YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF MANAGEMENT STUDIES

MBA PROGRAMME

THE EFFECT OF MARKET ORIENTATION AND INNOVATION ON PERFORMANCE OF SOFTWARE COMPANIES IN YANGON

MYA MYINT ZU

EMBA II - 75

EMBA 16th BATCH

DECEMBER, 2019

YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF MANAGEMENT STUDIES

MBA PROGRAMME

THE EFFECT OF MARKET ORIENTATION AND INNOVATION ON PERFORMANCE OF SOFTWARE COMPANIES IN YANGON

ACADEMIC YEAR (2017-2019)

Supervised By:

Dr. Hla Hla Mon

Professor

Department of Management Studies

Yangon University of Economics

Submitted By:

Mya Myint Zu

EMBA II - 75

EMBA 16th Batch

2017-2019

YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF MANAGEMENT STUDIES

MBA PROGRAMME

THE EFFECT OF MARKET ORIENTATION AND INNOVATION ON PERFORMANCE OF SOFTWARE COMPANIES IN YANGON

This Thesis submitted to the Board of Examiners in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA)

Supervised By:

Dr. Hla Hla Mon

Professor

Department of Management Studies

Yangon University of Economics

Submitted By:

Mya Myint Zu

EMBA II - 75

EMBA 16th Batch

2017-2019

ACCEPTANCE

This is to certify that the thesis entitled **"The Effect of Market Orientation and Innovation on Performance of Software Companies in Yangon"** has been accepted by the Examination Board for awarding Master of Business Administration (MBA) degree.

Board of Examiners

(Chairman)

Dr. Tin Win

Rector

(Supervisor)

(Examiner)

(Examiner)

(Examiner)

DECEMBER, 2019

ABSTRACT

This study intends to identify the effect of market orientation and innovation on performance of software companies in Yangon. The data are collected from the sample of 69 respondents by using structured questionnaires. According to the findings from the analysis, customer orientation, competitor orientation and inter-functional orientation positively impact on innovation. Furthermore, the result also indicates that product innovation and process innovation impact on performance of software companies in Yangon. It is recommended that software companies in Yangon should take market orientation activities seriously as it plays an important role in how well their product and process innovation will increase. They should also develop strong innovative practices as their financial and non-financial performance will increase if they implement innovative moves.

ACKNOWLEDGEMENTS

First and foremost, I would respectfully express my thanks and gratitude to Prof. Dr. Tin Win, Rector of Yangon University of Economics for his kind permission for the opportunity to undertake the study as a partial fulfillment towards the Master Degree of Business Administration.

My deepest thanks to Professor Dr. Nu Nu Lwin, Head of Department of Management Studies for her extensive and constructive suggestions, her supporting excellence lectures and comments to complete the thesis.

I am highly indebted to Professor Dr. Myint Myint Kyi for her fruitful suggestion and supervision in this study. I am heartily grateful to my supervisor, Professor Dr. Hla Hla Mon, Department of Management Studies, for her guidance, advice and encouragement in preparing to complete this study successfully. Without her kind support and encouragement, it will impossible to finish the thesis. And I would like to express my sincere gratitude and great respect to all the teachers, and visiting lecturers who have made their grateful efforts in rendering knowledge sharing of MBA Program during these years. I would like to express my heartfelt indebtedness to all of the professors, associate professors and lecturers who provided supervision and fortitude to help me achieve the goals set out for this study. In addition, I would like to extend my appreciation to the faculty and all the staffs in the Department of Management Studies who have provided me with any administrative support and strength during my academic years.

My sincere appreciation goes to software companies in Yangon for their sincere support. Their willingness to participate and effective cooperation make me accomplish this study successfully. I also would like to express my gratitude to my EMBA 16 classmates for their continuous support throughout the course of my study. Last but not least, my deep and sincere gratitude to my parents, husband, daughter and son for their continuous and unparalleled love, help and support.

Mya Myint Zu
EMBA II-75
EMBA 16th Batch

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATION

ICT	Information and Communications Technology
OECD	Organization for Economic Cooperation and Development
IDI	ICT Development Index
MD	Managing Director

CHAPTER 1

INTRODUCTION

Market orientation has been realized as the degree to how businesses disposed to carry out the marketing concept (Jaworski & Kohli, 1993). Homburg and Pflesser (2000) in their submission on the theory with respect to market orientation gave cultural and behavioral meanings to the concept. According to behavioral approach, market orientation is seen as set of processes with respect to philosophy of a firm in areas of wide generation of intelligence from the market, sharing information across functional areas, and as well firm's broad responsiveness to intelligence acquired (Kohli & Jaworski, 1990). The cultural viewpoint of market orientation mention orientation from customers, orientation from competitors, as well as inter- functional orientation as a strategic means of identifying the needs and want of customers and satisfying them more than competitors (Narver & Slater, 1990). Explaining cultural dimension of market orientation, the firm has been viewed as most efficient and effective in creating the relevant behavior for developing superior value for clients hence resulting in superior performance. There is a need for Software Companies in Yangon to welcome a concept of market orientation and it's applicably in their lines of operations if they want to be competitive.

Innovation in business carry out a relevant role in how well a company competes in the competitive business environment. Bringing innovation into ones operation may one way or the other be seen as taking a new form be it a product, an administrative system, technology or program with the aim of increasing performance. Bringing innovation helps extremely for profit, market share, increase in receivables among others when it is effectively and efficiently carried out by businesses (Agarwal, Krishna Erramilli, & Dev, 2003). Most businesses start to innovate due to demands from the external environment which takes the form of higher customer demands, competition from competitors, deregulation of the sector, shortage of resources or due to organizations wants to improve on their ways of serving clients. Whatever motivates businesses to innovate, the rational is to guarantee adaptive behaviour, improving performance in the long run or serve current and potential customers better (Damanpour, Walker, & Avellaneda, 2009).

Innovation is classified by dimensions and therefore, it is seen as an evolving process in which new or significantly improved products or processes replace the existing ones. These theoretical approaches describe innovation in four categories (Tidd, Bessant, & Pavitt, 2005). First, product and/or service innovation, which implies changes in a product or service provided by the organization by using new or existing technologies. It mentions to the development and marketing of new products and services, related to customer satisfaction. Second, process innovation, which involves changes in the way in which new or significantly improved products or services are created and delivered. It is the development of different ways of software development and providing services. Third, marketing innovation (competitive position), which refers to changes in the context in which goods or services are introduced to the market by focusing on the consumers' needs. It is the improvement of new power and leadership structures. Lastly, organizational innovation (management or mental process), which is comprised by changes in the underlying mental models which shape what the organization does, therefore, it is the result of strategic decisions done by the company through a newly developed business in order to provide a sustainable competitive advantage.

Murphy, Trailer and Hill (1996) claimed that business performance is a multidimensional concept, and three indicators can be production, finance or marketing (Sohn, Joo & Han, 2007), or consequences such as growth and profit (Wolff & Pett, 2006). According to Dawes, It is measured with objective or subjective indicators (Dawes, 1999). In this study, performance involves 2 indicators: financial performance and nonfinancial performance. Financial performance includes sales and profitability, market share, return on investment and profit targets. Non-financial performance includescustomer relations, strong market reputation, market share and organization image.

Software industry is now viewed as vital for the development of any economy. Developing countries value the importance of this industry because of its capacity to provide much needed export earnings and support in the development of other industries. In addition, access to quality software based systems is seen as important for improving governance. In countries like India and Singapore, software industry has assumed a significant position in the overall economy and many companies have established themselves as key players in the global software business. In addition to the significance of software industry in creating high value jobs, enhancing business efficiency and

earning export revenues, it also has a multiplier effect on other facets of a country's economy.

Market orientation that affect on key success factors of Myanmar software companies to improve business performance. Narver & Slater's market orientation is the key sources of creation of superior value for customers. The cultural viewpoint with respect to market orientation mention orientation from customers, orientation from competitors, as well as inter-functional co-ordination as a strategic means of identifying the needs and want of clients and pleasing them more than competitors (Narver & Slater, 1990). Getting valuable data by doing market orientation has greater benefit on Innovation.

Innovation in business performs a proper role in how well a company competes in the competitive business environment. Bringing innovation into one's operation may one way or the other be seen as taking a new form be it a product, an administrative system, or technology with the aim of increasing performance. Bringing innovation provides especially in terms of profit, market share, increase in receivables among others when it is effectively and efficiently carried out by businesses (Agarwal, Krishna Erramilli, & Dev,2003). Most businesses start to innovate due to demands from the external environment which takes the form of higher customer demands, competition from competitors, deregulation of the sector, scarcity of resources or because organizations want to improve on their ways of serving clients. Whatever motivates businesses to innovate, the rational is to guarantee adaptive behavior, improving performance in the long run or serve current and potential customers better (Damanpour, Walker, & Avellaneda, 2009).

