

## Enhance Micro, Small and Medium Enterprises' financial performance through e-commerce, capitals and experience

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### Abstract

**Purpose:** This study aims to determine the factors that influence the increase in MSMEs income such as e-commerce, capital and business experience. The type of data used is primary data using a sample of 47 MSMEs located on Soekarno Hatta Street, Binjai City.

**Method:** The data collection method used a questionnaire while the data analysis method used was multiple linear regression analysis.

**Result:** The results of this study indicate that e-commerce influences increasing MSMEs income, capital has an effect on increasing MSMEs income, and business experience has no effect on increasing MSMEs income.

**Originality/ relevance:** From the results of this study, it can be explained that the factors that influence the sustainability of MSMEs include the use of digital technology in the form of e-commerce and strong capital, while business experience has no impact on increasing the income of these MSMEs.

**Keywords:** e-commerce; capitals; experience; performance; MSMEs' income

## **Améliorer les performances financières des micro, petites et moyennes entreprises grâce au commerce électronique, aux capitaux et à l'expérience**

### **Résumé**

**Objectif** : Cette étude vise à déterminer les facteurs qui influencent l'augmentation des revenus des MPME, tels que le commerce électronique, le capital et l'expérience commerciale. Le type de données utilisées est primaire, avec un échantillon de 47 MPME situées dans la rue Soekarno Hatta, dans la ville de Binjai.

**Méthode** : La méthode de collecte des données a utilisé un questionnaire, tandis que la méthode d'analyse des données a été l'analyse de régression linéaire multiple.

**Résultats** : Les résultats de cette étude indiquent que le commerce électronique a un effet sur l'augmentation des revenus des MPME, que le capital a un effet sur l'augmentation des revenus des MPME et que l'expérience professionnelle n'a pas d'effet sur l'augmentation des revenus des MPME.

**Originalité / pertinence** : Les résultats de cette étude permettent d'expliquer que les facteurs qui influencent la durabilité des MPME comprennent l'utilisation de la technologie numérique sous la forme du commerce électronique et d'un capital solide, tandis que l'expérience commerciale n'a aucun impact sur l'augmentation des revenus de ces MPME.

**Mots-clés** : commerce électronique ; capitaux ; expérience ; performance ; revenus des MPME

## Introduction

Micro, Small and Medium Enterprises (MSMEs) are the most important part of the people's economy with the majority of business actors with the largest number in Indonesia, especially with contributions such as seen from the aspects of increasing sources of income, employment opportunities, rural economic development, and women entrepreneurs development (Tambunan, 2019). MSMEs have an important role in the growth and development of the national economy (Maksum et al., 2020). However, there are still many large companies that have stopped production, in this business sector, it has proven to be helpful when amid the economic crisis, so that the income of the general public has decreased during the currency crisis, but the demand for goods has remained stable and even increased. This is inversely proportional to the situation of large companies that have collapsed due to decreased market demand. It is hoped that MSMEs will be the savior of the Indonesian economy (Berry et al., 2001; Maksum et al., 2020).

MSME empowerment is important to encourage economic growth and development (Digdowiseiso & Sugiyanto, 2021; Nursini, 2020). MSME development is related to efforts to encourage a favorable business environment and increase community entrepreneurial motivation and knowledge in order to increase financial performance (Bartolacci et al., 2019). Financial performance that can be described by income, is very important for the sustainability of MSME businesses. An increase in income reflects business growth that encourages the sustainability of the business.

The current rapid digital era is an opportunity for business actors to be able to develop their business more easily and efficiently. The Ministry of Cooperatives and Small and Medium Enterprises (Kemenkop UKM) in 2017 launched as many as 3.79 million MSMEs utilized digital platforms in marketing their products. This number is around 8 percent of the total MSME players who surf in cyberspace, Kemenkop UKM and the Ministry of Communication and Information Technology (Kemkominfo) together with e-commerce players initiated a program entitled 8 million UMKM Go. Through this collaboration, the government also hopes to accelerate the transformation of MSMEs in Indonesia to digital. Lack of knowledge about utilizing technology has a less-than-optimal impact on the development of MSMEs. From the limitations felt by MSME players, there are still many MSME players who do not maximize the income and benefits of selling goods online or called E-commerce. E-commerce cannot be separated from the growth rate of the internet which is a medium for introducing, selling goods and services to consumers so e-commerce can stimulate economic growth (Kabanda & Brown, 2015). Ecommerce makes the business process simpler and faster without meeting sellers and buyers directly, business transactions can still be carried out (Lertwongsatien & Wongpinunwatana, 2003).

