

Analysis of Asset Management Capability on Business Performance Among SMEs in Batam City During the COVID-19 Pandemic

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Article Information	Abstract
<p><i>Article History:</i> Received: September 2022 Accepted: September 2022 Published: September 2022</p> <hr/> <p>Keywords: Asset Management, MSME Performance</p>	<p><i>Small and Medium Enterprises (MSMEs) around the world are receiving a considerable impact due to Covid-19. The impact of covid-19 on MSMEs certainly has a problem that inhibits the business in the form of the community still lacking in improving the performance of its business. In this case if the ability to manage assets in running a business, then can encourage the success of his business to cover the weaknesses he faces. Of course, this research has the aim to find out how asset management capabilities affect the performance of MSMEs in MSMEs in Batam city which has a population and a sample of 122 respondents. The data processing used Smart PLS 3 Software Application by testing descriptive statistic analysis and inference statistic in the form of Inner and Outer Model using first and second order in the research model. The results of the research include asset management capabilities in weak or low performance while asset management capabilities have a significant effect on MSME Performance.</i></p> <p style="text-align: right;">© 2022 Indonesia</p>

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1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) worldwide have been hit hard by Covid-19. All countries rely on MSMEs to grow, as these enterprises contribute up to half of the GDP growth in some countries and always support their nations in boosting economic growth. However, due to Covid-19, MSMEs have experienced a decrease in their cash flow and sales of their goods.

The government is taking various efforts to formulate fiscal and monetary policies to boost the economic performance of Indonesia. MSMEs, as the largest business actors in Indonesia, contribute not only as the largest job creators and providers in the country but also in exports, creating fixed capital or investment, as well as forming Gross Domestic Product (GDP) through their products. (UMKM Kementerian, 2020).

The contribution of MSMEs to Indonesia's GDP has continued to increase over the past three years, whether measured at current prices, which are the prices of goods and services prevailing in that year (BPS, 2019). However, despite the increasing contribution of MSMEs to Indonesia's GDP, their performance is still not optimal. Many MSMEs are unable to sustain their businesses, resulting in a significant number of MSMEs unable to develop and eventually closing down. One of the factors hindering MSMEs' productivity is poor business management, where MSMEs are still not optimal in utilizing limited resources to produce outputs. Despite the importance of MSMEs in supporting industrialization, exports, and productivity enhancement, it remains a target for future development of MSMEs' performance.

The economic growth of the Riau Islands Province in the first quarter of 2020 experienced a decline compared to the fourth quarter of 2019. However, the performance of household consumption, which is estimated to have strengthened compared to the first quarter of 2020, became one of the driving factors for economic growth in the second quarter of 2020 (BI, 2020). As a result, MSMEs become one of the driving forces for economic growth in the household consumption sector in Batam City.

The impact of Covid-19 on UMKM has created obstacles for these businesses, particularly in terms of their ability to improve their performance. One of the issues that hinders

UMKM is the lack of intellectual ability in financial reporting, and the weakness of risk estimation skills among business owners (Bahar, 2019) (Bahar & Ginting, 2018). In this context, if UMKM's asset management skills are improved, it can boost the success of their businesses and overcome the weaknesses they face. The success of their business can be seen through their profitability and other financial and non-financial performance indicators. As UMKM profitability is influenced by managerial decisions on investment, especially during periods of economic instability (Popa & Ciobanu, 2014), the larger the profits generated, the more competitive these businesses become, and their owners can make decisions to invest in their business.

Therefore, the general issue facing UMKM, as described above, is the lack of asset management skills and business performance among business owners in running their businesses. This study aims to determine the effect of asset management skills on UMKM performance in Batam City during the Covid-19 pandemic.