There are 83 software companies in Yangon. This study presents about market orientation, innovation and performance of software companies in Yangon. This research endeavored to show the effect of market orientation on innovation and the effect of innovation on performance.

1.1 Rationale of the Study

Most software businesses might realize short-term success with a sales-oriented strategy to marketing, but a more market-oriented strategy can increase the likelihood of long-term success. Market orientation focuses on pulling customers by satisfying an

existing need in the marketplace, rather than trying to push buyers with sales gimmicks. Firms that use a market orientation focus on driving revenue and sales by creating something the marketplace needs or wants.

Problems of Myanmar software companies are in a form of limited knowledge of customer needs and wants, unawareness of potentials of implementing market orientation, deficient in competitive differentiation capabilities, scarce resources in business operations and short-term focus minimize the capacity of software companies in the operationalization of market orientation strategies. These challenges enumerated above calls for the adoption of market orientation and implementation in the area of software companies' operation in Yangon, Myanmar.

One of the most important factors for business in today's world is innovation because it supports companies an advantage in penetrating markets faster and provides a better connection to developing markets, which can lead to bigger opportunities. It tends to believe that the market orientation will largely impact on the innovation of the business. If the company is not innovative, it will definitely face to maintain the market. Therefore it is needed to upgrade innovation in all aspects such as product innovation, process innovation, market innovation and organizational innovation of companies. Market orientation must be effective to support to the corporate objectives.

Due to the current situations in software companies in Myanmar, such as evolving of new technologies, innovative digital transformation and high competiveness among operators, software companies need to analyze their capabilities of innovation for competitive readiness to achieve a sustainable competitive advantage. Therefore the main goal of this study is to determine market orientation and innovation drive performance of software companies in Yangon, Myanmar.

Since market orientation, innovation and performance are too broad concepts to be addressed in one review paper, this study limits the focus on research contributions investigating three market orientation (customer orientation, competitor orientation and inter-functional coordination), two innovation (product innovation, process innovation) and two types of performance (financial and non-financial).

1.2 Objectives of the Study

The objectives of the study are;

1. To analyze the effect of market orientation on innovation of software companies in Yangon.
2. To examine the effect of innovation on business performance of software companies in Yangon.

1.3 Scope and Method of the Study

This study only focuses on the effect of market orientation and innovation on business performance of software companies. The scope is limited to software companies in Yangon, Myanmar. Though there are many indicators to affect on performance of software companies, this study only learn market orientation and innovation.

For collecting primary data, this study is made on the 69 out of 83 software companies in Yangon. All interviewees are managers and above positions. To get the sample size, this study is using sample size calculator, Raosoft.com. The study uses both types of primary and secondary data. Data includes qualitative data. Analytical research method is used to find out the samples from responsible person form each of the companies. To collect the primary data, structured questionnaires is used to collect data and information. Secondary data are collected from international research papers, some previous MBA research papers, library and relevant websites.

To understand firm's business performance, this study only focuses on two major factors, financial performance and non-financial performance. Market orientation and innovation, that affect on key success factors of software companies, is mainly based on Narver & Slater's market orientation – customer orientation, competitor orientation, inter-functional coordination. The study period of this research is from March to December 2019.

1.4 Organization of the Study

This study organized by five chapters. Chapter one presents introduction, rationale of the study, objectives of the study, scope and methodology of the study and organization of the study. Chapter two includes theoretical background on market orientation, innovation and measuring of company's performance. Chapter three includes

the marketing orientation and innovation of software companies in Yangon. Chapter four includes analysis on the relationship between market orientation, innovation and performance of software companies in Yangon. Chapter five concludes the study with findings, recommendations, suggestion and the needs for further research.

CHATPER 2

THEORETICAL BACKGROUND

In this chapter, it highlights the theoretical background on the three keys terms of Market Orientation, Innovation, and Performance which are important factors influencing the industry. The main headings covered are the concept of market orientation along with their definitions of customer orientation, competitor orientation and inter-functional orientation.

2.1 Market Orientation

A market orientation is a business culture in which all employees are engaged to the continuous creation of superior value for customers (Narver, Slater et al. 1998). In the development of the market orientation concept, two approaches have been adopted in the literature (Homburg & Pflesser, 2000). The first expresses three main components of the construct: an organization-wide generation of market information about current and future customer needs; a dissemination of such information across departments and individuals within the market-oriented firm, and an organization-wide responsiveness to the disseminated information (Jaworski & Kohli, 1993; Kohli & Jaworski, 1990). This behavioral perspective focuses on organizational and human activities that are related to the creation, propagation of, and reaction to market intelligence (Kirca, Jayachandran, & Bearden, 2005).

A cultural view is the second way that concentrates on organizational norms and values that encourage behaviors that are consistent with market orientation (Narver & Slater, 1990). In this last opinion, Narver and Slater (1990) express market orientation as a construct created from three main elements: customer orientation; which is firms' focus on client needs; competitor orientation, which analyzes the customer's strategy and market movement; and inter-functional coordination, which introduces cooperation among employees. In these circumstances, both market orientation strategies are complementary in explaining the behavior of firms. (Valter Afonso Vieira, 2010)There are various models that are propounded by various authors to explain the concept of market orientation. The study therefore adopted MKTOR model to explain market

orientation as it has been the model that is widely adopted in explaining market orientation. MKTOR model used three (3) components to explain market orientation that comprised customer orientation, competitor orientation and inter-functional coordination (Narver & Slater, 1990).

According to Narver and Slater, market orientation is the culturally based business behavior that most effectively develops the required behaviors for the creation of superior value for buyers and, thus continuous higher performance for the organization. It includes three behavioral elements; customer orientation, competitor orientation, and inter-functional coordination.

2.1.1 Customer Orientation

Market orientation enhances customer enjoyment and loyalty because businesses are well positioned to predict customer needs and offer goods and services to satisfy those needs (Narver & Slater, 1990). The market orientation essence is the customer's needs. Customer orientation involves more quality in products, firm's commitment, positive word-of-mouth, consumer satisfaction and loyalty. (Jaworski & Kohli, 1993).

Customer orientation is commonly seen as an aspect of business's strategic means of delivering desires value to clients (Zhou, Yim, & Tse, 2005). The main purpose of customer orientation is to lay a solid foundation of gaining information concerning current and future clients for strategic actions based on sufficient information provided by customer therefore resulting in creating improved superior value to the customer base (Narver & Slater, 1990). Kohli and Jaworski (1990) accepted customer orientation represents the level to which customer intelligence is gathered and implemented in the business set up and used by the business unit.

The vital feature of customer orientation is specifically stated in the management literature, and studies conducted in the field of strategic management and have constantly emphasized the notion that concentrate on client been the key reason for business operation (Webster, 1988). One will not be fair to say that, customers are the reasons why the business is in existence hence information that will help deliver value to them must be at the heart of management. Therefore, customer orientation must not be relegated to the background since it will help in delivering value to customers.

2.1.2 Competitor Orientation

Competitor orientation as part of market orientation is seen as an organizational strategy to end up creating behavior of businesses improving on the products they deliver to customers. It is important to know that, competitors will not sit down unconcerned but strive over the same group of customers. Businesses must there seek intelligence about their competitors in order to improve on their service delivery firms with peculiar or non-peculiar production technology platform. These have called for the need to gain an insight into the activities of what competitors are doing to help shape the operations of the firms (Michal Felcman, 2012).

For firms to be competitive, it is required of them to know weaknesses and strength as well as capabilities and activities of competitors. Information's that are gathered about competitors help the business to reposition its offering so as to prepare for the future survival of the entity (Deshpande et al., 1993; Narver & Slater, 1990).

The purpose competitor orientation has to do with providing a strong foundation of intelligence regarding current and future competitor for strategic action. Those competitors of the firm are seen as enterprises that are providing substitute product by serving the same need of customers (Kotler, 2009). The business current and future competitors are found in firms with peculiar or non-peculiar production technology platform.

2.1.3 Inter-functional Coordination

Market orientation acknowledges that, all department as well as employees are aware that, employees attitude with respect to internal and external customer is crucial. Coordinated integration of resources is hardly related to the customer and competitor since they are promoting customers experience among department (Narver & Slater, 1990). There is therefore a need to inter-coordinate the activities that are concerned with the day to day management of the business in order to help realized to potentials of the business in maximizing its performance.

Inter-functional orientation defines that, all the department in the business must coordinate well with each other in all aspect of the business operations. When there exists a coordinated maximization of the firm's resources that purposes at performing better in

the eyes of the customer, it is seen as the organization practicing inter-functional orientation (Narver & Slater, 1990).