MSMEs that have been running their businesses for a long time have extraordinary prospects, but the problem of lack of funds makes these MSMEs less able to develop because everyone doing business definitely needs capital to establish and expand their business. Capital is one of the factors that has a quite important role in the production process. SMEs have sufficient funding and good management skills can develop the operation successfully. The very important role of capital in this business is to finance the company's daily operations so that capital is an important concern for MSMEs (Khattak & Shah, 2020). In general, to get a large income, large capital is also needed.

Apart from capital, another important factor in managing a business is business experience. Business experience is measured based on the length of time the entrepreneur has been running his business. Usually the longer the entrepreneur runs his business, the more experience he gets to make innovation that can improve performance (Mabenge et al., 2020). The mature experience can affect MSMEs to achieve higher financial performance (Karadag, 2016). An entrepreneur who has experience will be able to make the right decisions in every condition and situation. It is undeniable that entrepreneurs who have been in business for a long time do not necessarily get greater profits than entrepreneurs who are new to the business world. But according to Cowling et al. (2017) younger SMEs can develop the firm faster than older firm because younger firm have higher intention to grow.

## Literature Review

### 1. E-commerce

Ecommerce provides wider market access for MSMEs. Ecommerce has changed the manner in which transactions are conducted (Seyal et al., 2014). By selling products or services online, MSMEs can reach customers in areas that were previously difficult to reach physically. By having wider access, MSMEs can increase the number of potential customers and increase their revenue. Ecommerce can reduce the operational costs of MSMEs (Kabanda & Brown, 2015). By operating online, MSMEs can reduce costs associated with business premises rent, product stock, and headcount. These cost reductions can increase profit margins for MSMEs. E-commerce allows MSMEs to utilize digital marketing strategies at a lower cost. Through e-commerce platforms, MSMEs can use social media, online advertising, and search engine optimization to expand their sales range.

Research conducted by Ram & Sun (2020), explaining that ecommerce provides benefits for developing businesses. According to Angeloni & Rossi (2021) digital marketing can generate business revenue. Based on studied by Wirdiyanti et al. (2022) explain that ecommerce can improve sales of MSMEs. The hypothesis of this study is:

H1: Ecommerce has a positive significant impact on increase SMEs' income

### 2. Capitals

Business capital can be used to expand the business capacity of MSMEs. With sufficient capital, MSMEs can invest in better products and services, expand their business space, or increase their stock of raw materials. This will increase the inventory capacity of MSMEs, thereby increasing sales volume and increasing revenue. Business capital is also used to improve the quality of products or services offered by MSMEs. With additional capital, MSMEs can invest in improving the quality of raw materials, training employees, or adopting better technology. With better products or services, MSMEs can attract new customers, retain existing customers, and increase revenue through increased prices or higher sales. According to F. et al. (2012) adequate capital can encourage MSMEs profitable and according to Braimah et al. (2021) Capital in the form of payables or receivables that can be traded has a positive effect on the profitability of MSMEs. Khattak & Shah, (2020) explained that financial capital has a significant effect on the MSMEs' performance. The hypothesis for this study is

H2: Capital has a positive significant impact on increase SMEs' income

### 3. Experience

Length of business can bring valuable experience and expertise to MSMEs. The longer an MSME operates, the more knowledge and skills it accumulates in managing the business. With better experience and expertise, MSMEs can optimize their operations, avoid common mistakes, improve product or service quality, and thereby increase revenue. Previous study by Suminah et al. (2022) explained that length of business have no significant effect to SMEs' income and according to Ahinful et al., (2023) and Dianningsih & Kristanto, (2024) length of business have positive significant effect to SMEs income. The hypothesis of this study is:

H3: Experience has a positive significant impact on increasing SMEs' income.

