises. Most of the samples taken have a turnover of less than IDR 50,000,000 per month and a workforce of fewer than 20 people. The analysis technique in the quantitative stage is descriptive statistics with the data from questionnaires. In this case, the data analysis is based on the percentage of the respondents' answers described through graphs and charts, or data summaries presented graphically. Brownstein et al. (2019) stated that descriptive statistics summarize numerical data and present it in one package, including the average, maximum and minimum values.

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A qualitative approach was carried out by studying the literature related to the SMEs performance phenomenon, and SMEs carried out risk management in the Covid-19 pandemic crisis. The study literature here is used to strengthen arguments about quantitative findings and find different perspectives in dealing with the Covid-19 outbreak from the side of SMEs. Literature studies usually strictly follow the methodology to ensure the completeness of information in a study (Danglot et al., 2019). Verboeket & Krikke (2019) the structure of this literature study/review approach provides a robust theoretical foundation and can lead to further research. This research is the first step in analyzing the impact of the Covid-19 outbreak on SMEs, so further and indepth research is needed to see future phenomena.

### 3. RESULT AND DISCUSSION

The world is being shocked by health problems that bring multiplier effects to all fields, namely the Covid19 virus or the coronavirus outbreak. The Covid-19 outbreak carries an unpredictable scale of impact. Many say that more than a decade for the world to recover economically and socially, which may significantly impact the development and agenda of the SDGs (Djalante et al. 2020). The current world integration is very strong, increasing the risk and impact of the spread of the Covid-19 outbreak. There are many economic impacts caused by this epidemic, especially labour restrictions to dismissal (layoffs). Problems include disruption of production, supply chain due to supply shock and demand shock at the same time, and shock in the global financial and capital market, the effect of the covid-19 pandemic.

Warwick & Roshen (2020) stated that all companies in the world are affected by the Covid-19 outbreak regardless of the company's size, either large industries or small and medium-sized enterprises (SMEs). In Pakistan, 94.57% of SMEs were affected by the crisis pandemic covid-19 (Shafi, Junrong, & Wenju, 2020). In the UK, about 41% of SMEs stopped operations, and about 35% of SMEs are unable to reopen again, about 50% of SMEs in Germany expected a negative effect due to the crisis, more than 70% of SMEs in Italy were directly affected by this crisis (Juergensen, Jose, & Rajnessh, 2020). In this research, based on the survey results, about 95.1% of SMEs stated that their businesses were affected by the covid-19 outbreak, and even most of them went bankrupt and went out of business. Even most of them went bankrupt and went out of business.

The age of business cannot guarantee that SMEs will be able to survive during the Covid-19 pandemic crisis. Of all respondents in this study, SMEs less than a year old, 1-5 years, and even those more than ten years were all affected by Covid-19. This crisis is different from previous crises since it has an impact on all SMEs. The impact of the 2008 crisis experienced by SMEs in the UK only affected some old SMEs, so the government considered policies on SMEs based on the type and age of business (Cowling, M, & Zhang, 2018). The results of the research by Shafi et al. (2020) show that 38% of SMEs in Pakistan which are most affected by Covid are old companies. Still, new companies are also inseparable from the current crisis conditions. This statement is strengthened by the calculation results of the percentage of SMEs affected by Covid-19, namely, the decrease in monthly turnover. SMEs with a turnover of less than IDR 5,000,000 per month dominate the total SMEs affected by Covid (41.67%). Meanwhile, the SMEs affected by covid with assets of IDR 5,000,000.00-IDR 10,000,000.00 per month amounted to 23.33%. Meanwhile, SMEs with a turnover of more than Rp. 15,000,000.00 affected by Covid-19 were 18.33%. The rest, 11.67% of SMEs affected by Covid-19, had a turnover of Rp.10,000,000.00-Rp.15,000,000.00. These results illustrate that sales turnover is also inseparable from the pressure of the Covid-19 outbreak.