2. Literature Review

Assets are one of the elements of the financial position statement, which is defined as resources managed by a company based on past events and future economic benefits that will be obtained by the entity (SAKEMKM, 2018). According to Akbar & Lukman (2010), asset management is a process of improving understanding of asset condition, operating costs, and performance to aid in decision-making. Meanwhile, Hastings (2015) in his book explains that asset management is the coordinated activity of an organization to realize value from assets. Attwater et al. (2014) propose a framework for measuring asset management that can reach the relationship between asset management performance and business performance, as follows:

- 1) Asset management planning which includes designing the scope of asset management, analyzing demand, developing asset management planning strategies, analyzing critical assets, justifying capital decisions, and planning for contingencies
- 2) Asset management implementation which includes asset acquisition, response to events, asset operation, asset maintenance, and asset disposal

- 3) Asset monitoring and review which includes asset assessment, monitoring asset conditions, analyzing root causes of problems, and developing continuous improvement plans
- 4) Enablers which include managing asset information systems and determining and managing asset competencies

According to Aribawa (2016), the performance of SMEs is the result of individual tasks completed within a specific period that is related to the value or standards of the company. Therefore, performance is the success of an organization in achieving predetermined strategic goals. Meanwhile, according to Wainwright (2013), measuring the performance of SMEs is complicated due to the presence of fixed assets and profitability data as a natural phenomenon in SMEs. In addition, differences in the level of understanding of each SME actor and aspirations and abilities in running their business will cause differences in assessing their business performance. This statement is in line with Rokhayati's (2015) assertion that the factors of SME performance can be measured by various indicators, namely increasing sales or turnover growth, increasing capital growth, high employment growth, broad market growth, and continuous profit or profit growth.

According to Attwater, Wang, Parlikad, & Russell (2014), good performance measurement in asset management is related to good management, which can produce asset performance related to business performance. With good asset management, the managed asset's performance will also be good, which will optimize the business performance. This is illustrated in the following diagram:

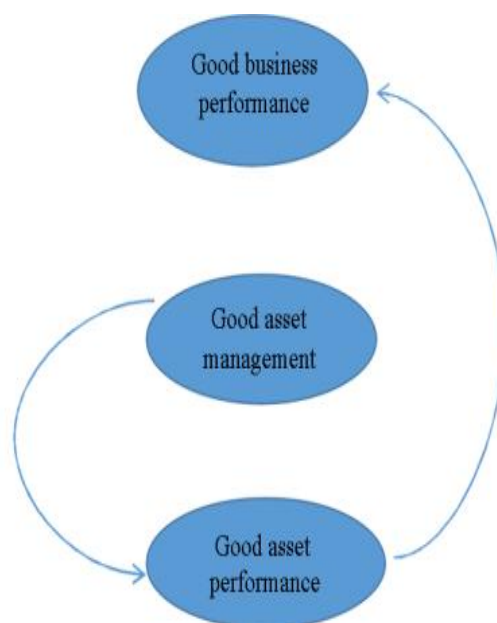


Figure 1
The Relationship Between Business Performance, Asset Management, and Asset Performance

The research model can be considered as follows:

