The Effect of Knowledge Management, Financial Literacy, and Technology Orientation on Innovation Capability and Performance of MSMEs in Myanmar

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Abstract

This paper aims to analyze the direct and indirect effects of knowledge management, financial literacy, and technology orientation on innovation capabilities and MSMEs performance in Myanmar. This paper aims to analyze the effect of psychological feelings of fear of missing out and anxiety on the delegation of people who are playing at the managerial level. In this study, a business that has at least five employees can be identified as MSMEs. There are 44,017 MSMEs in Myanmar and 8,221 MSMEs in the Yangon Region. The population is resized by the owners who registered at the Yangon Region Youth Entrepreneurs Association. There are 40 executive members registered with the Yangon Region Youth Entrepreneurs Association (2023). Then, a clustered sampling method is applied. From descriptive analysis, it is found that most of the respondents have better knowledge about management at their businesses, understand how to manage financing and they are willing to integrate new technologies. Therefore, the overall mean value of each variable has been found to be above the average level. From multiple linear regression analysis, knowledge management, financial literacy, and technology orientation are positively related to the MSMEs performance. It is found that knowledge management, financial literacy, and technology orientation are positively related to innovation capability and MSMEs performance. Moreover, innovation capability has a positive influence on the MSMEs performance.

Keywords: Knowledge Management, Financial Literacy, Technology Orientation, MSMEs Performance

Introduction

According to the Ministry of Industry, and the Department of Micro, Small, and Medium Enterprises Development, there are 44,017 MSMEs in Myanmar. There are 8,221 MSMEs in Yangon Region. However, there are 40 executive members registered with the Yangon Region Youth Entrepreneurs Association (YRYEA) based on their official website. The role of Micro Small Medium Enterprises is important in county development. Small and medium-sized enterprises (SMEs) play an important part in any economy, but in developing countries, they have a vital role in providing livelihoods and improving the well-being of citizens. The Myanmar Micro, Small, and Medium Enterprise Survey 2017 shows that there is a need for comprehensive and immediate change in industrial, financial, and educational policies in Myanmar to support structural change and increase economic growth.

Generally, knowledge management, financial literacy, and technology orientation are applied to adapt the effective MSMEs performance within a changing environment. To achieve these objectives, it is essential to explore the factors that influence MSMEs innovation capability and overall performance. However, MSMEs in Myanmar face numerous challenges in their

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pursuit of innovation and sustainable performance. Limited access to financial resources, lack of proper understanding of financial principles, inadequate technology adoption, and insufficient knowledge management practices often hinder their ability to innovate effectively. The objective of this study is to enlighten the importance of knowledge management, financial literacy, and technology orientation in improving the performance of MSMEs in Myanmar.

The Rationale of the Study

Myanmar, like many other developing countries, has witnessed rapid economic and social changes in recent years. The government supports the growth of MSMEs in Myanmar in all aspects. The performance of MSMEs is a key outcome variable in this study. Since Micro Small Medium Enterprises are small size, the adaption of new technology, creation, and innovation are easier than the large enterprises. Performance can be measured using different indicators, such as financial performance, market share, and growth rate. It is important to examine the impact of innovation capability on performance to assess the effectiveness of innovation efforts within MSMEs.

Technology-based businesses use technologies such as information sources and are intensely focused on research and development processes for performance improvement and improving the firms' innovativeness. All of this is managed by allocating a large budget to collect and store innovative information that significantly aids in enhancing strategic performance. Financial Literacy is a critical factor that affects innovation. By improving the financial Literacy of MSMEs owners, the owners can run their businesses more effectively and successfully through the innovation they build. Knowledge management practices like knowledge creation, sharing, implementation, and storage are crucial for achieving effective business performance. Overall, this study aims to contribute to knowledge management, financial literacy, technology orientation effect on innovation capability, and performance of MSMEs in Myanmar.