## Research Method

This research was conducted on micro, small and medium enterprises on Jalan Soekarno Hatta Binjai, Indonesia. The population or object that is the focus of this research is MSMEs on Jalan Soekarno Hatta Binjai as many as 47 MSMEs registered at the Office of Trade, Cooperatives and MSMEs of Binjai City, North Sumatra province. The samples used in this study were 47 samples. The data collection method used in this research is primary data. The data collection techniques used in this study were questionnaires and interviews. The analysis technique used in this study is a data quality test consisting of a validity test, reliability test, classical assumption test consisting of normality test, multicollinearity and heteroscedasticity test, and multiple linear regression analysis test.

## Results and Discussion

### 1. Statistics Descriptive Analysis

**Table 1: Statistics Descriptive**

	N	Min.	Max.	Mean	Std. Dev.
Ecommerce	47	10.00	35.00	23.34	7.265
Capital	47	18.00	35.00	26.48	3.556
Experience	47	20.00	30.00	25.17	2.631
Income	47	22.00	38.00	30.17	3.936

From the data above, it can be seen that minimum value of ecommerce is 10, maximum value is 35 with mean and standard deviation are 23.34 and 7.266. Minimum value of capitals is 18, maximum is 35, mean and standard deviation are 26.489 and 3.55. Minimum value of experiences is 20, maximum 30 with mean and standard deviation are 25.17 and 2.63. Minimum value of income is 22, maximum is 38, mean and standard deviation are 30.17 and 3.94.

**Table 2: Classical Assumption Test**

No.	Method	Result	Conclusion
1	Normality Test	Kolmogorov smirnov value is 0.200 > 0.05	Normally distributed
2	Multicollinearity Test	Tolerance > 0.1 and VIF < 10	No multicollinearity
3	Heteroscedasticity Test	Scatter plot has no patterns	No heteroscedasticity

From table 2, it can be concluded that data from this study passed the classical assumption test so that it can be used for multiple linear regression analysis testing.

**2. Respondent Description**

**Table 3: Types of MSMEs**

Types	Quantity
Food and Beverages	28
Cosmetics	2
Fashion	2
Farming	4
Automotive	5
Grocery Store	6
Total	47

From table 3 above, it can be seen that the respondents are from different types of business such as 28 food and beverages, each 2 cosmetic and fashions enterprises, 4 farming enterprises, 5 automotive and 6 grocery stores.

**Table 4: Questionnaire Result**

No	Variables	Strongly Agreed	Agreed	Netral	Disagreed	Strongly Disagreed
<b>MSMEs' Income</b>						
1.	Increase in income	15%	58%	10%	16%	1%
2.	Income sufficiency and sustainability	15%	68 %	15%	1%	1%
3.	Growth	18%	57%	9%	13%	3%
<b>Ecommerce</b>						
1.	Internet access	15%	44%	13%	22%	6%
2.	User acceptance	6%	35%	23%	23%	13%
3.	Digital marketing	21%	47%	6%	19%	7%
<b>Capitals</b>						

1.	Own capital	20%	57%	11%	10%	2%
2.	Borrowed capital	16%	47%	25%	9%	3%
3.	Capital sufficiency	18%	68%	12%	1%	2%
Experience						
1.	Length of business	24%	17%	8%	43%	8%
2.	Experiences	24%	16%	21%	38%	11%

From the data #4 above, it can be concluded that the respondents answer to each variable, i.e. MSMEs' income, ecommerce and capital were agreed and strongly agreed with average score more than 55%. Meanwhile, neutral and disagreement were below 30%. Contrary, the respondent answer for experience were agreed and disagreed with average score 40.5%, meanwhile neutral, disagreed and strongly disagreed were more than 50%.

