



DOI: <https://doi.org/10.38035/dijeфа.v5i5>  
<https://creativecommons.org/licenses/by/4.0/>

## The Influence of Capital, Labor, and Technology on MSME Performance with the Implementation of Digital Accounting as a Moderating Variable

Syafrial Syah<sup>1\*</sup>, Rahmawani<sup>2</sup>, Adetia Azmi Tanjung<sup>3</sup>

<sup>1</sup> STIE Muhammadiyah Asahan email. [hanifsafri@gmail.com](mailto:hanifsafri@gmail.com)

<sup>2</sup> STIE Muhammadiyah Asahan email. [88rahmawani@gmail.com](mailto:88rahmawani@gmail.com)

<sup>3</sup> STIE Muhammadiyah Asahan email. [tia.tanjung92@gmail.com](mailto:tia.tanjung92@gmail.com)

\*Corresponding Author: [hanifsafri@gmail.com](mailto:hanifsafri@gmail.com)

**Abstract:** The purpose of this study is to determine the effect of capital, labor and technology on the performance of MSMEs with the application of digital accounting as a moderating variable. This study was conducted on 100 respondents of MSME owners in Asahan Regency. The analysis of this study uses PLS and NVIVO. The results of this study are From the results of the study above, it can be seen that there is an influence between the Capital (X1) and Labor (X2) variables on Y, while the Technology (X3) variable shows that the results have no effect on the MSME Performance variable (Y). The moderation variable, namely Digital Accounting, does not moderate the Capital (X1) and Technology (X3) variables on Y. because the value obtained is above alpha. From the results of NVIVO processing, it can be seen that the application of digital accounting by MSMEs is due to easier use in preparing financial reports.

**Keywords:** Capital; Labor; Technology; MSME Performance; Digital Accounting

### INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) have a very important impact on the development of the Indonesian economy, especially in Asahan Regency. Encouraging the growth of MSMEs is strategic because it has great potential to significantly increase local economic activity and act as the main source of income for the population. local. The Asahan Regency government has demonstrated its commitment to optimizing the potential of MSMEs in various ways, including through partnerships with Shopee and Tokopedia, which are leading online trading platforms in Indonesia. The development of MSMEs in Asahan Regency is faced with several problems. MSMEs in Asahan Regency experience several obstacles in developing their businesses such as limited capital, inadequate human resources and workforce, lack of understanding in using technology, lack of understanding in using digital-based accounting, and others.

In the ever-evolving digital era, the role of MSMEs is increasingly vital in driving local economic growth. Asahan Regency, as one of the areas with great MSME potential, faces significant challenges and opportunities in optimizing MSME performance. Factors such as

capital, labor, and technology play a very important role in determining the success and sustainability of MSMEs. In this context, the application of digital accounting is becoming increasingly relevant as a tool to improve efficiency, accuracy, and transparency in MSME financial management. This study aims to analyze the effect of capital, labor, and technology on MSME performance in Asahan Regency, by considering the moderating role of digital accounting implementation. Thus, this study is expected to provide valuable insights for stakeholders, policy makers, and practitioners in an effort to improve the performance and competitiveness of MSMEs in Asahan Regency.

Previous studies have highlighted the importance of factors such as capital, labor, and technology in influencing MSME performance. However, in the context of Asahan Regency, studies that specifically examine the influence of these factors by considering the implementation of digital accounting are still very limited. Through a comprehensive research approach, this study aims to fill this knowledge gap by analyzing the relationship between capital, labor, and technology with MSME performance, while considering the moderating impact of digital accounting implementation. It is hoped that the findings of this study will not only provide a deeper understanding of the factors that influence MSME performance in Asahan Regency, but also provide practical recommendations for stakeholders to increase the effectiveness of MSME development strategies in today's digital era.

### **Capital**

Capital is a production factor that has a strong influence in achieving productivity or output. In macro terms, capital is a major driver for increasing investment both directly in the production process and in production infrastructure, so that it can encourage increased productivity and output.

According to Meij, capital is a collective of capital goods contained in the debit side of the balance sheet. What is meant by capital goods are all goods in the company's household in its productive function to generate income (Bambang Riyanto, Basics of Company Spending).

