

EFFECT OF KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs) IN PANGLONG

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Abstract

This study aims to analyze the effect of knowledge management on organizational performance of MSMEs in Panglong. Entrepreneurial orientation, entrepreneurial innovation, and knowledge management all play critical roles in improving the performance of micro, small and medium-sized enterprises (MSME) of Myanmar. Micro, small and medium-sized firms must overcome several obstacles in order for the country's economy to thrive. This study addresses this issue. A quantitative technique is used in this research. Data were acquired through personal interview with structured questionnaire. Data are collected from April 2023 to May 2023. To reach research objectives, multiple linear regression analysis is applied. From the analysis, it is found that entrepreneur orientation and organizational innovation are critical factors in enhancing the knowledge management of MSMEs. The findings of the study also suggested that knowledge management has positively significant effect on organizational performance of MSMEs in Panglong. The study's findings have a number of implications for MSME management including the importance of knowledge management in achieving better performance standards.

Keywords: Entrepreneurial Oriesntation, Organizational Innovation, Knowledge Management, Organization Performance

Introduction

Micro, small and medium-sized enterprises (MSMEs) are often the main drivers of long-term economic growth, simply because MSMEs contribute most to economic development. Economic expansion is difficult without consistent performance of micro, small and medium-sized enterprises (Azarloo, Eshghiaraghi, Salehi, Habibpoor, & Jahangiri, 2017). Approximately 99.4 % of all businesses in Myanmar are classified as MSMEs. On average, MSMEs in Myanmar account for 50-95 % of employment and contribute 30-53 % of GDP in ASEAN member states.

The Government recognizes that SME entrepreneurship will define the country's future national economic development (www.charltonsmyanmar.com). With the ASEAN Free Trade Area coming into full effect by 2015, MSMEs in Myanmar will no longer be able to rely on government tariffs to protect them from overseas competition. By the same token, the opening up of regional markets represents an enormous opportunity for MSMEs in Myanmar but only if they are ready and able to meet the new challenges ahead. MSME performance can be improved with the help of entrepreneurial orientation and organizational innovation. Firstly, it is clear from the previous literature that entrepreneurial orientation is one of the tools to gain superior performance (Herath & Mahmood, 2012).

Various entrepreneurial activities have an important contribution to local economic development (Ayandibu & Houghton, 2017). This local economic development enhances performance and creates employment opportunities, which automatically boost the nation's

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economic growth. Secondly, organizational innovation also has an important contribution to MSMEs' performance. More innovations in organizations lead to more performance (Tsai, 2001). Innovation is a main contributor to MSME business performance. Nonetheless, entrepreneurial orientation and organizational innovations are not achievable outside of appropriate knowledge management strategies. The favorable results of an entrepreneurial exercise require the management of several applicable ideas. Both internal and external ideas are mandatory for innovation development (Chesbrough, 2006), and it needs suitable management of ideas. Knowledge management system is crucial in assisting MSMEs to become more innovative and enterprising. Additionally, it's an excellent tool for illustrating how innovation and an entrepreneurial mindset improve the success of small and medium-sized businesses.

Previous literature shows that different studies (Soto-Acosta, Popa, & Palacios-Marqués, 2016; Taheri, Bititci, Gannon, & Cordina, 2019) were carried out on entrepreneurship. However, most of the studies did not consider the two important factors; entrepreneurial orientation and organizational innovation. These two factors are most important for getting the highest performance in the presence of knowledge management. Knowledge management approaches that are both entrepreneurially oriented and innovative must therefore be carefully considered. Many previous research on the performance of MSMEs, undertaken by various academics, have missed the role of knowledge management through entrepreneurial orientation and innovation (Ahmed, Halim, & Ahmad, 2018). Entrepreneurial orientation and entrepreneurial innovation are major contributors to MSMEs' performance, according to the study's findings. Better results can be achieved through the implementation of knowledge management strategies. Knowledge management and an entrepreneurial orientation are intertwined (Liu & Lee, 2015). Despite this, Yan (2018) claims that entrepreneurial orientation and innovation are intimately linked. As a result, improving the performance of MSMEs necessitates effective knowledge management. Consequently, the purpose of this study is to investigate the relationship between entrepreneurial orientation, entrepreneurial innovation and knowledge management in MSME sector of Myanmar.