Objectives of the Study

The objectives of the study are

1. To analyze the direct effect of knowledge management on the MSMEs performance
2. To analyze the indirect effect of knowledge management through innovation capability on the MSMEs performance
3. To analyze the direct effect of financial literacy on the MSMEs performance
4. To analyze the indirect effect of financial literacy through innovation capability on the MSMEs performance
5. To analyze the direct effect of technology orientation on MSMEs performance
6. To analyze the indirect effect of technology orientation through innovation capability on the MSMEs performance

Scope and Method of the Research

This study only focuses on Micro, Small, and Medium Enterprises. The target group is the owners or the top managers of MSMEs in Myanmar. By using a simple random sampling method, the target group is selected from the Yangon region. Therefore, the population is MSME owners who are registered in the Yangon Region Youth Entrepreneurs Association. YRYEA has four types of membership which are youth membership, associate membership, executive membership, corporate membership, gold membership, and foreign membership. MSME owners are only participants in youth membership, associate membership, and executive memberships. However, members can participate in more than one membership at the same time. Therefore, this study only focuses on executive members who were well-trained in their youth membership period and associate membership period. There are 40 executive members registered with the Yangon Region Youth Entrepreneurs Association (2023). Then, a clustered sampling method is applied. In this study, descriptive research is conducted by using structured questionnaires.

Research Instrument

The research instrument used for data collection is a questionnaire. In this paper, innovation capability is measured with three dimensions: product innovation, process innovation, and marketing innovation whereas MSMEs performance is measured with three dimensions: financial performance, product performance, and marketing performance. Furthermore, primary data from respondents were collected directly for this study through questionnaires using the Likert-type five-point scale to measure the research variables. The questionnaire consists of five parts: knowledge management, financial literacy, technology orientation, innovation capability, and the MSMEs performance. Question items are organized by adapting to the question items used by previous researchers. The questionnaire consists of 5 items for the knowledge management variable, 5 items for financial literacy, 5 items for the technology orientation variable, 11 items for the innovation capability variable, and 12 items for the MSMEs performance variable (See Appendix).

Literature Review

Knowledge Management

Processing data or information effectively and efficiently to accomplish a shared objective is known as knowledge management (Aliyu, 2015). Knowledge management, according to Darroch (2005), is the process of determining and evaluating the knowledge that is needed and available to achieve corporate objectives. According to Samir (2020), knowledge management may foster an organizational culture that is more intelligent, inventive, flexible, and sustainable. Using intangible assets to generate value is another way that knowledge management is perceived (Salojärvi et al., 2005). According to Massaro et al. (2016), knowledge management in the SME sector is becoming a more prominent field of study in many different nations. For MSMEs to effectively utilize and commercialize science, technology, and R&D, knowledge management is essential (Li et al., 2020).

Financial Literacy

Financial Literacy is a crucial component for the success of MSMEs as it contributes to understanding and evaluating the required data in making decisions that have a financial impact on the business's daily operations (Eniola & Entebang, 2017). Financially literate MSMEs owners may leverage their knowledge of money to make informed choices (Esiebugie et al., 2018). Make the case that can implement financial literacy correctly will help with resource allocation, financial planning, and service demands to optimize profits to pay financial responsibilities (Babajide et al., 2021). According to research by Liu et al. (2021), financial literacy has a significant impact on creativity. Through innovation, MSME owners may operate their businesses more successfully and effectively by increasing their financial literacy (Ali et al., 2020).

Technology Orientation

Technology orientation is the organization and effort to apply the latest technology to introduce new products and improve existing products and services by encouraging and supporting innovative ideas (Yousaf & Tariq, 2020). The logic of technological orientation emphasizes that a technology-oriented company is always proactive in research and development, acquiring the latest technology and applying the latest technology in the production of new products and services. Some researchers (Kocak et al., 2017) suggest that organizational and long-term success depends on the orientation of technologies that provide opportunities for the production of new technological products, procedures, and services that affect performance improvement.