2.2 Innovation

Innovation plays a vital role in how well a business entity improve its performance and customer satisfaction efforts. Introducing innovation into the business is aimed at improving performance and competitiveness of such business (Agarwal, Krishna Erramilli, & Dev, 2003). An innovation is the nature of coming out with new product, new production technology or a new strategy regarding employees that the businesses does not practice formerly (Damanpour, Walker, & Avellaneda, 2009). Innovation is considered as exposure to new ideas as part of an organizations way of doing things (Hurley & Hult, 1998). There are also ways by which the firm needs to be proactive thereby exploring new happenings rather adopting current strength to deliver its offerings (Menguc & Auh, 2006).

A well-known definition of innovation was proposed by the Organization for Economic Cooperation and Development (OECD) (OECD, 2005). They narrow innovation down into four types: product, process, marketing and organization: “An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a fresh organizational method in business practices, workplace organization or external relations (OECD, 2005, p.46).” A recent definition of innovation was presented by Crossan and Apaydin (2010). Based on their definition, innovation is both a process and an outcome. Innovation can be internally created or externally adopted as a process. It is not only about the novelty, but it must have a new added value. Innovation may include fresh products or processes. According to Crossan and Apaydin, innovation is building or acquisition of a value added in economic and social spheres; renewal and enlargement of products, services, and markets; creation of new management systems; and development of new production methods (Crossan and Apaydin, 2010, p.1155). For software companies, product innovation and process innovation are assumed as drivers to improve performance of the organization.

2.2.1 Product Innovation

Product innovation is based on meeting customers' desires by designing a new or considerably improved product. (OECD, 2005) Thus, product innovation enables firms to achieve competitive advantage by differentiating their products or range of products from competition (Porter, 1985). Therefore, product innovations are market driven (Utterback and Abernathy, 1975).

Software product innovation is different than other product innovation. Software is intangible and the threshold to enter the software market is low (Pikkarainen et al., 2011). In addition, time is the main resource consumed to write, compile and test the code. Software product innovation is the creation of a new software product to an existing or new market (Lippoldt and Stryszowski, 2009). For a software business, where software products often deliver the most important customer value, product innovation is an important source of competitive advantages. Like any modern dynamic business, the software industry is highly influenced by its knowledge intensive and technology-driven nature (Nambisan, 2002). Continual reliance on old technology will jeopardize the market position of a company (Dibrell et al., 2008). Therefore, companies must seek radical innovation as this disrupts former key players and creates entirely new business practices or markets with significant societal impact (Assink, 2006). Market opportunity and technology are two important elements in product development decision making (Krishnan and Ulrich, 2001). Technology is used to improve the current or to offer completely new functionality, e.g. the use of cloud computing as a form of the online storage or the implementation of a new electronic payment method, which gives customers the flexibility and security to pay online (Desouza et al., 2008). Market opportunity also activates the need for new and significantly improved functionality of a software product, e.g. to achieve customer needs not met by the current solution or to address the newly revealed customer needs.

2.2.2 Process Innovation

Process innovation relates improvements of operations and supply chain. (OECD, 2005) Process innovation, which includes changes in the way in which new or significantly improved products or services are created and delivered (Tidd, Bessant, & Pavitt, 2005). It is the development of different ways of producing products and providing

services. Process innovation is mainly occured on improving the efficiency and effectiveness of the production process (Higgins, 1995). It involves changes in the way products and services are created and delivered to customers (Tidd, Bessant, & Pavitt, 2005). Oslo Manual (2005) reports process innovation as the implementation of a new or significantly improved method of production or delivery. Significant changes in techniques and equipment are part of process innovation, which intends to reduce production or distribution costs in order to improve the quality and distribution of products (OECD, 2005).

2.3 Business Performance

According to Trkman, performance measure is essential for businesses because it helps them to ascertain the success or failure of the firm and also acts as an indicator to achieve sustainable improvement in firm and business activities. Accordingly, Murphy, Trailer and Hill, (1996) proclaimed that "accurate performance measurement is critical to understanding new venture and firm success and failure. Furthermore, business performance measurement has been viewed in two major dimensions: the financial and non-financial. They asserted that it is very important to adopt both financial and non-financial indicators in measuring business performance since it may offer a broader perspective of measuring performance and thus, tend to clarify the relationship between financial and non-financial aspects of business performance under investigation. Accordingly, Murphy, Trailer and Hill (1996) suggested that researchers in both small firm and entrepreneurship field should always consider multiple dimensions of both financial and non-financial methods of measuring small firms' performance in order to arrive at a better measurement. Hence, this study adopts both financial and non-financial objective measurement of profitability and growth of software companies' performance. Muhammad (2009) concurred that these two indicators of financial and non-financial measures seem to be important to firms.

2.3.1 Financial Performance

Firm size, Return on Assets (ROA), return on equity (ROE), assets size, return on sales are some of the frequently used and reliable financial measures of business performance. Financial performance measures are main indicators and capture the

historical performance of the firm. They mainly affect on the effectiveness of the business operations and the efficiency in the management of tangible assets.

2.3.2 Non-Financial Performance

Financial measures are based on historical data. Non-financial measures focus on long term success factors such as customer or employee satisfaction, quality, market share, and the number of new products. Non-financial performance measures are examined to be leading indicators of future financial performance, while current financial performance measures such as earnings or return on assets are commonly considered to be trailing measures of performance. Investments on new product innovation, research and development tend to depress profits in the short run but the benefits of such investments can be seen only in the long run. Therefore, non-financial measures are indicators of consequences rather than causes of performance. Financial performance measures are also objective in nature whereas non-financial measures are subjective in nature and are dependent on the managerial perceptions.

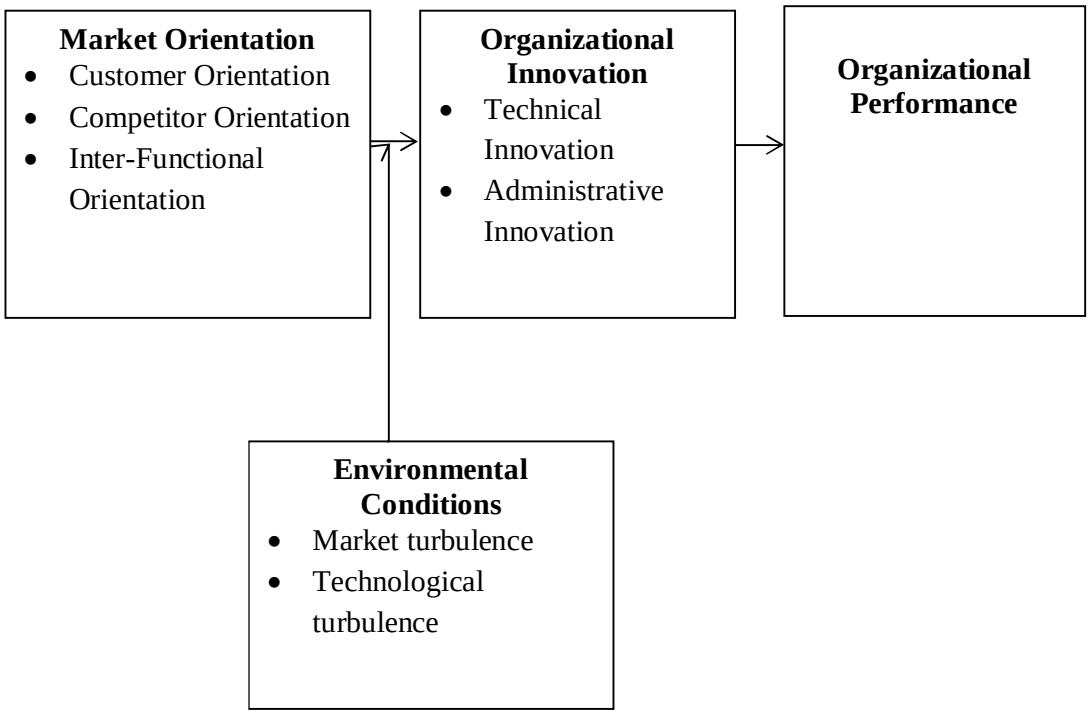
2.3 Previous Studies

The conceptual framework is built from previous papers and created as own compilation. This study is focused on effect of market orientation and innovation on performance of software companies in Yangon. The empirical support for the market orientation-innovation-business performance chain is only piecemeal. Among them, Quinn (1986), who discovered a strong market orientation in innovation businesses as an example, Slater and Narver (1994b, p.25) explain that "new product success and innovation are very likely to get from being market-driven". Likewise, Deshpande, Farley, and Webster (1993) find that business performance linked to both market orientation and innovation, speculate on a causal relationship of market orientation, innovation, and performance.