Objectives of the Study

The main purposes of this study are to examine whether the entrepreneurial orientation and organizational innovation of MSME can support business firms to increase their performance. The specific objectives of the study are:

1. To investigate the effect of entrepreneurial orientation and organizational innovation on knowledge management of MSME in Panglong
2. To examine the effect of knowledge management on organizational performance of MSME in Panglong

Method of the Study

This study focuses on the factors influencing MSMEs performance in Panglong. In this study, both primary and secondary data are used. According to the data from Loilem township municipal association, there are 412 MSMEs in Panglong last year. The Roasoft sample size calculator is used for sample size. It is taking into account a confidence interval of 90 %, margin of error of 5%. A simple random sampling method is used for the sample. 176 MSMEs are chosen as sample by simple random sampling method. . In these sample businesses, number of small foods shops and restaurants are 58, grocery stores are 23, stationery shops are 10, hardware shops

are 8, motor cycle repairs are 8, sewing shops are 6 equipment and accessories shops are 5 and the rest 58 businesses are 10 shops are lathes, dried tea leave shops, workshops, clothing shops, betel leave and nut shop, purified drinking water manufacturing businesses, furniture shops, beauty salons, printing services, pharmacy (drug stores), fuel shops, handsets and accessories, etc.,.

Personal interview method is applied by using structured questionnaire with 5-point likert scale. Secondary data are gathered from relevant websites, previous papers, international journals and textbooks. The descriptive and linear regression methods are applied for data analysis.

Conceptual Framework of the Study

Conceptual model of this study is adapted to five previous researchers' models which are closely related to basic assumptions of this study. The first model is not limited to a specific industry; its focus is on Pakistan's small and medium-sized enterprises. The second model is about the role of knowledge management in the relations of entrepreneurial orientation and innovation performance of SMEs in Iran. The third model emphasized on the effect of entrepreneurial orientation, innovation capability and knowledge creation on performance of SMEs in Malaysia. The fourth model examined on the effects of organizational innovation and knowledge management strategy in information technology companies in R&D departments on service quality and product innovation. The fifth model focused on the impact of knowledge management on organizational performance.

The first model adapted by this study is developed by Khan, Tufail and Ali (2021). The findings of this study suggested that entrepreneurial orientation and innovation are critical factors in enhancing the success of SMEs. The second model considered in this study is the model developed by Madhovi, Sadati, Delavari, Mehdivand and Mihandost (2011). This previous model pointed out that entrepreneurial orientation both directly and indirectly through the knowledge management affected innovation performance. The third model adapted by this study is developed by Omar, Aris and Nazi (2016). This model indicated that innovation capability is positively related to knowledge creation, but entrepreneurial orientation does not have a significant impact on knowledge creation. The fourth model examined in this study is developed by Sonmez Cakir, Kalaycioglu and Adiguzel (2024). The findings of this model suggested that both knowledge management strategies and organizational innovation have a positive effect on the success of service quality and product innovation. The fifth model took into account in this study is developed by [Abuaddous, Al Sokkar and Abualodous \(2018\)](#). The results of this model pointed out that knowledge management affect positively on organizational performance.

Conceptual Model of the Study

The conceptual model of this study is developed by covering the factors mentioned above with theoretical aspects, and previous researchers' findings. The conceptual model of this study is shown in Figure (1).

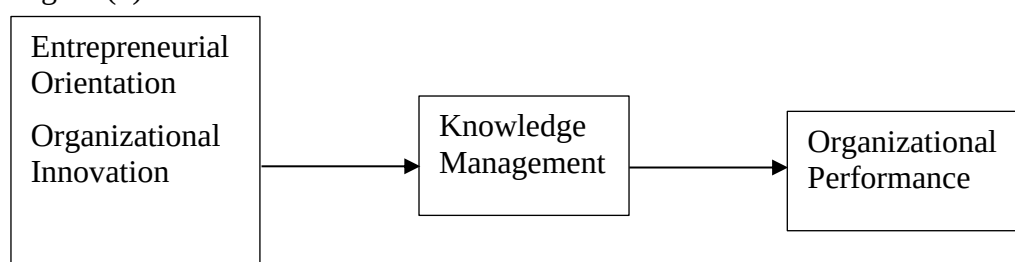


Figure (1) Conceptual Model of the Study

Source: Own Compilation

In this study, the three major assumptions are developed: both of entrepreneurial orientation and organizational innovation are relating to knowledge management; and there is an effect of knowledge management on organizational performance of MSMEs in Panglong. The concept adapted is that knowledge management is a set of controllable practices that businesses use to produce the response they want.