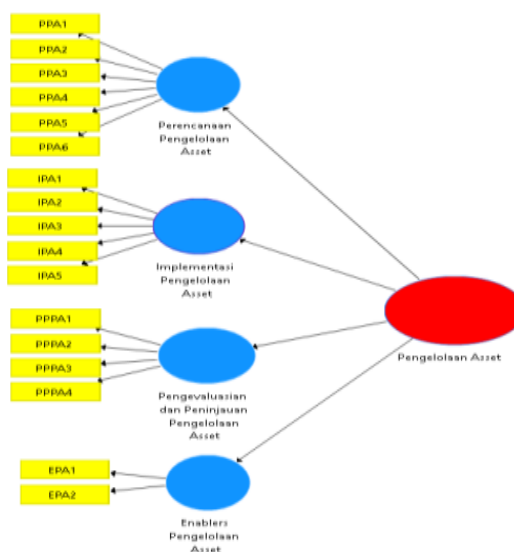


Figure 2
Research Model *First Order*

Source: SMART PLS3

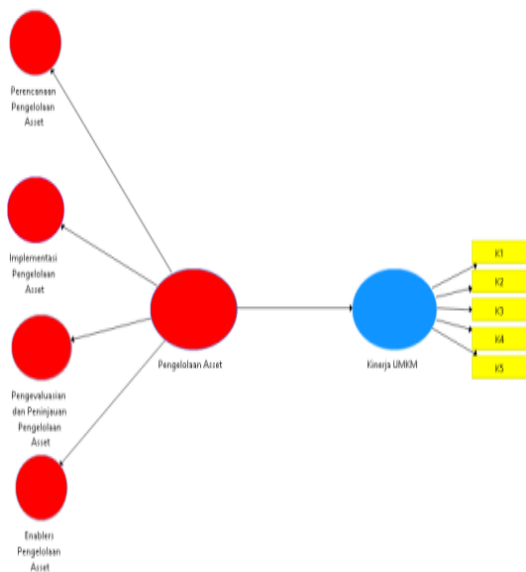


Figure 3
 Research Model *Second Order*
 Source: SMART PLS3

3. Research Method

This research used a quantitative descriptive method with reference to positivism philosophy in selecting the population and sample (Sugiyono, 2019). Meanwhile, the quantitative method was used to classify, measure, and analyze the ability of asset management on UMKM performance in facing Covid-19. The population of this research is all UMKM in Batam City with purposive random sampling technique, using the criteria of UMKM actors in Batam City who have an in-depth understanding of the problems faced by UMKM actors in terms of asset management ability and UMKM performance, and those who prepare themselves to face Covid-19, referring to the theory of determining the number of samples in SEM applications ranging from 100 to 200 samples. Therefore, the researcher used 122 samples for this study (Hair, Hult, & Ringle, 2017).

The research employed a quantitative descriptive method with a positivist philosophy approach to population and sampling (Sugiyono, 2019). The quantitative method was utilized to classify, measure, and analyze the asset management capabilities towards the performance of SMEs in facing COVID-19. The population of this study was all SMEs in Batam City, and the purposive random sampling technique was applied with criteria for SME owners who have an in-depth understanding of

asset management issues and SME performance, as well as those who have prepared themselves to face COVID-19, referring to the theory of determining the sample size in SEM application with a range of 100 to 200 samples. For this study, the researcher used a sample of 122 participants (Hair, Hult, & Ringle, 2017).

The research variables included the X variable of asset management capability with dimensions of asset management planning, asset management implementation, asset management monitoring and review, and asset management enablers with a total of 17 indicators. The Y variable of SMEs' performance was measured by five indicators: sales growth rate, capital growth rate, profit growth rate, high employment growth rate, and wide market growth rate. The researcher used a questionnaire to collect data directly, through mail, or the internet. The questionnaire statements were measured using a Likert scale, namely STS (1), TS (2), C (3), S (4), and SS (5) (Sugiyono, 2019).

Data analysis used in this study included descriptive and inferential statistical techniques. Descriptive statistics included means, standard deviations, and respondent characteristics based on gender, length of business, type of business, and number of employees. Meanwhile, inferential data analysis was conducted using Structural Equation Modeling Partial Least Square (SEM-PLS) to examine the suitability of the model used, measured using Smart-PLS 3.0 software, including model measurement (Inner and Outer Model) using First Order and Second Order, structural model evaluation, and hypothesis testing.

4. Results and Discussion

Based on the data distribution conducted on business owners through an online survey, the number of respondents by gender in this study was 124 people consisting of 63 men or 50.81 percent, while 61 women or 49.19 percent. Based on the annual sales results of the 124 respondents who filled out the questionnaire, the majority of them were micro-enterprises with sales results of \leq Rp 300,000,000, which amounted to 88 respondents or 70.97 percent. Small enterprises with sales results of more than Rp 300,000,000 and below Rp 2,500,000,000 were 34 respondents or 27.42 percent, and medium-sized enterprises with annual sales of

more than Rp 2.5 billion and below Rp 50 billion were 2 respondents or 1.61 percent.