A study on market orientation, innovation and performance is done by Jin K Han, Namwoon KIM, and Rajendra K. Srivastava on 1998 October. The purpose of this study is to investigate how market orientation and innovation engage, if at all, in affecting

organizational performance. To this end, they explore whether market orientation enhances an organization's innovativeness and, if so, the extent of the consequences on the level of organizational performance. In Figure (2.1), market orientation, innovation and conceptual framework is shown.

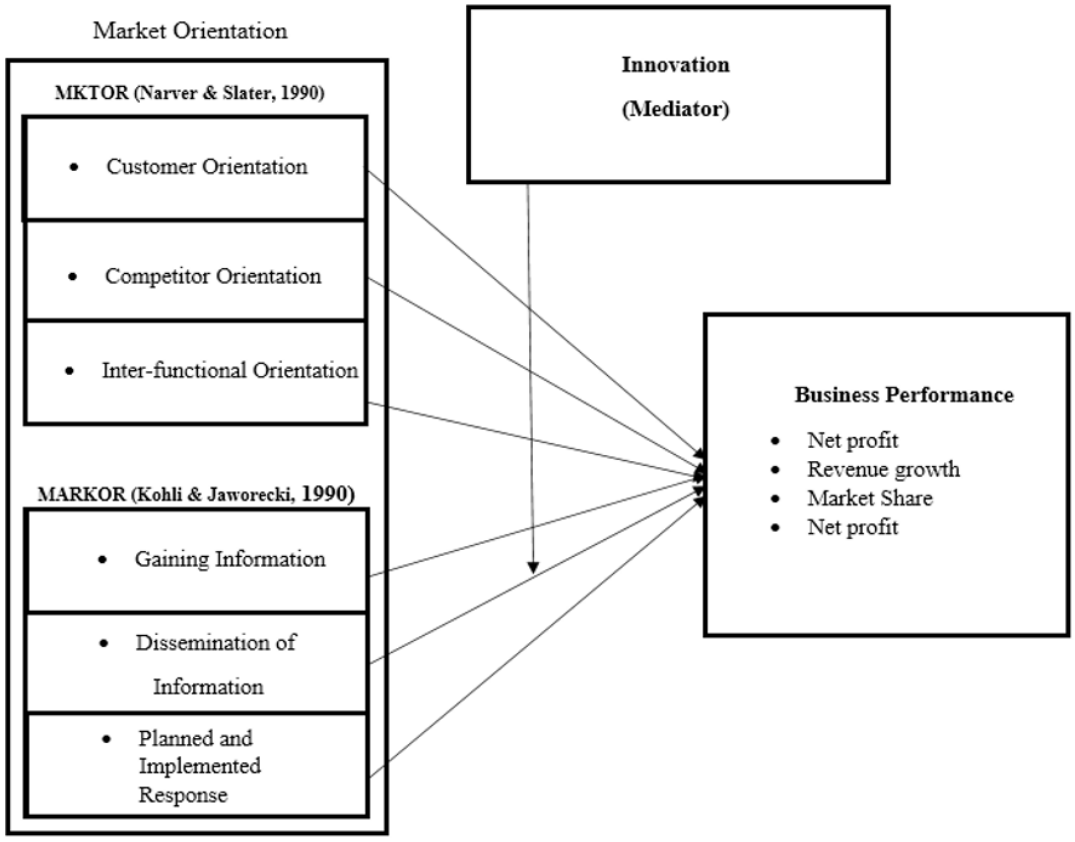
Figure (2.1) Conceptual Framework of Jin K Han, Namwoon KIM, and Rajendra K. Srivastava



Source: Jin K Han, Namwoon KIM, and Rajendra K. Srivastava, 1998

Another study on market orientation, innovation and performance relationship is done by Jerry Jay Kraa 2016. This study in the SMEs sector also adopted both Kohli and Jaworski (1990) and Narver and Slater (1990) model of market orientation. Innovation is therefore been used as mediating variable. Market orientation impact positively on innovation and performance and innovation will impact positively and as well serves as a mediator between market orientation and performance of SMEs. The below Figure (2.2) presents the effect market orientation will have on SMEs performance with innovation playing a mediating role.

Figure (2.2) Conceptual Framework of Jerry Jay Kraa



Source: Jerry Jay Kraa 2016

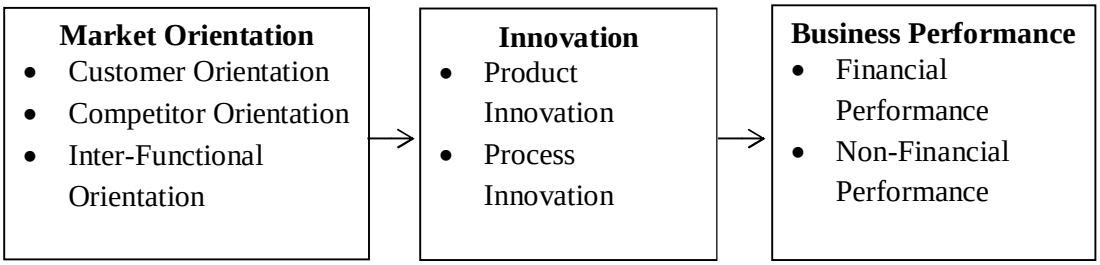
There is also a study using market orientation and Business Performance among SMEs in Ghana using 191 firms in Accra and Tema (Muhammad Abdulai Mahmoud, 2010). The research argue that, SMEs need to be more focused, assessed competitor trend and as well react appropriately to market information hence help to survive given evidence of technical, financial as well as other constraints. The study adopted market orientation proposed by Narver and Slater (1990) and Kohli and Jaworski (1990) in measuring market orientation.

2.4 Conceptual Framework

Conceptual framework is created based on the research objectives and research questions. It displays both dependent variable and independent variables. These variables are connected and linked with a test on this study. Figure (2.3) shows that conceptual

framework of the study on effect of market orientation and innovation on business performance as follow.

Figure (2.3) Conceptual Framework



Source: Own compilation, 2019

It is further analyzed the impact of market orientation and innovation on performance of software companies in Yangon. At which, market orientation is measured by customer orientation, competitor orientation and inter-functional orientation. Innovation is determined by product innovation and process innovation. And then, it is analyzed on the impact of market orientation and innovation on business performance in terms of financial and non-financial.

CHAPTER 3

MARKET ORIENTATION AND INNOVATION OF SOFTWARE COMPANIES IN YANGON

In this chapter, it studies the market orientation and innovation of software companies in Yangon. Study starts with the background of software companies in Yangon. Then, it analyzes demographic profiles of respondents. After that, it is followed by market orientation and innovation of software companies in Yangon.

3.1 Software Companies in Yangon

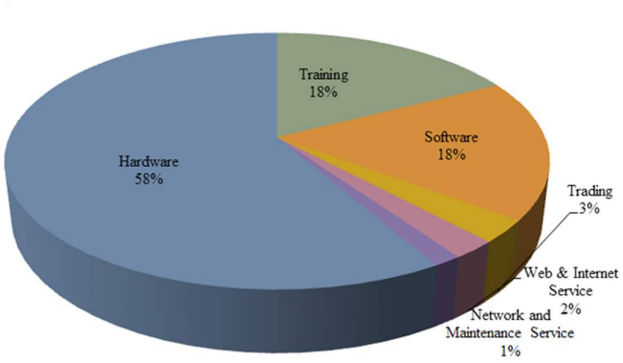
The World Wide Web has digitized information and converged the way the people access information. People read newspapers online via a computer or on mobile phones, and look up information by searching a key word rather than flicking through an alphabetized encyclopedia. The spectacular growth of the software industry in some non-G7 economies was a surprising element mostly for countries that are majorly export-oriented. For instance, in India, during the 1980s there was literally no software production and after 2000 India sustained an annual growth of 30-40 % year after year in software production (Patibandla and Petersen, 2002). Even though other countries like Israel and Ireland are in a lesser degree than India, they also showed a double-digit annual growth in software development (Andreosso-O'Callaghan et al, 2014).

As a Myanmar, following four decades of isolation, economic reforms beginning in 2011 have driven Myanmar's reintegration with the international community. Myanmar's economy is reshaped by new digital innovation wave, as a remodeled national strategy and increased competition enhance the performance of the ICT sector.

Investor's interest on Myanmar ICT sector has seen increased as growing telecoms and it increases competition in the market. While many are interested in telecoms operation and infrastructure, there is more than this to the local market. Increasing government support, reasonable-cost talent and well organized industry and expanded connectivity all make the Myanmar ICT sector an interesting opportunity. The Myanmar ICT sector began an overhaul in the early 2000's though previously it is controlled by

draconian legislation, through the enactment of the Computer Science Development Law (1996), and the following statement of the Myanmar Computer Development Council. This attitude towards ICT has continued to be a part of government policy both in words and in practice. The Myanmar ICT market is still largely influenced by hardware companies (see below), because of relatively low usage of ICT in business and industry.