Innovation Capability

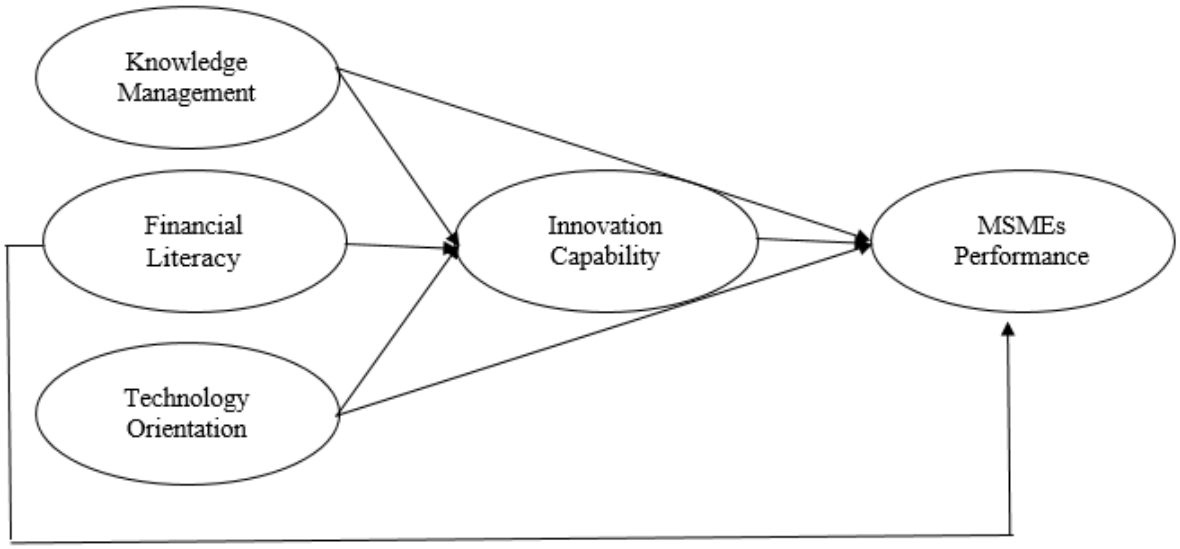
Innovation means the development of ideas and the creation of inventions, from products and methods of operation to customer service. Innovation continuously transforms knowledge and ideas into new products, processes, and systems for the benefit of the company and its stakeholders (Migdadi, 2020). An innovation can be a new product or service, a new production process technology, a new structure or management system, or a new plan or program for organizational members. Innovation is crucial for large companies and SMEs (Delener et al., 2017).

MSME Performance

Micro Small and Medium Enterprises (MSMEs) are important business expansion bases for financiers and entrepreneurs to address long-term economic development, job creation, and unemployment (Eniola & Entebang, 2017). SMEs run their business with a constant focus on achieving their goals. Quantified financial indicators obtained by organizations are called objective performance indicators. However, in a tough competitive environment, traditional financial initiatives cannot give an organization an advantage (Hudson et al., 2001). According to Samir (2020), the three performance dimensions of small and medium-sized enterprises are financial performance, operational performance, and product quality.

Conceptual Framework of the Study

The conceptual framework of the study is shown in Figure (1) below.



Source: Own Compilation (adopted from Soetjipto et al., 2023)

Figure 1. Conceptual Framework of the Study

Data Analysis

The analyses are conducted by using SPSS 22.0 software including reliability analysis and descriptive statistics for the direct and indirect effect of knowledge management, financial literacy, and technology orientation on innovation capability and MSMEs performance. Multiple regression analysis and mediating analysis are also applied to achieve the result. The reliability of the measured variables is examined by using Cronbach's Alpha and is shown in Table (1).

Table (1) Results of the Reliability Test

No.	Variable	No. of Questions	Cronbach's Alpha
1	Knowledge Management	5	0.898
2	Financial Literacy	5	0.832
3	Technology Orientation	5	0.917
4	Innovation Capability	11	0.945
5	MSMEs Performance	12	0.959

Source: SPSS Output

As shown in Table (1), the Cronbach's alpha values of variables are above 0.7. Therefore, the question items used to measure variables and the respondents' responses are reliable for further analyses (George & Mallery, 2003).

Findings from Analysis

Descriptive analysis has been conducted to present the average knowledge management, financial literacy, technology orientation, innovation capability, and MSMEs performance of respondents. The results are shown in Table (2).

