Analysis of the Impact of Assets, Capital, Workforce, Fintech on the Revenue of MSMEs in Medan City

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Abstract

The purpose of this study is to examine whether factors such as Assets, Capital, Workforce, and Fintech have an influence on the revenue of SMEs. The research method used in this study is descriptive analysis with quantitative data. The data for this study were obtained from the Cooperative and SME Agency of Medan City, and data analysis was conducted using Partial Least Square (PLS) analysis with the assistance of SmartPLS 3.0 software. The study utilized data from 245 MSMEs in Medan City for the year 2022. The results of this study demonstrate that among the three indicators, fintech has the strongest impact on MSME revenue. This is supported by the p-value in the hypothesis testing, which is 0.019 < 0.05, indicating that fintech has a positive and significant effect on revenue. Additionally, the asset indicator is also emphasized as it is considered to have a substantial influence on MSME revenue.

Keywords: Asset, Capital, Workforce, Fintech, Revenue, MSME.

1. Introduction

The current technological advancements have had a significant impact on the business world. Anything related to technology is highly sought after by all segments of society. Various functions have become easier in digital form compared to traditional methods. With highly advanced technology, it is capable of collaborating and even innovating with financial knowledge, which can potentially increase their revenue, or as the authors refer to it, Financial Technology. There are numerous important figures in Indonesia who believe that Fintech plays a crucial role in the MSME sector. One of them is President Joko Widodo. Joko Widodo stated, "Financial technology plays an important role in driving the businesses of MSMEs. Fintech provides convenience and efficiency for SMEs in the financial sector, enabling mass payments and even online lending." Currently, there are approximately 65 million MSMEs in Indonesia. Data from the Cooperative and SME Agency of Medan in 2022 stated that there are 1,603 MSMEs in the city of Medan, North Sumatra. Based on the background description above, the researchers have discovered a very interesting phenomenon that warrants further investigation. The researchers represent this phenomenon through the graph below.
Based on the above graph, we can observe two categories of MSMEs: those that do not optimize Fintech and those that do optimize Fintech. The average annual revenue of MSMEs that optimize Fintech is Rp.220,628,571.00, while the average annual revenue of MSMEs that do not optimize Fintech is Rp.185,172,312.00. Naturally, the revenue of MSMEs that do not optimize Fintech is smaller compared to those that do, because non-Fintech MSMEs have limited access to Fintech, resulting in less efficient financial management and online transactions with customers. This can lead to lower revenue compared to Fintech-enabled MSMEs.

2. Literature Review

Asset

In the context of MSMEs, assets play a crucial role in their operations and financial performance. Assets refer to the financial instruments or resources owned by an MSME, which can include physical assets like machinery, equipment, inventory, as well as intangible assets such as patents or trademarks. Accurately measuring the acquisition cost or fair value of these assets is important for MSMEs to have a clear understanding of their financial position and make informed decisions. It allows them to assess the value and potential returns on their investments, manage their resources effectively, and identify areas for improvement.

Research conducted by Priyo Suwono et al. (2020) has shown that assets have a significant impact on the revenue of MSMEs. This indicates that the presence and proper utilization of assets can contribute to generating higher revenue for these businesses. By having valuable and well-managed assets, MSMEs can enhance their production capabilities, deliver quality products or services, and attract more customers, ultimately leading to increased revenue and business growth. Therefore, MSMEs need to recognize the importance of assets and ensure that they are accurately measured and effectively utilized. This includes proper maintenance, regular evaluation of asset values, and strategic decision-making regarding asset acquisition or disposal. By optimizing their asset management practices, MSMEs can maximize their revenue potential and enhance their overall financial performance.

Capital

Capital refers to the financial resources or funds available for the operation and growth of the business. It represents the value that remains after deducting the liabilities, such as debts or

Figure 1. Phenomenon of MSME Revenue in Medan City
obligations, from the total assets of the MSME. Having an adequate amount of capital is essential for MSMEs as it enables them to cover their operational expenses, invest in necessary resources, and seize growth opportunities. Capital can be used for purchasing inventory, upgrading equipment, hiring skilled staff, marketing and promotional activities, and expanding business operations. Research conducted by Lintang Kinasih (2021) has demonstrated that capital has a positive and significant impact on the revenue of MSMEs. This suggests that the availability of sufficient capital can directly influence the revenue generation potential of these businesses.