Figure (3.1) IT Companies by Sector



Source: Cross Roads Myanmar Magazine (2016)

The software market in Myanmar is still largely underdeveloped, with relatively few companies operating in this area. At the moment, the finance sector appears to be an early adopter of technology, with banks installing increasingly secure and progressive systems. IT usage are limited to the larger players in the trading and tourism sectors, – such as major airlines and foreign-owned hotels which provide online booking systems and big supermarket chains using inventory management solutions. Most of the largest business sectors in the country- such as agriculture, manufacturing, education, and health- employ very little software solutions if at all. However, the demand for sophisticated applications is expected to spike as the country's various industries grow and require more developed solutions, be it custom-made applications or licensed comprehensive systems.

Other opportunities exist for setting up offshore development or outsourcing projects. Myanmar can provide experienced and well trained human resources – in the IDI sub-skills index of 2011 Myanmar scored 5.24, significantly higher than India (4.63), Cambodia (4.38) and Laos (4.35) – for a fraction of the cost. New investor friendly regulations and tax incentives create it even more attractive to invest in such ventures.

Software industries have been seen as the engine of growth to several countries as a result of its ability to create job, generate revenue and drive economic growth. In recent decades the software industry has offered opportunities for developing and emerging

countries, because of the low capital requirement for international market entry, low trade barriers, high growth and value capabilities and rich in knowledge profile; although developing countries face barriers in establishing the industry, they have a number of notable locational advantages like skilled labor, infrastructure, etc., which should not be ignored (Fredriksson et al. 2012; Patibandla and Petersen, 2002). For software products providers, working together with global customers plays a major role in terms of obtaining the most accurate market intelligence and staying ahead in the competition. Software companies should also emphasis inter-functional coordination: the quality of the response to customer needs should be well managed regardless of the geographical location. Additionally, the concepts of reactive and proactive market orientation are intertwined: neither contributes to better customer satisfaction in isolation. However, depending on the time needed for responding to customer needs, either may require more attention (Mika Ruokonen, 2008).

3.2 Demographic Profile of Respondents

In the first analysis, it analyzes on the demographic profiles of respondents. In this study, the sample size is 69 respondents from software companies in Yangon. Profile of respondents includes demographic factors such as gender, age, education, position and working experiences. Each characteristic has been analyzed in terms of absolute value and percentage, and the summary of the demographic characteristics of respondents at software companies, which are included. Table (3.1) shows the result of the analysis on the respondents' demographic profile as follows.

The first study of the demographic characteristics of respondents is the gender analysis. The gender of the respondents' employee is simply classified into males and females. From the Table (3.1), it shows the result of gender profile of respondents as male respondents are 26 and female respondents are 43 among total 69 number of software companies in Yangon. In term of percent, female respondents share with 62% and male respondents share only 38% in the study. Normally in technology field, people assume that female is in minority. But according to this result, it defines that female ratio of senior management, director and MD is more than male ratio in software companies, Yangon. It proves that women are more interested in general management than men who are willing to emphasize in technology development.

Table (3.1) Demographic Profile of Respondents

Sr.	Demographic Variables	No: of respondents	Percent
		69	**100**
Gender			
1	Male	26	38
2	Female	43	62
Age			
1	36 to 40 Years	24	34
2	41 to 45 Years	33	49
3	46 to 50 Years	9	13
4	Above 50 Years	3	4
Highest Educational Qualification			
1	University Graduate	22	32
2	Post Graduate Diploma	15	22
3	Master Degree and Above	32	46
Position			
1	Managing Director	18	26
2	Director	21	31
3	Senior Management Position	21	30
4	Manager	9	13
Service Years in Software Industry			
1	Four to Six Years	7	10
2	Seven to Ten Years	21	30
3	Above 10 Years	41	60
Service Years in Current Company			
1	Four to Six Year	48	70
2	Seven to Ten Year	15	21
3	Above 10 Years	6	9

Source: Survey Data (2019)

One of the most common demographic questions asked in surveys is age. How old a person often determine his/her knowledge and experience with the focus of the survey. In term of percent, the most participants are found in age group 41 to 45 years old with 49% and group 36 to 40 years share 34% with the second most participants. Result findings shows that all participants' age are more than 36 because all participants are manager, senior management position, director and managing director position.

Highest level of education completed is often asked on surveys. In the result of the analysis on the education level of respondents, the most participants found in master and above education level with 46%. The result shows that most managers, directors and MD

in Yangon software companies have high education. This is because these companies are technology based companies and respondents' positions are manager and above level. It can be assumed that they are able to work within local and global competition, performing companies business with high creative and innovative.

Another analysis is on respondents' positions which are grouped into four: Managing Director, Director, Senior Management Position and Manager. According to research, it seems that the largest percentage is 31% which is director and the second largest is 30% which is senior management position. Since this research is related with market orientation, innovation and business performance, it is suitable to ask the questions to senior management level participants.

Respondents' working experience in software industry is analyzed in terms of their service year at software industry and experience in current software company. The first analysis of the respondent's working experience in the software companies started with their working experience at their previous software companies. In the study, respondents working experience is classified as four categories: under four years, four to six years, seven to ten years and above ten years. Working experience in their current companies is analyzed by grouping into four groups: under four years, four to six year, seven to ten year and above 10 years. Table (3.1) reports that respondents who have working experience in software industry above 10 years is 60% as the largest ratio. The research also finds that the largest percentage of working experience in current company is four to six year group with 70%. From the analysis, it can be assumed that to be a manager or to become senior management level, working experience should be more than 10 years since they need to make decisions for their department and company.

3.3 Market Orientation of Software Companies

The specific focus of this study is the software industry and the market orientation and innovation of software companies in Yangon. Software products are identified by a high degree of complexity and intangibility, making the offering's support and service elements of paramount importance in the process of value creation for the customer (Ruokonen and Saarenketo, 2009). This is reflected by a study by Ojasalo et al., (2008) who suggest that cooperation with a bigger and trustworthy actor in the market is also the

key to strengthening software companies' marketing communications and customer relationships.

Market- oriented firms are able to better adjust to changes in the environment, allowing for incremental innovation (Baker and Sinkula, 2002). A customer-centric nature developing from a market orientation creates opportunities for innovation via customer ideas and expressed needs. Likewise, closely following competitor moves also facilitates innovation as the market-oriented company meets innovation adopted by the competition. Finally, inter-functional coordination allows ideas to flow across the organization, bolstering its ability to bring new product and service concepts to fruition. In this research, market orientation of software companies in Yangon is analyzed with six factors for customer orientation, competitor orientation and Inter- functional Orientation.

3.3.1 Customer Orientation

Regarding to the analysis on customer orientation among software companies in Yangon, total respondents are asked to answer six questions namely; having a strong commitment to customers, looking at ways to create customer value in company products, encouraging customer comments and complaints because they help company do a better job, driving business objectives by customer satisfaction, measuring customer satisfaction on a regular basis, and believing after-sales service is an important part of company business strategy. The survey result of customer orientation among software companies in Yangon is shown in Table (3.2).

The Table (3.2) reports that the obtained score is 4.57 higher than cut off mean 3, indicating there have high influencing of customer orientation among software companies in Yangon. Among the various customer orientations, the highest effect is found on believing after-sales service with main score value 4.72. The lowest main score of customer orientation is measuring customer satisfaction on a regular basic with 4.35.

Table (3.2) Customer Orientation

Sr.	Customer Orientation	Mean	Std. Deviation
1	Having a strong commitment to customers	4.54	0.63
2	Looking at ways to create customer value in company's products	4.59	0.65
3	Encouraging customer comments and complaints because they help company do a better job	4.61	0.67
4	Driving company business objectives by customer satisfaction	4.62	0.64
5	Measuring customer satisfaction on a regular basis	4.35	0.66
6	Believing after-sales service is an important part of company business strategy	4.72	0.62
	Overall Mean	**4.57**	

Source: Survey Data (2019)

From the findings, it is stated that these software companies are doing well after sales-service since they believe that it is very important for customers in software industry. Though software is successfully implemented, there is still some software errors, some issues are found by customers fault and sometimes customers still need user training. Software companies also need to consult to customers when their software is needed to upgrade to new version with new functionalities. Therefore customers are always needed to take care after sales of software. Measuring customer satisfaction on regular basics has the least mean scores compared to other variables. Some respondents agree on that they don't measure customer satisfaction regularly though they know it drives company business objectives. Mostly they are busy with operation tasks and they didn't do analysis on satisfaction regularly. They agree they are lack in doing analysis of customer satisfaction. In conclusion to the customer orientation among software companies in Yangon, survey shows that software companies in Yangon have the understanding of the importance of customer orientation.