Table (2) Knowledge Management, Financial Literacy, Technology Orientation, Innovation Capability and MSMEs Performance of Respondents

Sr. No.	Description	Mean Value
1	Knowledge Management	3.0125
2	Financial Literacy	3.1850
3	Technology Orientation	3.3950
4	Innovation Capability	3.1091
5	MSMEs Performance	3.0125

Source: Survey Data, 2023

As shown in Table (2), most of the respondents have better knowledge management, higher financial literacy, and technology orientation. The innovation capability of the respondents is at the above-average level. It can also indicate that their business performance is progressing effectively and efficiently.

Analysis of the Effect of Knowledge Management, Financial Literacy, and Technology Orientation on MSMEs Performance

To reach the objectives of this study, multiple linear regression analysis is conducted to present the effect of knowledge management, financial literacy, and technology orientation on the performance of MSMEs. The results from multiple linear regression analysis are shown in Table (3).

Table (3) Analysis of the Effect of Knowledge Management, Financial Literacy, and Technology Orientation on MSME's Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	0.310	0.321		0.966	0.341	
Knowledge Management	0.614***	0.105	0.638	0.000	0.000	1.495
Financial Literacy	0.162*	0.218	0.059	0.782	0.082	5.627
Technology Orientation	0.349**	0.184	0.378	0.067	0.047	5.060
R	0.846					
R Square	0.715					

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
Adjusted R Square	0.692					
F	30.153***					
Durbin-Watson	2.145					

Source: SPSS Output

Notes: *** Significant at 1% Level, ** Significant at 5% Level, * Significant at 10% Level

Dependent Variable: MSME performance

As shown in Table (3), it is found that knowledge management, financial literacy, and technology orientation are influencing MSMEs' performance and positive relationships. The correlation coefficient (R) stands for the multiple linear relationship between independent and dependent variables. The value of R is 0.846 and it underlies between 0 and 1. It seems that most respondents have better knowledge and management skills to achieve effective performance in their businesses. The result shows some respondents also understand financial literacy to manage their finances well to gain effective performance in their businesses. Also, some respondents are willing to challenge high-tech tools in their businesses, as they are integrating new technologies in their operation and production process.

Analysis of the Effect of Knowledge Management, Financial Literacy, and Technology Orientation on Innovation Capability

The multiple linear regression analysis is conducted to analyze the effect of knowledge management, financial literacy, and technology orientation on the innovation capability of the respondents. The results from multiple linear regression analysis are shown in Table (4).

Table (4) Analysis of the Effect of Knowledge Management, Financial Literacy, and Technology Orientation on Innovation Capability

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	0.560	0.325		1.724	0.930	
Knowledge Management	0.525***	0.106	0.577	4.972	0.000	1.495
Financial Literacy	0.138*	0.220	0.039	0.172	0.064	5.627
Technology Orientation	0.282**	0.186	0.324	1.517	0.038	5.060
R	0.822					
R Square	0.676					
Adjusted R Square	0.649					
F	25.034***					

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
Durbin-Watson	2.213					

Source: SPSS Output

Notes: *** Significant at 1% Level, ** Significant at 5% Level, * Significant at 10% Level

Dependent Variable: Innovation Capability

As shown in Table (4), it is indicated that knowledge management, financial literacy, and technology orientation are all influencing innovation capability and this is a positive relationship. The correlation coefficient (R) stands for the multiple linear relationship between independent and dependent variables. The value of R is 0.822 and underlies between 0 and 1. As a result, most respondents have better knowledge management skills and understand financial literacy to achieve effective performance of their businesses. Also, some respondents are integrating new technologies in their operation and production process. Therefore, respondents can build up the innovation capability in their new product production, their production and operation process, and their marketing process.

Analysis of the Effect of Innovation Capability on MSME's Performance

The multiple linear regression analysis is used to analyze the effect of innovation capability on the performance of MSMEs of the respondents. The results from the analysis are shown in Table (5).