Outer Model (Measurement)

In the research model, the Outer Model (Measurement) is processed in two stages: First Order and Second Order.

1. First Order

On the first order, the analysis is focused on testing the relationship between Asset Management Capability dimensions (Planning, Implementation, Monitoring and Evaluation, Enablers) and UMKM Performance using the outer model. The several stages in the analysis include Convergent Validity, Discriminant Validity, and Composite Variables.

1) Analysis Include Convergent Validity

The results of Convergent Validity measurement are measured through Loading factors, which can be seen as follows:



Figure 4

PLS Algorithm Model 1

Source: SMART PLS3

Based on the testing results obtained, the outer model in Figure 4 of the PLS algorithm shows that the loading factor values for all indicators of asset management in the dimensions of Asset Management Planning, Asset Management Implementation, Asset Management Monitoring and Review, and Asset Management Enablers, as well as Business Performance in the dimensions of High Sales Growth Rate, High Capital Growth Rate, High Profit/Revenue Growth Rate, High Employee Growth Rate, and Wide Market Growth Rate, have some values that are below 0.7. Therefore, it can be stated that in this research model, it does not meet the

requirements for convergent validity testing.

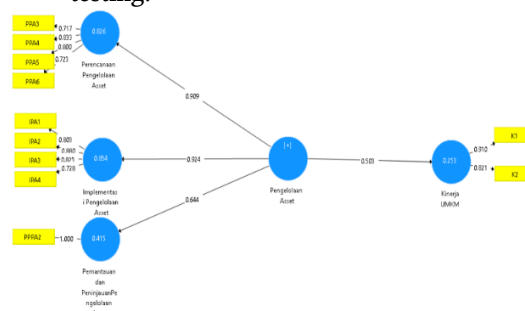


Figure 5

PLS Algorithm Modification

Source: SMART PLS3

In Figure 5, it can be seen that the criteria for the loading factor value are not met for items in the Asset Management dimension of Asset Management Planning in PPA1 and PPA2, Asset Management Implementation in IPA5, Asset Management Monitoring and Review in PPPA1, PPPA3, and PPPA4, Asset Management Enabler in EPA1 and EPA2, as well as for the SME Performance in items K3, K4, and K5. However, the Asset Management and SME Performance dimensions have loading factor values above 0.7, which means that this research model meets the criteria for convergent validity.

2) Analysis Discriminant Validity

Discriminant validity can be assessed based on the results of the average variance extract (AVE), where all variables meet the requirement of having an AVE value above 0.5. Specifically, the Asset Management variables in the dimensions of Asset Management Planning have an AVE of 0.593, Asset Management Implementation has an AVE of 0.656, and Asset Management Monitoring and Review has an AVE of 0.750. This indicates that the variables have sufficient discriminant validity, meaning that they are measuring distinct and separate constructs.

Tabel 1.
Convergent and Discriminant Validity

Construct Model	Measurement Item	Loadings	AVE
Asset Management	PPA3	0,717	0,593
	PPA4	0,833	
	PPA5	0,800	
	PPA6	0,723	0,656
	IPA1	0,803	
	IPA2	0,880	
	IPA3	0,823	
	IPA4	0,728	
PPPA2	1,000	0,593	
MSME Performance	K1	0,910	0,750
	K2	0,821	

Source: SMART PLS3

3) Composite Variables

The reliability testing of questionnaire data in Smart PLS is conducted using composite reliability. A good composite reliability value is above 0.7 (Ghozali & Latan, 2014). The results of the composite reliability calculation can be seen in Table 2.

Table 2.