**TABLE 1. SMEs affected by Covid-19 based on Turnover per Month (%) Impact of Covid**

Covid Impact	Business Turnover per month			
	Less than Rp5.000.000	Rp5.000.000- Rp10.000.000	Rp10.000.000Rp15.000.000	More than Rp15.000.000
Yes	41,67	23,33	11,67	18,33
No	1,67	1,67	0,00	1,67

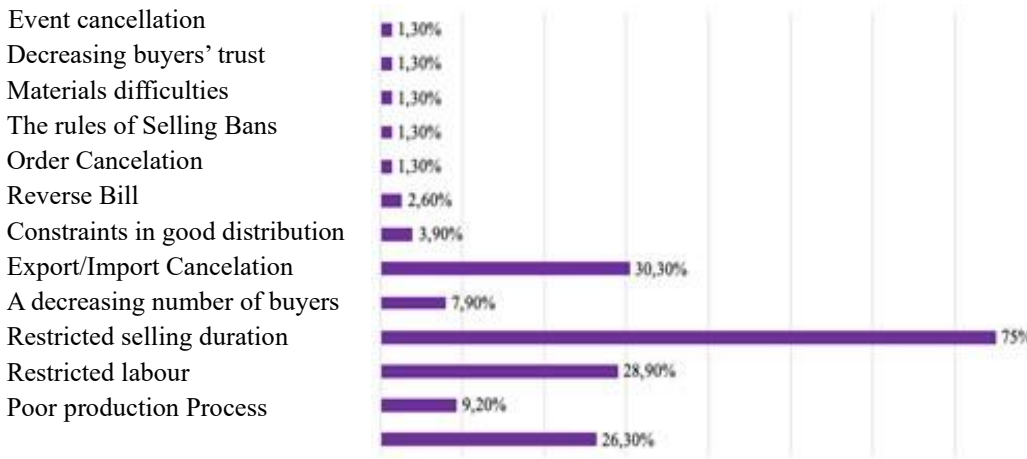
**Source:** Primary Data, processed in 2020

Based on the research results, the extent of the losses experienced by SMEs during the pandemic period also varies. If calculated based on the beginning of the Covid-19 pandemic appearing in Indonesia, then in the last three months (March-May), the SMEs suffered losses ranging from less than IDR 5,000,000 to more than IDR 20,000,000. Most of the SMEs suffered a loss of less than IDR 10,000,000 during the Covid-19 pandemic (56.6%). However, compared to a turnover of less than IDR 5,000,000 per month during regular times, this loss is very high. There are 25.9% of SMEs suffering a loss of more than IDR 20,000,000.00 during this Covid-19 pandemic.

The causes of these losses are primarily from policies to restrict direct human contact. In China, restrictions on the number of workers hinder the production process, resulting in a decrease in company income, so companies experience losses (Lu, Jing, Junlin, & Li, 2020). In America, the cause of the loss of SMEs during the Covid-19 crisis was due to liquidity difficulties and labour

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restrictions, so many companies lay off their workforce (Gourinchas, Sebnem, Veronika, & Nick, 2020). In Europe, the impact of the pandemic was on the supply side because of the disruption of transportation and labour shortages (Juergensen, Jose, & Rajnessh, 2020). Besides, Pakistan faced some problems such as financial, supply chain disruption, decreased demand, and reduction in sales and profit (Shafi, Junrong, & Wenju, 2020).