Table (5) Analysis of the Effect of Innovation Capability on MSMEs Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	0.126	0.162		0.776	0.442	
Innovation Capability	0.854***	0.050	0.956	20.132	0.000	1.000
R	0.956					
R Square	0.914					
Adjusted R Square	0.912					
F	405.285***					
Durbin- Watson	1.810					

Source: SPSS Output

Notes: *** Significant at 1% Level, ** Significant at 5% Level, * Significant at 10% Level

Dependent Variable: MSME performance

As shown in Table (5), it is indicated that innovation capability is influencing MSME's performance and this relationship is positive. The correlation coefficient (R) stands for the linear relationship between independent and dependent variables. The value of R is 0.956 and it underlies between 0 and 1. It seems that most respondents have the innovation capability to achieve the better performance of their MSMEs. Also, some respondents are integrating new technologies in their operation and production process which could leads them to marketing.

Mediating Effects of Innovation Capability on MSMEs Performance

To determine whether there is a mediating effect of innovation capability between independent variables (knowledge management, financial literacy, and technology orientation) and dependent variable (MSMEs performance), the path analysis is conducted with multiple linear regression analysis.

Table (6) Mediating Effects of Innovation Capability on MSMEs Performance

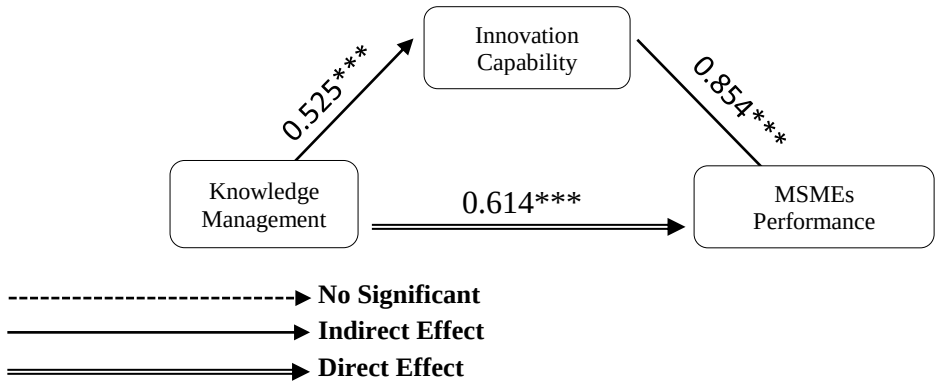
Information System	Innovation Capability			Remark (Indirect Calculation)
	Direct	Indirect	Total (Direct +Indirect)	
Knowledge Management	0.614***	0.448	1.062	(0.525x0.854=0.448)
Financial Literacy	0.162*	0.118	0.280	(0.138x 0.854=0.118)
Technology Orientation	0.349**	0.240	0.589	(0.282x 0.854=0.240)

Source: Survey data (2023)

As shown in Table (6), the total effect of knowledge management on MSMEs' performance through innovation capability is greater than the direct effect of knowledge management on MSME performance. Similarly, the total effect of financial literacy and technology orientation on MSMEs' performance through innovation capability is greater than the direct effect of financial literacy and technology orientation on MSMEs' performance.

The result of the path analysis for testing all variables is presented in the following figures: Figures (2), (3), and (4).

Figure (2) Path Analysis for MSMEs Performance on Knowledge Management



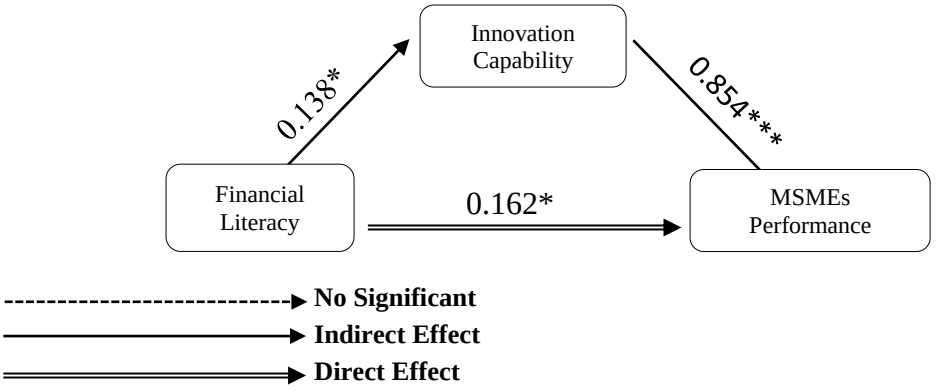
Source: Survey Data (2023)