When MSMEs have access to capital, they can invest in their operations, improve their production capacity, enhance the quality of their products or services, and expand their customer base. This, in turn, can lead to increased sales, higher customer satisfaction, and ultimately, a positive impact on revenue. Furthermore, having adequate capital also provides MSMEs with a safety net to navigate through challenging times, such as economic downturns or unforeseen expenses. It enables them to withstand financial shocks, maintain business continuity, and seize new opportunities that may arise.

Therefore, MSMEs should focus on capital management, including strategies for acquiring and allocating capital effectively. This may involve exploring various funding sources, such as loans, grants, investments, or partnerships, and implementing financial planning and budgeting to ensure optimal utilization of available capital. By understanding the significance of capital and its positive impact on revenue, MSMEs can make informed decisions and take necessary steps to strengthen their financial position, sustain growth, and achieve long-term success.

Workforce

The workforce plays a crucial role in the daily operations and productivity of the business. The workforce refers to the individuals who are engaged in various roles and responsibilities within the MSME, both physically and mentally. According to Alam (2014) and Hamzah (2014), the workforce consists of individuals between the ages of 17 and 60 who work to fulfill their daily needs. This definition encompasses both employees who are formally employed by the MSME and individuals who may work on a contractual basis or as freelancers, contributing to the production process or providing services. Research conducted by Lintang Kinasih (2021) has found that the workforce has a positive and significant impact on the revenue of MSMEs. This implies that the quality, skills, and commitment of the workforce directly influence the business's ability to generate revenue and achieve its financial goals.

A skilled and motivated workforce can contribute to increased productivity, improved product or service quality, enhanced customer service, and effective utilization of resources. They play a vital role in driving innovation, maintaining customer satisfaction, and fostering a competitive edge in the market. Furthermore, a dedicated and efficient workforce can positively impact customer retention, word-of-mouth referrals, and overall business reputation. Their expertise, knowledge, and commitment can lead to customer loyalty and repeat business, resulting in higher revenue for the MSME. To leverage the positive impact of the workforce on revenue, MSMEs should focus on attracting and retaining talented individuals, providing adequate training and development opportunities, fostering a positive work environment, and promoting employee engagement. Additionally, effective communication, teamwork, and proper resource allocation are essential to optimize the productivity and efficiency of the workforce. By recognizing the importance of the workforce and investing in their development and well-being, MSMEs can enhance their revenue potential, strengthen their competitive position, and achieve sustainable growth.
Fintech

Fintech, as defined by Hsueh and Kuo (2017), refers to a new model of financial services that has emerged through innovative information technology solutions. It encompasses various technological advancements and digital platforms that provide financial services such as online payments, digital lending, crowdfunding, blockchain-based transactions, and automated investment platforms. Research conducted by Eri Yanti Nasution (2021) has revealed that Fintech has a positive impact on the revenue of businesses. This finding suggests that integrating Fintech solutions into business operations can contribute to increased revenue generation. By leveraging Fintech, businesses can benefit from enhanced efficiency, accessibility, and convenience in their financial processes. For example, Fintech solutions enable streamlined payment systems, allowing businesses to accept online payments from customers easily. This, in turn, can expand customer reach, improve sales, and boost revenue.

Moreover, Fintech offers alternative funding options such as online lending platforms or crowdfunding, which can provide businesses with additional capital to invest in growth opportunities. These platforms can connect businesses with potential investors or lenders, facilitating access to funds that can support expansion, product development, or marketing efforts, leading to increased revenue. Fintech also plays a role in improving financial management and reducing costs for businesses. Through digital financial tools and platforms, businesses can automate financial processes, monitor cash flows, and gain real-time insights into their financial performance. This enables better decision-making, cost optimization, and more efficient resource allocation, ultimately impacting revenue positively.

Furthermore, Fintech enables businesses to tap into digital marketing channels, data analytics, and personalized customer experiences. By leveraging these capabilities, businesses can target their marketing efforts more effectively, understand customer preferences, and offer tailored products or services. This can result in increased customer engagement, higher conversion rates, and ultimately, improved revenue generation. Incorporating Fintech solutions into business operations has been found to have a positive impact on revenue. By leveraging Fintech's technological advancements, businesses can enhance financial processes, access new funding sources, optimize cost management, and improve customer experiences. Embracing Fintech can position businesses for growth, innovation, and increased revenue in the dynamic digital era.