Analysis and Results

The main purpose of the study is to analyze the relationship between knowledge management and organizational performance of MSMEs in Panglong. To explore this relationship, the study also intends to identify the entrepreneurial orientation, organizational innovation and knowledge management practices that influence the organizational performance of MSMEs in Panglong. The descriptive statistics and multiple linear regression analysis were conducted to analyze the effect of entrepreneurial orientation and organizational innovation on knowledge management, and the relationship between knowledge management and organizational performance.

Profile of MSMEs in Panglong

The profile of MSMEs in Panglong consists of kinds of businesses and their contribution. In the last year, there are 412 MSMEs in Panglong (Loilem township municipal association). This study is based on these 412 businesses. According to the business number, MSMEs businesses are divided into two categories: above ten shops and below 10 shops. Types of businesses which have more than 10 shops are restaurants and food shops, grocery stores, stationery stores, hardware shops, motorcycle repair shops, sewing shops and equipment and accessories shops. Types of business which have less than 10 shops are lathes, dried tea leave shops, workshops, clothing shops, betel leave and nut shop, purified drinking water manufacturing businesses, furniture shops, beauty salons, printing services, pharmacy (drug stores), fuel shops, handsets and accessories, etc.,

Among 412 businesses, the largest portion of businesses (33 %) is small food shops and restaurants. The reason is that Panglong is the town where Panglong University is located. Both of day and distance students study at Panglong University. Most of the students come from other towns around Panglong. In addition, most of the university teachers come from Yangon, Mandalay and Taungyi. Therefore, demand for food has exceeded supply. The second largest portion (13 %) is grocery stores. Both kinds of stationery and hardware shops have five percent contribution rate. Moreover, motorcycle repair shops and sewing shops are four percent of all MSMEs businesses in Panglong. Three percent of all MSMEs businesses are equipment and accessories shops. The rest percent of businesses consists of 10 shops are lathes, dried tea leave shops, workshops, clothing shops, betel leave and nut shop, purified drinking water manufacturing businesses, furniture shops, beauty salons, printing services, pharmacy (drug stores), fuel shops, handsets and accessories, etc.,

Effect of Knowledge Management on Organizational Performance of MSMEs

The analysis on factors influencing MSMEs performance is conducted by using survey data. In this study, influencing factors is concerned with entrepreneurial orientation, organizational innovation and knowledge management. The practices of surveyed business for their entrepreneurial orientation can be seen with the mean value data shown in Table (1).

Table (1) Practices on Entrepreneurial Orientation

Sr.	Items	Mean	Std.Dev
1	Placing a high value on innovation and R&D operations	3.773	0.705
2	Being well-known for rapidly introducing innovative products and services	3.659	0.707
3	Encouraging risk-taking tactics in product creation	3.705	0.695
4	Motivating employees to take the lead and make proactive decision	3.636	0.858
5	Being frequently the first to market with new products and technologies	3.205	0.728
6	Having a strong competitive stance when it comes to competition.	3.591	0.780
	Overall Mean	3.595	

Source: Survey Data (2023)

As shown in Table (1), entrepreneurial orientation mean score of respondents is fairly high (greater than 3). It can be concluded that they show strength in performing entrepreneurial orientation activities. According to the results of each item, it is found that they are rarely market new products and technologies. The reason for this is that getting attention for a new offering is a big challenge so most of the MSMEs do not introduce new products and technologies as a strategic tool in their growth and continuation. Moreover, these businesses are lack of understanding of the target market and customer needs. On the other reason for this is that most of the consumers do not take risk of using new products and technologies. However, these businesses are more emphasis on placing a high value on innovation and R&D operations and encouraging risk-taking tactics in product creation than any other activities.