**Table 5:  
Linear  
Analysis**

Variable	Coefficient	t	Sig.	F Sig.	R <sup>2</sup>
Constanta	10.65	1.988	0.053	0.001	0.327
Ecommerce	0.148	1.925	0.061		
Capital	0.327	2.221	0.032		
Experience	0.294	1.371	0.178		

**Multiple  
Regression  
Result**

**3. Multiple Linear Regression Analysis Result**

From the data above, it can be seen the regression model equation is

$$Y = 10.655 + 0.148X_1 + 0.327X_2 + 0.294X_3$$

From the model above can concluded that R<sup>2</sup> value is 32.7% the meaning is ecommerce, capitals and experiences can explain the MSMEs' income value is only 32.7% the others value as 67.3% explained by other variables outside the regression model.

Partial effect test results show that sig. value of ecommerce and experiences each 0.061 and 0.178 > 0.05, the hypothesis was rejected. It can be concluded that ecommerce and experiences have no positive significant effect on MSMEs' income. Sig. value of capitals is 0.032, less than 0.05, the hypothesis not rejected. It can be concluded that capitals have a positive significant effect on MSMEs' income. Simultaneously ecommerce, capitals and experiences have a positive significant effect on MSMEs' income because Sig. value is 0.001 less than 0.05.

## Discussion

### 1. The Effect of Ecommerce on MSMEs' Income

Based on the study results, it can be concluded that ecommerce is still rarely used by MSMEs that are sampled in this study. This can be seen from the results of respondents' answers related to internet access, user skills and digital marketing. The average respondent's answer was around 47% agreed, and 21.3% disagreed, and the distribution of respondents' answers was in disagree, neutral and agree. There is no big trend that shows that e-commerce is in great demand by MSMEs.

MSMEs who use ecommerce do not necessarily have greater monthly income than entrepreneurs who do not use ecommerce. MSMEs' actors who use ecommerce will not immediately increase their income and vice versa, MSME actors who do not use ecommerce will not necessarily reduce their income. This study not in line with previous study by Gao et al. (2023); Wirdiyanti et al. (2022) explained that ecommerce have an impact to improve financial performance of MSMEs.

### 2. The Effect of Capitals on MSMEs' Income

Capital adequacy and growth are factors that determine the amount of income earned by MSMEs. Based on this research, it was found that the respondents' answers showed that more than the respondents considered the importance of capital in the development of MSMEs, which is in line with the growth of the income obtained by these MSMEs. This is the same as study conducted by Jasra et al. (2011); F. et al. (2012); Setiaji & (Fatuniah, 2018), and Abe et al. (2015) the adequacy of the amount of capital owned by MSMEs has an influence on the income of MSMEs and better future growth opportunities.

### 3. The Effect of Experiences on MSMEs' Income

Based on this research, the results show that MSMEs are not affected by the length of time the business has been established to increase their income. MSMEs that have just opened a business can gain experience from the surrounding environment and imitate other businesses. In addition, MSMEs that are new to trading are more likely to accept changes so that they are able to survive and compete with other MSMEs. From the answers of respondents answering the establishment of a business and experience in doing business, there were fewer who agreed than those who answered disagree. This is because many business actors have just started their business but the location, they are in is a strategic business point and prices are cheaper. This research is in line with the research of Setiaji & Fatuniah (2018) which states that the length of business has no effect on MSMEs' income. According to Cowling et al. (2017) firm age have negative significant impact on firm growth and contrary with Ahinful et al. (2023) explained that firm age have positive significant impact of SMEs' financial performance.

## Conclusion

Ecommerce has no significant positive effect on increasing MSMEs' income. The number of MSMEs that have not used ecommerce due to the existence of ecommerce or the use of technology that is not yet understood in marketing products so that it cannot affect MSMEs' income. Capital has a significant positive effect on increasing MSMEs' income. If MSMEs can increase the amount of business capital and increase the quantity and type of goods sold, MSMEs' income will increase.



Experience has no significant positive effect on increasing MSME revenue. Many MSMEs that are just running their business by observing the business environment and market can continue to increase their business income. So that the longer a business runs, it does not guarantee that MSME actors have more experience and business knowledge.

This study is limited scope in one region, it cannot be used as a general reference for different conditions. Future researchers are expected to be able to further develop this research by examining other variables such as product quality, business location and service. In addition, further research can expand the scope of the research sample.

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