3.3.2 Competitor Orientation

Regarding to the analysis on competitor orientation among software companies in Yangon, total respondents are asked to answer six questions namely; monitoring regularly competitors' marketing efforts, collecting marketing data frequently on competitors to help direct our marketing plans, instructing staff to monitor and report on competitor

activity, responding rapidly to competitors' actions, doing discussion frequently by managers for competitors' actions and monitoring competitors who want to take company customers. The survey result of competitor orientation among software companies in Yangon is shown in Table (3.3).

Table (3.3) Competitor Orientation

Sr.	Competitor Orientation	Mean	Std. Deviation
1	Monitoring regularly competitors' marketing efforts	4.43	0.67
2	Collecting marketing data frequently on competitors to help direct marketing plans	4.39	0.65
3	Instructing staff to monitor and report on competitor activity	4.39	0.67
4	Responding rapidly to competitors' actions	4.29	0.64
5	Doing discussion frequently by managers for competitors' actions	4.31	0.63
6	Monitoring competitors who want to take company's customers	4.45	0.65
	Overall Mean	**4.38**	

Source: Survey Data (2019)

Table (3.3) reports that the obtained score is 4.38, higher than cut off mean 3, indicating there have high influence of competitor orientation among software companies in Yangon. Among these influences of the competitor orientation, the highest mean is found as software companies in Yangon are monitoring competitors who want to take company's customers is 4.45. The lowest mean score is found as responding rapidly to competitors' actions is 4.29.

According to survey, it can be concluded that software companies in Yangon monitor competitors carefully. Closely following competitors takes companies' market share is very risky in market economy. By monitoring competitors, if companies determine where competitors went wrong, these companies can ensure to avoid those mistakes to minimize losses. Closely studying what competitors have been doing allows companies to predict future moves and strategies. Responding rapidly to competitors' actions has the least mean score among six variables. There is a bottle neck in software development life cycle. It takes time in development and deployment periods. These development team delays affect the marketing team not to cope up with changing market demands. In conclusion to the effect of competitor orientation among software companies

in Yangon, survey shows that software companies have the understanding of the importance of competitor orientation.

3.3.3 Inter-Functional Orientation

Regarding to the analysis on the influence of the inter-functional orientation among software companies in Yangon, total respondents are asked to answer the six questions namely; sharing market information inside organization, preparing business plans/strategies by all departments together, integrating the activities inside organization, doing inter-organizational meetings regularly to discuss market trends and developments, doing employees meeting regularly to take collective decision and doing well all department function to promote growth of the business. The survey result of inter-functional orientation among software companies in Yangon is shown in Table (3.4).

The below Table (3.4) reports that the obtained score is 4.34, higher than cut off mean 3, indicating that there have high influence of inter-functional orientation among software companies in Yangon. Among these influence of the inter-functional orientation, the highest mean is found as preparing business plans/strategies by all departments together is 4.41. The lowest mean score of inter-functional orientation is found as doing employees meeting regularly to take collective decision is 4.26.

Table (3.4) Inter-functional Orientation

Sr.	Inter-functional Orientation	Mean	Std. Deviation
1	Sharing market information inside organization	4.29	0.64
2	Preparing business plans/strategies by all departments together	4.41	0.69
3	Integrating the activities inside organization	4.35	0.66
4	Doing inter-organizational meetings regularly to discuss market trends and developments	4.39	0.67
5	Doing employees meeting regularly to take collective decision	4.26	0.66
6	Doing well all department function to promote business growth	4.32	0.65
	Overall Mean	**4.34**	

Source: Survey Data (2019)

Most respondents agree on that preparing strategy together. Preparing business plans/ strategies by all departments together is important because it provides a sense of

direction and outlines measurable goals. Some respondents replied that they rarely make collective decision because top management of their companies believes it cannot reach a satisfactory decision. And most managers are not familiar with doing important decisions. In conclusion to the effect of software companies, survey shows that software companies have the understanding of the importance of inter- functional orientation.

3.3.4 Summary of Market orientation

The survey results of market orientation conditions of customer orientation, competitor orientation and inter-functional orientation is as shown in Table (3.5).

Table (3.5) Summary of Market Orientation

No	Description	Mean
1	Customer Orientation	4.57
2	Competitor Orientation	4.38
3	Inter-functional Orientation	4.34

Source: Survey Data (2019)

The Table (3.5) reports that customer orientation has the strongest mean. And then it is followed by competitor orientation. Inter-functional orientation is the less frequently applied in business. This survey is conducted through software companies in Yangon, and then it is found that they are using above three market orientations. According to survey data, it can be concluded that software companies in Yangon are more emphasize on customer orientation. Customer orientation is regarded as a tactical orientation that reflects the firm's ability to create and deliver superior customer value through the processing of market intelligence. It ensures that all organizational activities and processes are effectively aimed toward anticipating and responding to market changes ahead of competitors. The analysis reveals that customer orientation is the most frequently used rather than competitor orientation and inter-functional orientation.

3.4 Innovation of Software Companies

Innovativeness, the tedency to develop and/or adopt new products, processes, or business systems, positions a company well for growing new value for its customers. For example, a new product can better meet a customer need, thereby providing greater value. More efficient processing can lower operation costs and subsequently result in a lower

price for customers, again providing greater value. In either event, enhanced product offerings or lower costs can assist create a competitive advantage and result in increased business performance. The survey result of the product innovation and process innovation of software companies in Yangon are shown in below tables.

3.4.1 Product Innovation

Regarding to analysis on product innovation, respondents are asked to answer six questions namely: in new product introduction, being first-to-market frequently in new products introduction, taking up against new competitors with new products, managing to cope with market demands and build new products quickly, modifying continuously design of products and rapidly enter new emerging markets, managing to deliver special products flexibly according to customers' orders and improving continuously old products and raise quality of new products. The survey result of product innovation is shown in Table (3.6).

Table (3.6) reports that the obtained mean score is 4.45, higher than cut off mean 3, indicating there have some influences of the product innovation. Among these product innovation, most of respondents are agreed in the fact of modifying continuously design of products and rapidly enter new emerging markets with received main score 4.55 and they are lack of skills in managing to cope with market demands and develop new products quickly with received mean score 4.38.

Table (3.6) Product Innovation

Sr.	Product Innovation	Mean	Std. Deviation
1	Being first-to-market frequently in new products introduction	4.49	0.66
2	Taking up against new competitors with new products	4.46	0.68
3	Managing to cope with market demands and develop new products quickly	4.38	0.67
4	Modifying continuously design of products and rapidly enter new emerging markets	4.55	0.61
5	Managing to deliver special products flexibly according to customers' orders	4.41	0.75
6	Improving continuously old products and raise quality of new products	4.42	0.63
	Overall Mean	**4.45**	

Source: Survey Data (2019)

According to the findings, most respondents believe that updating the software product by using latest technology and modifying product features design is important part in software industry. Software product development should be a continuous process. The changes to the software should be made as needed and when needed. Managing to cope with market demands has the least mean score among six variables. Because customers demand changes and new technology trends are very fast. It is hard for product development technical team to continuously develop to follow up every market demand changes. In conclusion to the effect of product innovation, survey shows that software companies in Yangon have the understanding of the importance of product innovation.

3.4.2 Process Innovation

Regarding to analysis on process innovation, respondents are asked to answer six questions namely: developing innovative ways of accomplishing work targets/objectives, initiating new procedures and methods periodically in providing services, developing frequently new sales or distribution methods such as internet sales, franchising, direct sales or distribution licenses, developing periodically new ways of evaluating quality of service, developing periodically new supporting methods for the business of the enterprise, and reviewing and innovating periodically new ways of improving customer relations. The survey result of process innovation is shown in Table (3.7).

Table (3.7) Process Innovation

Sr.	Process Innovation	Mean	Std. Deviation
1	Developing innovative ways of accomplishing work targets/objectives	4.39	0.65
2	Initiating new procedures and methods periodically in providing services	4.43	0.58
3	Developing frequently new sales or distribution methods, such as internet sales, franchising, direct sales or distribution licenses	4.54	0.63
4	Developing periodically new ways of evaluating quality of service	4.52	0.58
5	Developing periodically new supporting methods for the business of the enterprise	4.36	0.64
6	Reviewing and innovating periodically new ways of improving customer relations	4.45	0.65
	Overall Mean	**4.45**	

Source: Survey Data (2019)

Table (3.7) reports that the obtained mean score is 4.45, higher than cut off mean 3, indicating there have some influences of the process innovation. Among these process innovation, most of respondents are agreed in the fact of that developing frequently new sales or distribution methods with received main score 4.54 and they are lack of skills in developing periodically new supporting methods for the business of the enterprise with received mean score 4.36.