Notes: ***, ** and * are statically significant at 1%, 5% and 10% levels respectively

As shown in Figure (2), the partial mediation effect of innovation capability occurs on the linkage between knowledge management and MSMEs performance. Knowledge management has a positive direct effect on MSME's performance. In addition, the coefficient of knowledge management has an indirect effect on innovation capability and innovation capability has an indirect effect on MSME's performance. The analysis shows that respondents have better

knowledge regarding management to achieve more innovation in their product production and marketing processes which can leads to better performance of their businesses in the future.

Figure (3) Path Analysis for MSMEs Performance on Financial Literacy

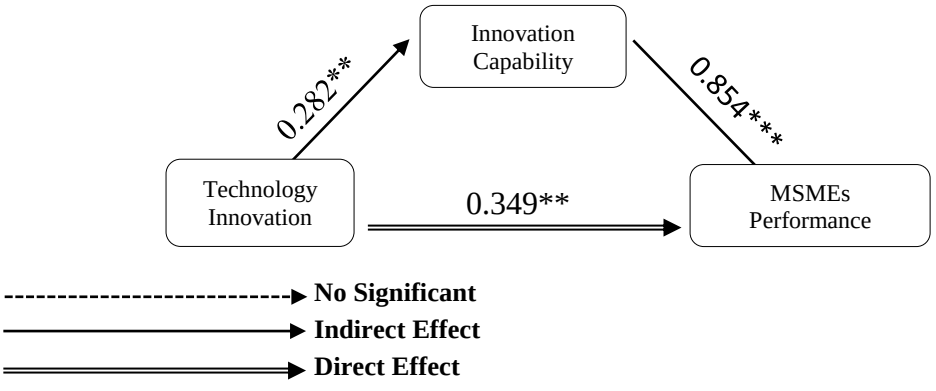


Source: Survey Data (2023)

Notes: ***, ** and * are statically significant at 1%, 5% and 10% levels respectively

As shown in Figure (3), the partial mediation effect of innovation capability occurs on the linkage between financial literacy and MSMEs performance. Financial literacy has a positive direct effect on MSME's performance. In addition, the coefficient of financial literacy has an indirect effect on innovation capability and innovation capability has an indirect effect on MSME's performance. The analysis shows that respondents know about financial literacy which can manage the equity financing and debt financing of the business well. This will support their product production and marketing processes which lead the better performance for their businesses in the future.

Figure (4) Path Analysis for MSMEs Performance on Technology Orientation



Source: Survey Data (2023)

Notes: ***, ** and * are statically significant at 1%, 5% and 10% levels respectively

As shown in Figure (4), the partial mediation effect of innovation capability occurs on the linkage between technology orientation and MSMEs performance. Technology orientation has a positive direct effect on MSME's performance. In addition, the coefficient of technology orientation has an indirect effect on innovation capability and innovation capability has an indirect effect on MSME's performance. The analysis shows that respondents are integrating new

technologies which could support production and marketing processes which could lead to better performance of their businesses in the future.

Limitations of Research

This study focuses on and emphasizes only three influencing factors on MSME's performance, it is suggested to focus on the other factors affecting MSME's performance such as customer relationship management, credit institutions, labor qualifications, Human Resource competence, quality control, risk management, and so forth. This study has its limitations, and it investigated the information systems of only executive members registered with the Yangon Region Youth Entrepreneurs Association (YRYEA). Therefore, further study can also examine other regional MSME owners.

Conclusion

The study is conducted to analyze the direct and indirect effect of knowledge management, financial literacy, and technology orientation on the innovation capability and MSME performance of MSME owners in the Yangon Region. As the result of this research, knowledge management, financial literacy, and technology orientation could have positive affect innovation capability and MSMEs performance. Also, innovation capability has a positive effect on the performance of MSMEs. The paper proves that there is a mediation effect between the independent variables (knowledge management, financial literacy, and technology orientation) and the dependent variable of MSME's performance, while innovation capability is a mediator in the relationship between them.

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