Revenue

According to Swastha (2005), revenue refers to the cumulative sales of goods and services, which are calculated in total over a specific period of time or during an accounting process. In this context, revenue represents the total amount of money earned from the consumption of goods or services by consumers within a given time frame. The author's perspective suggests that revenue is determined by the amount of money received in exchange for the goods or services provided by a business. It serves as a measure of the business's sales performance and reflects the value generated from customer transactions. When calculating revenue, businesses consider the total monetary value of all sales made during a specific period, regardless of whether the payment is received in cash, through credit transactions, or other forms. Revenue serves as an indicator of a business's income, highlighting the financial resources generated through its core operations. By tracking revenue, businesses can assess their financial performance, evaluate the effectiveness of their sales strategies,
and make informed decisions regarding pricing, production, and resource allocation. Revenue is a crucial component in financial analysis and planning, as it directly impacts a business's profitability and sustainability. Revenue represents the total monetary value obtained from the consumption of goods or services during a specific period. It serves as a key metric for businesses to evaluate their sales performance, financial health, and overall success in meeting customer demands.

**Conceptual Framework**

The conceptual framework of this research illustrates the two-way relationship among the independent, moderating, and dependent variables. Based on the framework below, the following hypotheses can be formulated:

![Conceptual Framework](image)

**Hypotheses**

- H1: The effectiveness of assets has an impact on Fintech adoption in MSMEs in Medan city during the period 2022.
- H2: The effectiveness of capital has an impact on Fintech adoption in MSMEs in Medan city during the period 2022.
- H3: The effectiveness of the workforce has an impact on Fintech adoption in MSMEs in Medan city during the period 2022.
- H4: The effectiveness of assets has an impact on revenue through Fintech adoption in MSMEs in Medan city during the period 2022.
- H5: The effectiveness of capital has an impact on revenue through Fintech adoption in MSMEs in Medan city during the period 2022.
- H6: The effectiveness of the workforce has an impact on revenue through Fintech adoption in MSMEs in Medan city during the period 2022.
• H7: The effectiveness of Fintech adoption has an impact on revenue in MSMEs in Medan city during the period 2022.

3. Methodology

The research was conducted in Medan city from October 2022 to January 2023, focusing on the MSMEs in the area. The chosen research method was quantitative, utilizing numerical data and statistical analysis. The population consisted of 1,603 MSMEs in Medan, and the sample selection followed the purposive sampling technique. The selected criteria for the sample were MSMEs in Medan that had optimized the use of fintech in their businesses. A total of 245 MSMEs met the criteria and were included as the sample for the study. The data used in this research was secondary data obtained from the Cooperative Office of Medan. The variables examined in the study included assets, capital, workforce, fintech, and revenue. These variables were defined and operationalized based on their respective definitions and measurement scales. The analysis of the data was conducted using the SmartPLS SEM software, which allowed for the examination of latent variables through indicators.

The data analysis process involved several steps, including descriptive statistical analysis, measurement model testing (outer model), and structural model testing (inner model). The measurement model focused on assessing the convergent validity, discriminant validity, composite reliability, and Cronbach's alpha of the variables. The structural model aimed to examine the relationships between the latent variables and involved R-square analysis, F-square testing, and hypothesis testing. The research focused on MSMEs in Medan, utilizing a quantitative approach and secondary data. The study employed SmartPLS SEM for data analysis, considering variables such as assets, capital, workforce, fintech, and revenue. The measurement model and structural model were tested to assess the validity, reliability, and relationships between the variables.

4. Result and Discussion

Descriptive Statistics

Descriptive statistics provide an overview and description of the data used as the research sample, including the minimum, maximum, mean, and standard deviation values of the variables. The table below presents the descriptive statistics for the variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset</td>
<td>245</td>
<td>Rp 25.000.00</td>
<td>Rp 2.090.000.00</td>
<td>Rp 135.187.75</td>
<td>Rp 108.225.16</td>
</tr>
<tr>
<td>Capital</td>
<td>245</td>
<td>Rp 101.000.00</td>
<td>Rp 2.150.000.00</td>
<td>Rp 240.522.44</td>
<td>Rp 226.990.69</td>
</tr>
<tr>
<td>Workforce</td>
<td>245</td>
<td>3</td>
<td>15</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>
Based on the results of the descriptive statistics test (Table 2), the following findings are obtained: There were 245 UMKM actors observed during the year 2022. The minimum asset value of Rp 25,000,000 was obtained by "Khas Melayu Fina" in 2022, while the maximum value of Rp 2,090,000,000 was obtained by Bradan Donuts Medan in 2022. The average asset value for UMKM in Medan during the period 2022 was Rp 135,187,755, with a standard deviation of Rp 230,225,169. There were 45 UMKM actors with asset values above the mean and 200 UMKM actors with asset values below the mean. A smaller standard deviation than the mean indicates a low level of data deviation. The minimum capital value of Rp 101,000,000 was obtained by GOGO, while the maximum value of Rp 2,150,000,000 was obtained by UD.Cipta. There were 80 UMKM actors with capital values above the mean and 165 UMKM actors with capital values below the mean. A smaller standard deviation than the mean indicates a low level of data deviation. The minimum workforce value of 3 was obtained by Rumah Batik Siti Khadijah, while the maximum value of 15 was obtained by Restoran Paripurna. There were 113 UMKM actors with workforce values below the mean and 32 UMKM actors with workforce values above the mean. A smaller standard deviation than the mean indicates a low level of data deviation. The minimum revenue value of Rp 62,000,000 was obtained by Mie Ayam D'lapan, while the maximum value of Rp 2,400,000,000 was obtained by Restoran Paripurna. There were 141 UMKM actors with revenue values below the mean and 104 UMKM actors with revenue values above the mean. A smaller standard deviation than the mean indicates a low level of data deviation.