Composite Variabel

Construct Model	Composite Reliability
Asset Management Implementation	0.884
Asset Management Monitoring and Review	1.000
Asset Management Planning	0.853
MSME Performance	0.857

Source: SMART PLS3

Based on the data obtained from the calculation of composite reliability in Table 2, all constructs in the model meet the criteria for composite variables.

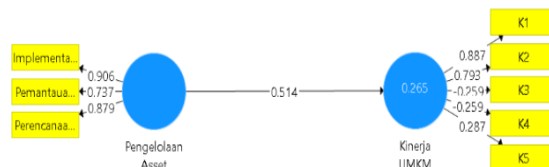
2. Second Order

At the second-order level, the study tests the relationship between the Asset Management constructs and Business Performance by evaluating discriminant validity, convergent validity, and composite variables. The research

model for the second-order testing is presented below:

Figure 6.

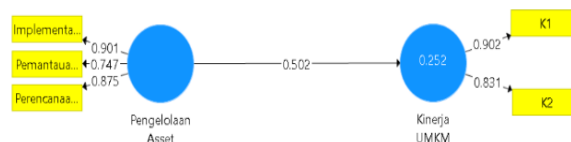
Model Second Order PLS Algorithm



Source: SMART PLS3

Figure 7.

Model Second Order PLS Algorithm Modification



Source: SMART PLS3

Based on the research model presented in Figures 6 and 7, there are several steps involved in the outer model testing at the second-order level, which include:

1) Evaluation of Convergent Validity

The evaluation of convergent validity shows that the testing results for each construct variable of asset management in the dimensions of Asset Management Implementation, Asset Management Monitoring and Review, and Asset Management Planning meet the requirements for convergent validity, which can be seen in Figures 6 and 7.

2) Evaluation of Discriminant Validity

In the evaluation of discriminant validity for the second-order part, we can see that the level of the average variance extracted (AVE) is above 0.5 for the construct model of Asset Management and MSME Performance in Table 3.

Table 3.

Convergent dan diskirminan Validity

Construct Model	Measurement Item	Loadings	AVE
Asset Management	Asset Management Implementation	0,875	0,712

Construct Model	Measurement Item	Loadings	AVE
	Asset Management Monitoring and Review	0,901	
	Asset Management Planning	0,747	
MSME Performance	K1	0,902	0,752
	K2	0,831	

Source: SMART PLS3

3) Composite Variabel

The composite variable results in Table 4 show that all the construct model values are greater than 0.7, indicating that the variables meet the requirements for good reliability testing.

Table 4.
Composite Variabel

Construct Model	Composite Reliability
Asset Management	0,881
MSME Performance	0,858

Source: SMART PLS3

Structural Model

After the validity and reliability testing have met the requirements of each first order and second order in the outer model, the next step is to test the structural model in the inner model, which can be seen in table 5 as follows:

Tabel 5
Hasil Bootstrapping

	Asset Management -> MSME Performance
R-Square	0.252
Confidence Intervals 97.5%	0,618
t value	9.104
p value	0.000
Significance (p<0.05)	Significance

Source: SMART PLS3

Based on the analysis results in table 5, the coefficient of determination for the relationship between asset management and SMEs performance has an R2 value of 0.252 or 25.2%. However, this is still a very low value in terms of the Crobach Alpha score limit. This indicates that asset management has a relationship capability of only 25.2% on SMEs performance, while 74.8% has a relationship capability with other factors.

On the other hand, other bootstrapping results found that the construct variable of asset management has a significant influence on SMEs performance. The influence is obtained from the important role of asset management planning, implementation, monitoring, and review in improving SMEs performance.

5. Conclusion

The conclusion drawn from the above research and discussion is as follows: The ability of asset management is still low in its relationship with factors affecting the performance of UMKM. There are many other factors that have a significant impact on the performance of UMKM. However, the ability of asset management has a significant effect on the performance of UMKM.

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