Most participants believe in software industry, develop new sales method is very important among other factors. Based on market orientation result, companies have to create sales method such as license based sales, subscription based sales, etc. Companies also need to develop distribution method to gain the business performance as they expected. Developing periodically new supporting methods for the business of the enterprise has the least main score. Customer requests vary based on company type and software. After defining one supporting method for specific software, it rarely modifies the method. At times, when they get feedback from customer, they slightly change it based on feedback. In conclusion to the effect of process innovation, survey shows that software companies in Yangon have the understanding of the importance of process innovation.

CHAPTER 4
ANALYSIS ON EFFECT OF MARKET ORIENTATION AND INNOVATION ON PERFORMANCE OF SOFTWARE COMPANIES IN YANGON

This chapter includes analysis the effect of market orientation and innovation on performance of software companies in Yangon. These are presented based on the linear regression result from the analysis.

4.1 Business Performance of Software Companies

Whatever the influencing factors are using, major important goal is to be effective and efficient business performance. And thus, respondents are asked to rate their firm financial and non-financial performance status with ten statements. The survey result of performance of software companies in Yangon are shown in below tables.

4.1.1 Financial Performance of Software Companies

Regarding to analysis on financial performance, respondents are asked to answer five questions namely: increasing sales and profitability by investing in innovation, Meeting sales objectives by doing innovation periodically, Achieving successful attainment of market share objective by investing in innovation, Achieving good return on investment by investing in innovation, Achieving attainment of profit targets by investing in innovation. The survey result of financial performance is shown in Table (4.1).

Table (4.1) reports that the total obtained mean score of financial performance is 4.53, higher than cut off mean value 3, indicating that many of software companies in Yangon have some improvement in their financial performance with relation to the market orientation and innovation. Among many performance variables, mean score of achieving attainment of profit targets is 4.59 with the highest mean score. The least mean score is increasing sales growth in the company with 4.48.

Table (4.1) Financial Performance

Sr.	Financial Performance	Mean	Std. Deviation
1	Increasing sales growth in the company within recent 3 years	4.48	0.66
2	Meeting company's sales objectives within recent 3 years	4.57	0.63
3	Achieving attainment of market share objective within recent 3 years	4.49	0.58
4	Achieving return on investment within recent 3 years	4.54	0.56
5	Achieving attainment of profit targets within recent 3 years	4.59	0.58
	Overall Mean	**4.53**	

Source: Survey Data (2019)

According to the findings, most respondents believe that achieving attainment of profit targets by investing in innovation. If software companies innovate new products quickly to cope with market demand and being first to market in this new product introduction, they gets greater affect on financial performance. Increasing sales is least main score. Innovation is not the key to increase profit target in short term. Companies need to invest in innovation for long term to increase sales and profit target. In conclusion to the effect of financial performance, survey shows that software companies in Yangon have the understanding of the importance of financial performance.

4.1.2 Non-Financial Performance of Software Companies

Regarding to analysis on non-financial performance, respondents are asked to answer five questions namely: Increasing numbers of new customers by innovating new ways to improve customer relations , Retaining loyalty of existing customers by innovating new ways to improve customer relations, Getting strong market reputation by doing innovation periodically, Gaining competitive advantage over other service providers by doing innovation periodically, Improving organization image by doing innovation periodically. Table (4.2) shows the status of companies' financial non-performance as follows.

Table (4.2) reports that the total obtained mean score of non-financial performance is 4.54, higher than cut off mean value 3, indicating that many of software companies in Yangon have some improvement in their non-financial performance with relation to the market orientation and innovation. Among many performance variables,

mean score of retaining loyalty of existing customers is 4.62 with the highest mean score. The least mean score is getting strong market reputation.

Table (4.2) Non-Financial Performance

Sr.	Non-Financial Performance	Mean	Std. Deviation
1	Increasing numbers of new customers within recent 3 years	4.57	0.58
2	Retaining loyalty of existing customers within recent 3 years	4.62	0.55
3	Getting strong market reputation within recent 3 years	4.48	0.66
4	Gaining competitive advantage over other service providers within recent 3 years	4.51	0.63
5	Improving organization image within recent 3 years	4.54	0.63
	Overall Mean	**4.54**	

Source: Survey Data (2019)

According to the findings, most respondents believe that they can retain loyalty of existing customers by innovating new ways to improve customer relations. Based on customer type and project type, software companies create new communication channel. If communication flows working well, employees know customers' needs and wants and they fulfills customer complaints. By getting customer satisfaction, software companies believe their business gain good performance and they can retain existing customers. Getting strong market is the least main score. Not only engage with customers but also engage with community are also important for market reputation. By creating and maintaining competitive advantage, it makes more improve in market reputation. In conclusion to the effect of non-financial performance, survey shows that software companies in Yangon have the understanding of the importance of non-financial performance.

4.2 Effect of Market Orientation on Innovation

In this section, the effect of market orientation on product innovation and the effect of market orientation on process innovation of Yangon software companies are analyzed. These are presented based on the linear regression results from the analysis.

4.2.1 Effect of Market Orientation on Product Innovation

To find out the relationship between market orientation and product innovation at software companies in Yangon, linear regression is used to test the relationship between independent variables (Customer Orientation, Competitor Orientation, and Inter-functional Orientation) and dependent variables (Product Innovation). Table (4.3) reports the effect of market orientation on product innovation of software companies in Yangon.

Table (4.3) Effect of Market Orientation on Product Innovation

Variable	Unstandardized Coefficients		Standardized Coefficients	Tolerance	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	2.67	1.53		1.74	0.09	
Customer Orientation	0.37***	0.11	0.40	3.24	0.00	5.32
Competitor Orientation	0.31**	0.15	0.30	2.06	0.04	7.11
Inter-functional Orientation	0.23*	0.13	0.23	1.69	0.09	6.53
R	0.90					
R.Square	0.81					
Adjusted R.Square	0.80					
Durbin Watson	1.82					
F Value	92.25***					

Source: Survey data, 2019

*** Significant at 1% level, **Significant at 5% level, *Significant at 10% level

It is found that the model as a whole is statistically significant at 1 percent level, which is indicated by F=92.25. And the model could explain 80 percent about the independent variable (Product Innovation) and dependent variables (Customer Orientation, Competitor Orientation, and Inter-functional Orientation) since the value of adjusted R Square is 0.80. Durbin Watson is 1.82 and thus, there is no problem of autocorrelation in the sample.

As shown in Table (4.3), customer orientation of software companies in Yangon has the expected positive sign and is highly significant at 1 percent level. The positive relationship indicates that increase in customer orientation leads to increase in product

innovation of software companies in Yangon. If there is the increase in customer orientation by 1 unit, this will also raise to the product innovation by .37 units.

The variable "competitor orientation" has the expected positive sign and is significant at 5 percent significant level as significant value is less than 0.05. The positive relationship means that the increase in competitor orientation leads to increase in product innovation of software companies in Yangon. If the increase in competitor orientation by 1 unit, this will also raise to the product innovation by .31 units.

There is 10 percent significant level as significant value is less than 0.1 with positive coefficient value between inter-functional orientation and product innovation. This shows that the increase in inter-functional orientation leads to increase in product innovation of software companies in Yangon. It means that if there is an increase in inter-functional orientation by 1 unit, this will also increase to the product innovation by .23 units.

In general, the result provided that all three market orientations have affect on product innovation. Among them, the customer orientation would provide greater product innovation. It can also be seen that this market orientation has largest and positive impact on the product innovation comparing with other two market orientations. By dealing and engaging with customer frequently, their feedback and recommendations help software companies to innovate new product features. Accordingly, if the software companies in Yangon want to improve product innovation, they need to improve more customer orientation.

4.2.2 Effect of Market Orientation on Process Innovation

To find out the relationship between market orientation and process innovation at software companies in Yangon, linear regression is used to test the relationship between independent variables (Customer Orientation, Competitor Orientation, Inter-functional Orientation) and dependent variables (Process Innovation). Table (4.4) reports the effect of market orientation on process innovation of software companies in Yangon.

According to Table (4.4), the value of F test, the overall significance of the model, is highly significant at 1 percent level. This model can be said valid. And the model could explain about 82 percent about the independent variables (Customer Orientation,

Competitor Orientation, Inter-functional Orientation) and dependent variable (Process Innovation) since the value of adjusted R Square is .82. Durbin Watson value is 1.49 and thus, there is no problem of autocorrelation in the sample.