**Outer and Inner Model**

![Figure 3. PLS-Alghorithm](image-url)

According to the results of the convergent validity test, the outer model was evaluated using the measurement evaluation, and the loading factor for each target variable was found to be >0.7. The outer loadings showed the relationships between the latent variables and indicators. The values of the

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outer loading were in the order of 0.993, 0.993, 0.014, and 0.045 for the period 2022. The modal values for the period 2022 were 0.991, 0.993, 0.988, and -0.001. The workforce values for the period 2022 were 0.992, 0.994, 0.982, and 0.991. Finally, the revenue values for the period 2022 were 0.982, 0.988, 0.985, and 0.988. Although some variables did not meet the criteria, with outer loadings >0.7, it can be stated that most variables met the requirements.

The discriminant validity test was conducted to compare the square root of the average variance extracted (AVE) with the discriminant validity. The measurement model was calculated using cross-loading data with other constructs. If the correlation between latent constructs estimates its indicators better than other constructs, good discriminant validity is achieved (if AVE > 0.5). The AVE measurements for each indicator were as follows: Aset 0.494, Fintech 0.980, Modal 0.291, Revenue 0.977, and Tenaga Kerja 0.736. From the AVE measurements, it can be seen that Fintech, Revenue, and Tenaga Kerja met the criteria as their values were greater than the rule of thumb of 0.5. However, Aset and Modal still had values below 0.5.

The composite reliability test was conducted to assess the composite reliability of the constructs. If the composite reliability value is >0.7, the construct is considered to have high reliability, and if it is >0.6, it can be considered reliable. The composite reliability measurements for each construct were as follows: Aset 0.674, Fintech 0.995, Modal 0.413, Revenue 0.994, and Tenaga Kerja 0.893. From the measurements, it can be seen that Fintech, Revenue, and Tenaga Kerja had composite reliability values >0.7, indicating high reliability. These three variables can be used as independent variables to examine their influence on the dependent latent variable, which is the UMKM revenue.

Moving to the inner model, the R-Square was calculated to determine the variability of the independent variables that could explain the variability of the dependent variable. The R-Square values for Fintech and Revenue were 0.991 and 0.987, respectively, indicating that 99.1% and 98.7% of the variations in these variables were explained by the exogenous and endogenous variables.

Lastly, the F-Square was examined to assess the effect size of the model. The values indicated that the influence of asset, modal, and tenaga kerja on fintech was weak (values < 0.02), while the influence of fintech on revenue was strong (value > 0.35).

**Path Analysis**

This test is conducted based on the results of the Inner Model test, which includes the R-Square output. To determine whether a hypothesis is rejected or accepted, attention can be given to the construct values and p-values. These values are obtained from the results of bootstrapping. The rule of thumb used in the study is a significance level of p-value 0.05 (5%). Below, the hypothesis values can be seen as follows.

| Hypothesis | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|------------|--------------------|----------------|---------------------------|----------------|---------|
| Asset -> Fintech | 0.053 | 0.067 | 0.067 | 0.799 | 0.425 |
| Asset -> Revenue | 0.551 | 0.511 | 0.085 | 6,500 | 0.000 |
| Fintech -> Revenue | 0.124 | 0.149 | 0.105 | 1.189 | 0.019 |
| Capital -> Fintech | -0.001 | 0.000 | 0.008 | 0.140 | 0.889 |