### **Labor**

According to the Republic of Indonesia Law Number 13 of 2003, labor is every person who is able to do work to produce goods and/or services either to meet their own needs or those of the community. Several external and internal factors affect labor absorption:

- a. External Factors: Macroeconomic conditions, government policies, and foreign investment.
- b. Internal factors: Quality of education and training of the workforce and the skills possessed by individuals

### **Technology**

Technology is a word taken from the English word "Technology" which is absorbed from the Greek word "Technologia", meaning knowledge expertise. The root word of technology itself is "techne" which means a series of principles or a rational method which is also closely related to the creation of an object, knowledge and art regarding various principles or methods, and skills and certain expertise.

The following will explain the meaning of technology or dimensions viewed from various angles.

- a. Technology is seen as a tool to help make human work easier.
- b. Technology as a substitute for human labor, many companies utilize technology to increase productivity by replacing labor with machines.

c. Technology as a productivity tool with technology, productivity can increase because it produces better performance.

The role of technology in increasing the productivity of small businesses is very large. The use of conventional technology that is widely used by small business entrepreneurs has its weaknesses, including:

## METHOD

The method used is The qualitative approach is carried out by conducting observations, interviews, documentation, and other data and the qualitative data obtained will be processed using Nvivo software. Then, the quantitative approach is carried out by distributing questionnaires to MSME actors and processing data using Partial least Square (PLS) analysis and the software used is SMART PLS 4.0

## RESULTS AND DISCUSSION

### Characteristics of MSME owners in Asahan Regency

The characteristics of the 100 MSME owners who were respondents in this study were 73% male, 27% female. Judging from the age of 30-40 years old by 37% and above 40 years old by 67%.

### *Average variance extracted (ave)*

Average Variance Extracted (AVE) is a value used in convergent validity testing because the value is obtained from the convergent validity output. In this study, the expected AVE value is  $> 0.5$ , and so when viewed from the latent variable construct, all constructs have values above 0.5 (or greater than 0.5), for more details the AVE results can be seen in Figure 5.1 and Table 1 below:

**Table 1. Average Variance Extracted (AVE) Table**

Construction	AVE
X1 Capital	0.829
X2 Labor Force	0.786
X3 Technology	0.521
Y MSME Performance	0.788

### Composite reliability

To ensure that there are no measurement-related problems, the final step in the outer model evaluation is to test the unidimensionality of the model. This unidimensionality test is carried out using composite reliability and Cronbach's alpha. For both indicators, the cut-off value is 0.7.

**Table 2. Composite Reliability Table**

Construction	Composite Reliability
X1 Capital	0.893
X2 Labor Force	0.877
X3 Technology	0.631
Y MSME Performance	0.788

Source: Data Analysis 2024

The table above shows that all constructs have a composite reliability value above 0.7. Therefore, no unidimensionality problems were found in the Influence of Capital, Labor, and Technology on MSME Performance with the Implementation of Digital Accounting as a Moderating Variable except for variable X3.



**Table 5. Coding Results**

Word	Length	Count	Weighted Percentage (%)
digital	7	222	3.76
accountancy	9	220	3.72
finance	8	82	1.39
system	6	75	1.27
software	8	73	1.23
business	6	60	1.02
data	4	56	0.95
report	7	56	0.95
team	3	53	0.90
small and medium enterprises	4	37	0.63
switch	7	34	0.58
security	8	33	0.56
manual	6	32	0.54
feature	5	31	0.52
time	5	31	0.52
start	5	28	0.47
step	7	27	0.46
training	9	27	0.46
efficiency	9	25	0.42

Source: Nvivo 12 Pro Data Processing Results

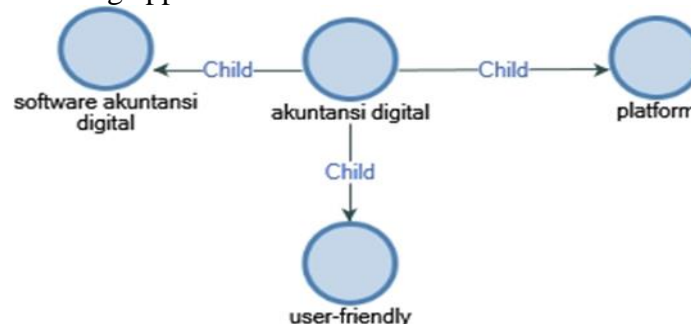
The next feature used is the Hierarchy Chart Mind Map. This feature can produce a graph of the application of digital accounting. In the image below, it can be seen that the things that are part of the application of digital accounting are:



Source: Nvivo 12 Pro Data Processing Results

**Figure 2. Hierarchy Chart Mind Map**

Then the next feature used is the Hierarchy Chart Project Map. This feature can produce graphs in the digital accounting application section.