At the second step, the analysis focuses on practices of businesses on organizational innovation. The organizational innovation practices of surveyed businesses can be assessed with the mean values shown in Table (2).

Table (2) Practices on Organizational Innovation

Sr.	Items	Mean	Std.Dev
1	Opening new ideas, both external and internal	4.023	0.842
2	Seamless communication between partners on innovation efforts	4.023	0.623
3	Sharing enough information between my teammates and me to encourage creative problem solving	3.727	0.838
4	Having enough resources to bring about the innovation we need	3.500	0.725
5	Having a R&D department for innovation	3.591	0.809
	Overall Mean	3.773	

Source: Survey Data (2023)

As shown in Table (2), organizational innovation variable mean score of respondents is also fairly high (greater than 3). It can be concluded that the businesses indicate strengths in performing organizational innovation activities. In innovating their businesses, they mainly based

on opening new ideas from both external and internal, and seamless communication between partners on innovation efforts. According to the results of each item, it is found that they rarely have enough resources to bring about the innovation they need.

The third part is analysis on practices of businesses for knowledge management. The level of commitment of businesses to knowledge management practices can be seen with mean values shown in Table (3).

Table (3) Practices on Knowledge Management

Sr.	Items	Mean	Std.Dev
1	Having processes in place for both developing and acquiring new knowledge	3.818	0.914
2	Encouraging employees to share ideas and information through systems we have in place	3.841	0.707
3	Rewarding employees who contribute fresh perspectives and information	3.682	0.764
4	Keeping track of employee suggestions for improvement	3.909	0.823
5	Having put in place tools to absorb and impart information from people	3.500	0.659
	Overall Mean	3.750	

Source: Survey Data (2023)

As shown in Table (3), the knowledge management variable mean score of respondents is fairly high (greater than 3). It can be concluded that they show strengths in performing knowledge management activities. However, according to the results of each item, it is found that they pin point weakness in having put in place tools to absorb and impart information from people such as suggestion box, hotlines, etc. This is because most of the businesses rarely accept feedbacks from people.

The final part is analysis on organizational performance of businesses. The level of organizational performance of businesses can be seen with mean values shown in Table (4).

Table (4) Practices on Organizational Performance

Sr.	Items	Mean	Std.Dev
1	The number of customer complaints within the last period has decreased strongly.	3.773	0.672
2	Employees' trust into leadership is high.	3.659	0.639
3	Productivity of employees is much higher than industry average.	3.750	0.713
4	Work organization is efficient.	3.659	0.880
5	Work costs per employee are well below the industry average.	3.796	0.788
6	Return on investment (ROI, %) in our business is well above the industry average.	3.773	0.824
7	Employees feel very committed to the organization.	4.045	0.770
	Overall Mean	3.779	

Source: Survey Data (2023)

As shown in Table (4), the organizational performance variable mean score of respondents is fairly high (greater than 3). It can be concluded that the businesses indicate strengths in organizational performance. In improving their organizational performance, they mainly based on the fact that employees feel very committed to the organization, and Work costs per employee are well below the industry average. According to the results of each item, it is found that they point out weakness in Employees' trust into leadership is high, and Work organization is efficient.

Analysis on the Effect of Entrepreneurial Orientation and Organizational Innovation on Knowledge Management

This analysis intends to test the relationship between entrepreneurial orientation and organizational innovation and knowledge management. In this study, multiple linear regression analysis is conducted to test this relationship. The results for the effect of entrepreneurial orientation and organizational innovation on knowledge management are shown in Table (5).

Table (5) Effect of Entrepreneurial Orientation and Organizational Innovation on Knowledge Management

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	Sig	T	Tolerance	VIF
	B	Std. Error	Beta				
(Constant)	0.519	0.260		0.048	1.995		
Entrepreneurial Orientation	0.234	0.072	***0.205	0.001	3.233	0.732	1.367
Organizational Innovation	0.634	0.071	***0.570	0.000	8.975	0.732	1.367
R			0.699				
R.Square			0.489				
Adjusted R.Square			0.483				
Durbin-Watson			1.830				
F (P<0.05)			82.740				

Source: Survey Data (2023)

*, **, ***: Indicate statistical significance at the 10 % level, 5 % level and 1% level

As shown in Table (5), R^2 (proportion of the variance in the dependent variables accounted by model) is 0.489 and adjusted R^2 is 0.483. Thus, the model has accounted for 48.3 % of the variance in the dependent variable.