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Based on the results of the inner model path coefficients, it is known that: The first hypothesis tests that assets have a positive but insignificant effect on fintech. The testing results show that the coefficient of assets on fintech is 0.053 with a p-value of 0.425 > 0.05, indicating a positive but insignificant influence on revenue. The second hypothesis tests that capital has a negative but insignificant effect on fintech. The testing results show that the coefficient of capital on fintech is -0.001 with a p-value of 0.889 > 0.05, indicating a negative but insignificant influence on revenue. The third hypothesis tests that workforce has a positive and significant effect on fintech. The testing results show that the coefficient of workforce on fintech is 0.943 with a p-value of 0.000 < 0.05, indicating a positive and significant influence on revenue. The fourth hypothesis tests that assets have a positive but insignificant effect on revenue through fintech. The testing results show that the coefficient of assets on revenue through fintech is 0.006572, derived from 0.053 × 0.124, with a p-value of 0.09 > 0.05, derived from 0.425 × 0.235, indicating a positive but insignificant influence on revenue. The fifth hypothesis tests that capital has a negative but insignificant effect on revenue through fintech. The testing results show that the coefficient of capital on revenue through fintech is -0.00012, derived from -0.001 × 0.124, with a p-value of 0.208 > 0.05, derived from 0.889 × 0.235, indicating a negative but insignificant influence on revenue. The sixth hypothesis tests that workforce has a positive and significant effect on revenue through fintech. The testing results show that the coefficient of workforce on revenue through fintech is 0.116, derived from 0.943 × 0.124, with a p-value of 0.00 < 0.05, derived from 0.000 × 0.235, indicating a positive and significant influence on business value. The seventh hypothesis tests that fintech has a positive and significant effect on revenue. The testing results show that the coefficient of fintech on revenue is 0.124, with a p-value of 0.019 < 0.05, indicating a positive and significant influence on revenue.

Discussion

Based on the conducted research, it can be concluded that among the 245 SMEs in Medan, assets have a positive but insignificant effect on fintech. The research demonstrates that among the 245 SMEs in Medan, capital has a negative but insignificant effect on fintech. The research reveals that among the 245 SMEs in Medan, workforce has a positive and significant impact on fintech. Based on the research, it can be concluded that among the 245 SMEs in Medan, assets have a positive but insignificant effect on revenue through fintech. The research findings indicate that among the 245 SMEs in Medan, capital has a negative but insignificant effect on revenue through fintech. The research demonstrates that among the 245 SMEs in Medan, workforce has a positive and significant impact on revenue through fintech. It can be concluded that among the 245 SMEs in Medan, fintech has a positive but insignificant effect on revenue. This is in line with the statement that a lack of information about information technology development results in limited business infrastructure and a lack of progress in businesses (Tyas and Safitri, 2014).

5. Conclusions

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The hypothesis testing results for assets on fintech show a coefficient value of 0.053 with a p-value of 0.425 > 0.05, indicating a positive but insignificant influence on revenue. This means that assets have a positive effect on fintech but do not significantly impact revenue. The hypothesis testing results for capital on fintech show a coefficient value of -0.001 with a p-value of 0.889 > 0.05, indicating a negative and insignificant influence on revenue. This means that capital has a negative effect on fintech but does not significantly affect revenue. The hypothesis testing results for workforce on fintech show a coefficient value of 0.943 with a p-value of 0.000 < 0.05, indicating a positive and significant influence on revenue. This means that workforce has a positive effect on fintech and significantly impacts revenue. The hypothesis testing results for assets on revenue through fintech show a coefficient value of 0.006572 with a p-value of 0.09 > 0.05, indicating a positive but insignificant influence on revenue. This means that assets have a positive effect on revenue through fintech but do not significantly impact it. The hypothesis testing results for capital on revenue through fintech show a coefficient value of -0.00012 with a p-value of 0.208 > 0.05, indicating a negative and insignificant influence on revenue. This means that capital has a negative effect on revenue through fintech but does not significantly affect it. The hypothesis testing results for workforce on revenue through fintech show a coefficient value of 0.116 with a p-value of 0.00 < 0.05, indicating a positive and significant influence on revenue. This means that workforce has a positive effect on revenue through fintech and significantly impacts business value. The hypothesis testing results for fintech on revenue show a coefficient value of 0.124 with a p-value of 0.019 < 0.05, indicating a positive and significant influence on revenue. This means that fintech has a positive effect on revenue and significantly impacts it. Recommendation for MSMEs to increase their revenue is to optimize the use of fintech, assets, and capital in their businesses. These three variables have a significant impact on the dependent variable, which is revenue.

References