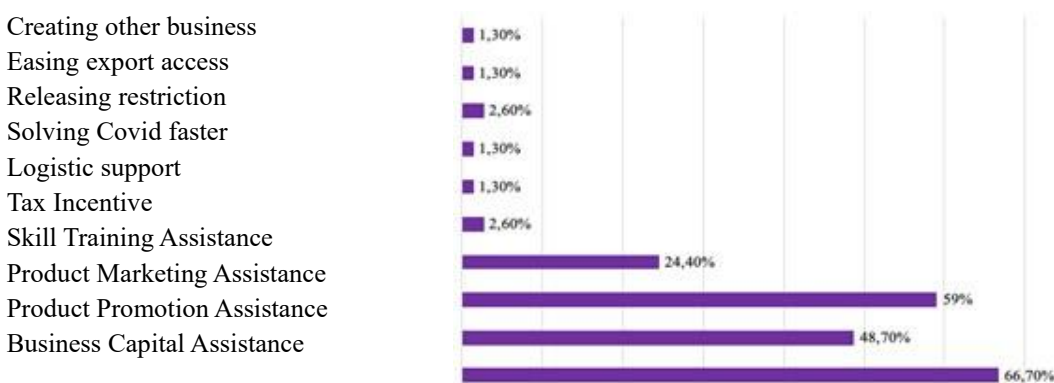


**FIGURE 1. Causes of Losses from Covid-19**

Source: primary data, processed in 2020

The statistical survey results show that the problems of SMEs in Indonesia are the same as the ones faced by other countries in the world. Based on respondents' answers in this study, 75% of respondents stated that the loss was caused by a decrease in the number of buyers. In addition, constraints in the distribution of goods (30.30%) are also the main reason for SMEs' losses in Indonesia. Several business actors also had problems with the limitation of selling time (28.9%) and delayed production processes (26.30%). Government policies related to PSBB limit the mobility of the community so that buyers cannot freely choose goods and the slightly slow distribution of goods due to restrictions on business operating hours. In addition, the most crucial thing is the problem of production, which is increasingly hampered by the need to maintain distance, namely by only allowing 50% of employees and other related policies.

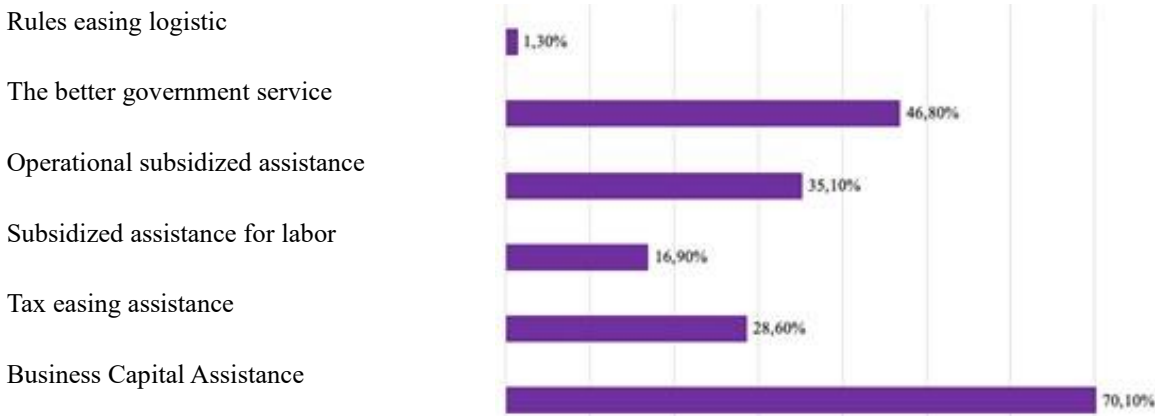
Based on the results of this study, most of the respondents stated that the pandemic crisis made companies short of capital so the primary need for SMEs is capital assistance. 66.7% of the total respondents, SMEs in Indonesia need capital to survive in the crisis because capital is eroded by the losses that must be borne. The other issues are marketing strategy as many as 48% of respondents stated they need marketing assistance and product promotion assistance. In addition, 24.4% of SMEs need training and skills to increase their business during the pandemic.