Source: Nvivo 12 Pro Data Processing Results

**Figure 3. Hierarchy Chart Project Map**



## CONCLUSION

From the results of the study above, it can be seen that there is an influence between the Capital (X1) and Labor (X2) variables on Y, while the Technology (X3) variable shows that the results have no effect on the MSME Performance (Y) variable. The moderation variable, namely Digital Accounting, does not moderate the Capital (X1) and Technology (X3) variables on Y. because the value obtained is above alpha.

From the results of NVIVO processing, it can be seen that the implementation of digital accounting by MSMEs is due to easier use in preparing financial reports.

## REFERENCE

- Suminah S, Suwanto S, Sugihardjo S, Anantanyu S, Padmaningrum D. Determinants of micro, small, and medium-scale enterprise performers' income during the Covid-19 pandemic era. *Heliyon*. 2022 Jul 1;8(7). Available from: <https://www.sciencedirect.com/science/article/pii/S240584402201163X>
- Ndiaye N, Razak LA, Nagayev R, Ng A. Demystifying small and medium enterprises'(SMEs) performance in emerging and developing economies. *Borsa Istanbul Review*. 2018 Dec 1;18(4):269-81. Available from: <https://www.sciencedirect.com/science/article/pii/S2214845018300280>
- Lin B, Xu C. Digital inclusive finance and corporate environmental performance: Insights from Chinese micro, small-and medium-sized manufacturing enterprises. *Borsa Istanbul Review*. 2024 Feb 23. Available from: <https://www.sciencedirect.com/science/article/pii/S2214845024000292>
- Surya B, Menne F, Sabhan H, Suriani S, Abubakar H, Idris M. Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*. 2021 Jan 7;7(1):20. Available from: <https://www.sciencedirect.com/science/article/pii/S2199853122007892>
- Ratmono D, Frendy, Zuhrohtun Z. Digitalization in management accounting systems for urban SMEs in a developing country: A mediation model analysis. *Cogent Economics & Finance*. 2023 Oct 9;11(2):2269773. Available from: <https://www.tandfonline.com/doi/full/10.1080/23322039.2023.2269773?scroll=top&needAccess=true>
- Maksum IR, Rahayu AY, Kusumawardhani D. A social enterprise approach to empowering micro, small and medium enterprises (SMEs) in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*. 2020 Sep 1;6(3):50. Available from: <https://www.sciencedirect.com/science/article/pii/S2199853122005431>
- Rachmatika AG, Safii M, Worokinasih S. The Influence of Financial Literacy, Financial Technology on Financial Inclusion Mediated by Cashless Policy. *Journal of Indonesian Applied Economics*. 2023;11(1):1-12.
- Kristanto H. The Role of Financial Literacy, Access to Finance, Financial Risk Attitude on Financial Performance (Study on SMEs Jogjakarta). *Jurnal Keuangan dan Perbankan*. 2022;26(4):805-819.
- Irman M, Budiyanto dan Suwitho. Increasing Financial Inclusion Through Financial Literacy and Technology on MSMEs. *International Journal Economics Development Research*. 2021;2(2):126-141.
- Syah S. Management Audit to Assess the Effectiveness of Sales Management at PT. XX. *International Journal of Economics (IJEC)*. 2024 Feb 28;3(1):348-57. Available from: <https://ejournal.ipinternasional.com/index.php/ijec/article/view/799/740>
- Syah S. Pengaruh Harga (Price) dan Kualitas Pelayanan (Service Quality) terhadap Kepuasan Pasien Rawat Inap di RSUD Haji Medan. *Warta Dharmawangsa*. 2016(48). Available

from: <https://jurnal.dharmawangsa.ac.id/index.php/juwart/article/view/192>

Husein Umar.2000. Riset Pemasaran dan Perilaku Konsumen. Jakarta: PT. Gramedia Pustaka Utama

Bambang Riyanto.2010. Dasar-dasar Pembelanjaan Perusahaan. Yogyakarta: BPFE

Undang-Undang Republik Indonesia Nomor 13 Tahun 2003.

Nurul Huda dkk. 2015. Ekonomi Pembangunan Islam. Prenadamedia Group.