It is found that the relationship between entrepreneurial orientation and knowledge management is positively significant at 99 % confidence interval. A unit increase in entrepreneurial orientation will lead to 0.205 units increase in effect on knowledge management while taking all other independent variables at zero. Moreover, it is also found that the relationship between organizational innovation and knowledge management is positively significant at 99 % confidence interval. A unit increase in organizational innovation will lead to 0.570 units increase in effect on knowledge management while taking all other independent variables at zero.

There is no autocorrelation in sample because the Durbin-Watson value is 1.83 (nearly 2). All VIFs (variance inflation factors) of independent variables are less than 10. Thus, there is no problem of multicollinearity correlation between independent variables. According to the results from the survey, it can be concluded that there are effects of entrepreneurial orientation and organizational innovation on knowledge management of MSMEs in Panglong.

To increase the level of knowledge management, both of entrepreneurial orientation and organizational innovation should be emphasized by owners or managers of MSMEs in Panglong.

Analysis on the Effect of Knowledge Management on Organizational Performance

This analysis intends to test the relationship between knowledge management and organizational performance. In this study, multiple linear regression analysis is conducted to test this relationship. The results for the effect of knowledge management on organizational performance are shown in Table (6).

Table (6) Effect of Knowledge Management on Organizational Performance

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	Sig	T	Tolerance	VIF
	B	Std. Error	Beta				
(Constant)	1.459	.185		0.000	7.903		
Knowledge Management	.619	.049	***0.694	0.000	12.711	1.000	1.000
R			0.694				
R.Square			0.481				
Adjusted R.Square			0.479				
Durbin-Watson			2.668				
F (P<0.05)			161.580				

Source: Survey Data (2023)

*, **, ***: Indicate statistical significance at the 10 % level, 5 % level and 1% level

As shown in Table (6), R^2 (proportion of the variance in the dependent variables accounted by model) is 0.481 and adjusted R^2 is 0.479. Thus, the model has accounted for 47.9 % of the variance in the dependent variable.

It is found that the relationship between knowledge management and organizational performance is positively significant at 99 % confidence interval. A unit increase in knowledge management will lead to 0.694 units increase in effect on organizational performance while taking all other independent variables at zero.

There is no autocorrelation in sample because the Durbin-Watson value is 2.668 (nearly 2). All VIFs (variance inflation factors) of independent variables are less than 10. Thus, there is no problem of multicollinearity correlation between independent variables. According to the results from the survey, it can be concluded that there is an effect of knowledge management on organizational performance of MSMEs in Panglong.

To increase the level of organizational performance, knowledge management should be emphasized by owners or managers of MSMEs in Panglong.

Conclusion

The study extracted significant research findings that have emerged from the analysis of research data on entrepreneurial orientation, organizational innovation, knowledge management and organizational performance of MSMEs in Panglong. Based on the results of findings from regression analysis, both of entrepreneurial orientation and organizational innovation practices are important to improve the knowledge management practices. In addition, the results also found that knowledge management practices are important to increase the organizational performance.

Knowledge management practices of MSMEs are improved because of entrepreneurial orientation practices consist of placing a high value on innovation and R&D operations, encouraging risk-taking tactics in product creation, being well-known for rapidly introducing innovative products and services, motivating employees to take the lead and make proactive decision, having a strong competitive stance when it comes to competition and being frequently the first to market with new products and technologies.

Furthermore, improved knowledge management practices of MSMEs are coming from opening new ideas from both external and internal of the organization, seamless communication between partners on innovation efforts, sharing enough information among team members to encourage creative problem solving, having a R&D section for innovation and having enough resources to bring about the needed innovation.