**FIGURE 2. The Needs of Business Actors Post-Covid-19 Pandemic** Source: primary data, processed in 2020.

The short-term expected solution that SMEs in Indonesia is government assistance. For assistance from the government, both from central and regional governments, most of them expect business capital assistance (70.1%). There are 46.8% respondents who expect for government services. Thus, the better the service from the government, the better the business climate for these SMEs will be. Meanwhile, respondents who expect operational subsidies from the government are 35.1%. Government policies to reduce electricity rates for marginalized communities can also be applied to SMEs actors, as a form of operational subsidies. This step will ease the burden on SMEs actors, at least for savings from electricity costs.

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**FIGURE 3. Expected assistance from the government**

Source: primary data, processed 2020

The Indonesian government has a National Economic Recovery (PEN) program to tackle the impact of the Covid-19 pandemic economic crisis. This program is included in Law No. 43 of 2020 concerning the implementation of the PEN program to support state financial policies for handling the COVID-19 pandemic and/or facing threats that endanger the national economy and/or financial system stability as well as saving the National Economy. In the PEN program, one of the government's priorities is to assist SMEs with the amount of Rp. 123.46 trillion. The PEN program for SMEs includes interest subsidies, placement of funds for restructuring, operational expenditures, guarantees for working capital, taxes for SMEs, and investment financing for cooperatives.

The government is trying to improve the performance of SMEs during the pandemic by providing capital assistance to SMEs of 2.4 million for 12 million actors. This program is considered quite effective because 99% of business actors who have received capital assistance have been able to bounce back from the pandemic crisis and are actively running their businesses. This capital assistance program has been distributed to 12.8 million actors with total assistance of 1.2 million.

Based on quantitative data, shows that risk management has not been carried out properly by SMEs in Indonesia. The shock of the COVID-19 pandemic crisis has had a significant impact on the SME business. This is not only happening in Indonesia, most of the SMEs in other countries are also not familiar with risk management. This is due to the small scale of the business and also the corporate structure which is based on individual ownership. The Covid-19 pandemic that caused the economic crisis shows that risk management does not only apply to large industries but also applies to SMEs to survive in the new normal era.

Therefore, there needs to the risk management for SMEs to anticipate the occurrence of bankruptcy. In risk management during the pandemic, what is needed is financial risk management and risk management on the operational side and the strategic side. This method can be done by identifying and considering the possibilities that occur, measuring the significant impact on business development, making a priority scale in allocating resources and communicating the results to all stakeholders to create efficiency. In addition, it is also necessary to identify and evaluate control risks in times of crisis (Zoghi, 2017).

Referring to the results of research by Brustbauer, J. (2014), this is the first stage, namely risk identification. In contrast, SMEs in Indonesia have identified the impacts or problems faced during the COVID19 crisis, namely capital, marketing, and skills. In the second stage, SMEs create a business plan during a pandemic because there is uncertainty related to the pandemic period, so there is a need for a new business plan. The last stage is the monitoring and evaluation of the new business plan to get an idea of the points of success and failure.

Based on this method, the risk management that must be carried out is currently in the second and third stages, creating a new business plan and including elements of additional capital and sources of capital. Loans from banks or non-bank financial institutions or capital assistance from the government are the existing sources of capital. The new promotional strategy is also one of the crucial points that must be included in a business plan, because the primary need is marketing and promotion, so that it can improve marketing quality, for example, with a digital promotion strategy, endorsement of influencers, or advertising in the media. The final stage evaluates current performance, weaknesses, strengths, and gaps that can be taken during this pandemic. It does not demand the possibility of moving or shifting to a new product if indeed, the old product is not marketable (for example, products that are directly related to tourism).