Additionally, as stated by the findings from the analysis on the effect of knowledge management practices on organizational performance, high level of organizational performance is obtained because of keeping track of employee suggestions for improvement, encouraging employees to share ideas and information, having processes in place for both developing and acquiring new knowledge, rewarding employees who contribute fresh perspectives and information, and having put in place tools to absorb and impart information from people.

After evaluating the aspects of organizational performance, the conclusion is that two themes that play a significant role in knowledge management at work – entrepreneurial orientation and organizational innovation – both of them are crucial in the development of employee knowledge. Moreover, one theme, knowledge management also plays a significant role in organizational performance. All of which – entrepreneurial orientation, organizational innovation, knowledge management practices and organizational performance – are crucial in the development of businesses, particularly MSMEs in Panglong.

Suggestions and Recommendations

The current study's findings established a strong correlation between the overall organizational performance of MSMEs and their entrepreneurial orientation. Increased entrepreneurial orientation and organizational innovation boost the performance of MSMEs. When micro, small and medium-sized firms (MSMEs) lack entrepreneurial orientation and innovation, they perform poorly. Nonetheless, MSMEs face significant obstacles in developing an entrepreneurial orientation and transforming their organizations. Micro, small and medium-sized businesses (SMEs) are unable to maximize their entrepreneurial and innovative activities. However, a recent study discovered that persuasive knowledge management may enable

organizations to innovate and adopt a more entrepreneurial mindset (Rezaei & Ortt, 2018). Knowledge management is crucial for micro, small and medium-sized enterprises to accelerate internal innovation and nurture an entrepreneurial culture. Knowledge management bolsters the beneficial effect of entrepreneurial innovation and entrepreneurial orientation on the increased performance of MSMEs.

It is suggested for MSMEs to embellish entrepreneurial and organizational innovation activities via persuasive knowledge management approaches. These firms should develop an innovative culture. The employees should be entrepreneurially oriented, which will automatically lead to better performance. Additionally, knowledge management activities should also be needed to support the organization. The government should work on various activities related to knowledge management. Government efforts on the topic of "how to manage knowledge" is crucial.

Contributions of the Study

For practitioners, the current study has very important insights into increasing the organizational performance with the help of entrepreneurial orientation, organizational innovation and knowledge management. This study provides vital clues for managers while making strategies to increase the organizational performance among MSMEs in Panglong. This study provides evidence that MSMEs can increase their knowledge through placing a high value on innovation and R&D operations, rapidly introducing innovative products and services, encouraging risk-taking tactics, having a strong competitive stance when it comes to competition, opening new ideas, communicating seamlessly, sharing enough information, having enough resources and having a R&D department for innovation. This study also provides evidence that MSMEs can increase their organizational performance through having processes in place for both developing and acquiring new knowledge, sharing ideas and information through systems in place, rewarding employees who contribute fresh perspectives and information, keeping track of employee suggestions for improvement and putting in place tools to absorb and impart information from people. Hence, the current research is much more productive for Panglong MSMEs.

This study has implications for owners/managers. Although owners or managers recognize the importance of entrepreneurial orientation, organizational innovation and knowledge management practices, their implications for and demands on the rest of the organization are often ignored in the process toward its success. This study calls on firm owners/managers to be aware of the importance of entrepreneurial orientation, organizational innovation and knowledge management to increase organizational performance.

This study makes a considerable contribution to the existing literature on entrepreneurship and small business management and knowledge management practices of MSMEs, particularly in regards to explaining the organizational performance of Panglong MSMEs.

Needs for Further Studies

The current study has different limitations that may influence the results. This study did not consider the control variables. Control variables (as organizational performance can be heavily influenced by them) include age, R&D expenditure, firm size (some MSMEs may be quite large), and industry technological orientation (high-tech versus low-tech firms). The study has a small sample size, which may affect the final outcomes. Additionally, the current study is based on a

quantitative research method. However, mixed method (quantitative and qualitative) may help to get accurate results. Moreover, this study does not classify the types of firms into the categories.

Although the results provide new insights to current research, this field is far from well developed, and a continued research effort is needed to understand the practices of entrepreneurial orientation, organizational innovation, knowledge management and their integrated influences on firm's organizational performance.

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