On the other hand, when referring to risk management in the Casualty Actuarial Society (2003) and the results of He & Lu's research (2018), the first step, SMEs make a Key Performance Index (KPI) or Key Risk Index (KRI) as a measure of each risk. In this case, the hazard risk is in the form of disease or infectious disease, namely the Covid-19 pandemic. Financial risk is in the form of liquidity, namely cash flow, where many SMEs have suffered losses. Operational risk is in the form of business operations, product development, and human resources skills, to the supply chain for marketing and the use of technology as a solution. The strategic risk is in the form of cultural trends, namely new everyday lifestyles (health protocols, maintaining distance, wearing masks, washing hands, etc.), capital ability (capital loans to financial institutions), technological innovation (digitizing SMEs),

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regulatory (in the form of government regulations). e.g: lockdown or PSBB). The next stage is to analyze the risk by ranking the heaviest to the lightest. At this stage, each SMEs will have a different measure of risk. The final stage is an evaluation of each value, making a roadmap/business plan by classifying each risk's strengths and weaknesses and then deciding. Risk management has the same result, namely a strengthening strategy based on the business plan of each SMEs.

In Indonesia alone, SMEs have largely not made a business plan in overcoming the COVID-19 pandemic. Low knowledge and insight into the importance of risk management are major factors. Based on bps survey data (2020), only 15% of businesses in Indonesia adapt through diversification of businesses to prevent losses or survive during pandemics. While only 5% of businesses are on the road to switching to other business sectors to survive during a pandemic. This figure shows that risk management is still very low in SMEs in Indonesia.

On the other hand, in terms of risk strategy, SMEs in Indonesia are faster and faster in the face of the COVID-19 Pandemic crisis. As many as 80% of SMEs have adapted to implementing new habits in the work environment. A total of 79.47% of SMEs apply physical distancing, 80.23% provide hand washing facilities, and 83.96% apply the use of masks. Cultural trends in the form of new lifestyles during this pandemic are carried out to prevent the spread of COVID-19, as well as applying regulations that have been made by the government during the COVID-19 pandemic.

Innovation by utilizing technological developments becomes one of the main ways for businesspeople to improve and maintain their businesses. The COVID-19 pandemic limited conventional marketing that required face-to-face. Therefore, the risk strategy that must be done is to switch to an online staging strategy. Based on data, only 47.75% of businesses in Indonesia use the internet in marketing. But at the beginning of the 2020 pandemic, there was an increase of 5.76% of businesses who switched to online marketing. This is one of the risk management on the strategic side in tackling the COVID-19 pandemic crisis. Risk Management support to sharpen the management decision of strategic and operational to increase the competitiveness value of SMEs (Hanggraeni, et al., 2019). The government created a digital platform in the form of the Indonesian Proud National Movement (GNBBI) as a promotion of national SME products. By the end of 2020 there are already 11.7 million SMEs entering this digital platform. During the pandemic, SMEs switched to online in cities increased by 7.12% and in the district increased by 5.19% (BPS, 2021).

## 4. CONCLUSION

The covid-19 outbreak has had a huge impact on the economy and businesses. Unlike the crisis that occurred in 1998 and 2008, the crisis caused by the spread of the corona virus or covid-19 also hit SMEs in Indonesia. Over the past three months, losses suffered by SMEs in Indonesia amounted to approximately Rp10,000,000.00 or less, with turnover per month of less than Rp5,000,000.00. Sales that fell by 50%, even more, make SMEs lack cash flow, so it needs capital assistance to survive. To be able to recover SMEs in Indonesia requires additional capital, assistance for promotion and marketing, and additional skills to diversify products. The Indonesian government has a PEN program that is used to help financial risks from affected SMEs.

Therefore, risk management in SMEs during the COVID-19 crisis pandemic is very necessary to be able to get out and adapt to the new culture of life. SMEs in Indonesia have not implemented good risk management during the COVID-19 pandemic. Most SMEs have not been able to adapt to create a business plan and diversify their business to survive during a pandemic. Risk management that has been applied by most SMEs only on the strategy side through cultural trends is a new normal lifestyle that implements health protocols following government regulations. Innovation efforts for marketing strategies by utilizing technological developments are still ongoing to this day. The government continues to encourage SMEs to transform into online SMEs as a marketing risk management effort.

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