Table (4.4) Effect of Market Orientation on Process Innovation

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	3.58	1.39		2.59	0.01	
Customer Orientation	0.18*	0.10	0.21	1.73	0.09	5.32
Competitor Orientation	0.25*	0.14	0.25	1.81	0.08	7.11
Inter-functional Orientation	0.46***	0.12	0.49	3.76	0.00	6.53
R	0.91					
R.Square	0.83					
Adjusted R.Square	0.82					
Durbin Watson	1.49					
F	92.25***					

Source: Survey data, 2019

*** Significant at 1% level, **Significant at 5% level, *Significant at 10% level

As shown in Table (4.4), customer orientation of software companies in Yangon has the expected positive sign and is significant at 10 percent level. The positive relationship indicates that increase in customer orientation leads to increase in process innovation of software companies in Yangon. If there is the increase in customer orientation by 1 unit, this will also raise to the process innovation by .18 units.

The variable "competitor orientation" has the expected positive sign and is significant at 10 percent significant level as significant value is less than 0.1. The positive relationship means that the increase in competitor orientation leads to increase in process innovation of software companies in Yangon. If the increase in competitor orientation by 1 unit, this will also raise to the process innovation by .25 units.

There is 1 percent significant level as significant value is less than 0.01 with positive coefficient value between inter-functional orientation and process innovation. This shows that the increase in inter-functional orientation leads to increase in process innovation of software companies in Yangon. It means that if there is an increase in inter-

functional orientation by 1 unit, this will also increase to the product innovation by .46 units.

In general, the result provided that all three market orientations have affect on process innovation. Among them, the inter-functional orientation would provide greater process innovation. It can also be seen that this market orientation has largest and positive impact on the process innovation comparing with other two market orientations. By sharing information internally and planning strategy helps to improve companies' process innovation. Accordingly, if the software companies in Yangon want to improve process innovation, they need to improve more inter-functional orientation.

4.3 Effect of Innovation on Business Performance

In this section, the effect of innovation on financial performance and the effect of innovation on non-financial performance of Yangon software companies are analyzed. These are presented based on the linear regression results from the analysis.

4.3.1 Effect of Innovation on Financial Performance

To find out the effect of innovation toward financial performance at Software Companies in Yangon, linear regression is used to test the relationship between independent variables (product innovation, process innovation) and dependent variables (financial performance). Table (4.5) states the relationship of product innovation and process innovation to the financial performance, as follows.

According to Table (4.5), it is found that since the value of F test, overall significance of the mode, is highly significant at 1 percent level, this model can be said valid. The model could explain about 84 percent about the variance of the independent variables (Product Innovation and Process Innovation) and dependent variable (Financial Performance) since the value of adjusted Square is .84. Durbin Watson value is close to 2, thus, there is no problem of autocorrelation in the sample.

Table (4.5) Effect of Product Innovation and Process Innovation on Financial Performance

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	2.31	1.15		2.01	0.05	
Product Innovation	0.32***	0.12	0.39	2.57	0.01	9.58
Process Innovation	0.45***	0.13	0.54	3.52	0.00	9.58
R	0.92					
R.Square	0.84					
Adjusted R.Square	0.84					
Durbin Watson	1.89					
F	173.00***					

Source: Survey data, 2019

*** Significant at 1% level, **Significant at 5% level, *Significant at 10% level

As shown in Table (4.5), the product innovation of software companies in Yangon has the expected positive sign and is highly significant at 1 percent level. The positive relationship indicates that the increase in product innovation leads to increase in financial performance of software companies in Yangon. If there is the increase in product innovation by 1 unit, this will also raise to the financial performance by .32 units.

The variable "Process Innovation" has the expected positive sign and is highly significant at 1 percent significant level as significant value is less than 0.01. The positive relationship means that the increase in process innovation leads to increase in financial performance of software companies in Yangon. If the increase in process innovation by 1 unit, this will also raise to the financial performance by .45 units.

In general, the result provided that product innovation and process innovation has strongly affect on financial performance. Customer satisfaction is very important to achieve attainment of profit targets. Software companies have to manage to deliver special products flexibly according to customers' orders. Customer satisfaction can provide major competitive advantages, which can directly lead to increase in financial performance and business growth. In conclusion, regarding to the Table (4.5), if software

companies in Yangon can do both product innovation and process innovation, this leads to increase financial performance.

4.3.2 Effect of Innovation on Non-Financial Performance

To find out the effect of innovation toward financial performance at Software Companies in Yangon, linear regression is used to test the relationship between independent variables (product innovation, process innovation) and dependent variables (non-financial performance). Table (4.6) states the relationship of product innovation and process innovation to the non-financial performance, as follows.

Table (4.6) Effect of Product Innovation and Process Innovation on Non-Financial Performance

Model	Unstandardized Coefficients		Standardized Coefficients	Tolerance	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	2.08	1.14		1.83	0.07	
Product Innovation	0.44***	0.12	0.54	3.60	0.00	9.58
Process Innovation	0.34***	0.13	0.40	2.66	0.01	9.58
R	0.92					
R.Square	0.85					
Adjusted R.Square	0.84					
Durbin Watson	1.98					
F	182.77***					

Source: Survey data, 2019

*** Significant at 1% level, **Significant at 5% level, *Significant at 10% level

According to Table (4.6), it is found that since the value of F test, overall significance of the mode, is highly significant at 1 percent level, this model can be said valid. The model could explain about 84 percent about the variance of the independent variables (Product Innovation and Process Innovation) and dependent variable (Non-Financial Performance) since the value of adjusted R Square is .84. Durbin Watson value is 1.98, thus, there is no problem of autocorrelation in the sample.

As shown in Table (4.6), the product innovation of software companies in Yangon has the expected positive sign and is highly significant at 1 percent level. The positive

relationship indicates that the increase in product innovation leads to increase in non-financial performance of software companies in Yangon. If there is the increase in product innovation by 1 unit, this will also raise to the financial performance by .44 units.

The variable “Process Innovation” has the expected positive sign and is significant at 10 percent significant level as significant value is less than 0.1. The positive relationship means that the increase in process innovation leads to increase in non-financial performance of software companies in Yangon. If the increase in process innovation by 1 unit, this will also raise to the non-financial performance by .34 units.

In general, the result provided that product innovation and process innovation has strongly affect on non-financial performance. Innovation with a view to serve customers better is important for business success. Software companies have to innovate new ways of customer relations to increase numbers of new customers and to retain loyalty of existing customers. Improving organization image is also importation for software companies. They have to develop innovative ways of accomplishing work targets/ objectives to gain organization image. In conclusion, regarding to the Table (4.6), if software companies in Yangon can do both product innovation and process innovation, this leads to increase non-financial performance.

CHAPTER (5)

CONCLUSION

This study describes findings and discussion, suggestion and recommendation of findings from the relationship between market orientation and innovation of software companies in Yangon. Moreover, the effect of innovation on performance is also discussed. Finally, the limitation and needs for further studies are discussed.

5.1 Findings and Discussions

The study examines the effect of market orientation and innovation on performance of software companies in Yangon through a quantitative research process. Each factor includes different number of statements and each statement is measured with five-point Likert scale. Survey shows that Yangon software companies have the understanding of the importance of market orientation and they are doing well customer orientation, competitor orientation and inter-functional orientation. As a consequence, they have a positive effect on product and process innovation and find that it improves organizations' financial and non-financial performance.

As first analysis, demographic profile of respondents with multiple choice questions is analyzed. The finding indicated that managers and above level in software industry are educated people since it is a technology-based industry. And the workforce in this industry is younger and can expect high performance from them and it also indicates that this industry's backbone of success is based on young, energetic and innovative management level. More than half of participants are above 10 years working experience in software industry. It can be assumed that they have a range of knowledge and it helps to develop strategic plan for market orientation which may improve innovation and business performance.

Further, three market orientation factors are analyzed and it can assume that software companies in Yangon are doing well customer orientation, competitor orientation and inter-functional orientation. Employees are preparing business plan/ strategies together. And in after-sales service, software companies develop great value-adding after sales activities since they strongly believe that it is an important part of

company business strategy. More than that, software companies always monitor competitors to avoid losing market share.

Regarding to the analysis on the effect of market orientation on product innovation, all three market orientation variables (customer orientation, competitor orientation, and inter-functional orientation) have positive impact on product innovation of software companies in Yangon and they are statistically significant. The analysis result indicates that customer orientation has strongest affect on product innovation. And then followed by competitor orientation and inter-functional orientation. According to the result from the summary of analysis, most software companies in Yangon strongly believe that customer orientation has strongly effect on product innovation. It assumes that software companies manage to deliver special products flexibly according to customers' orders and they modify continuously design of products and rapidly enter new emerging markets by encouraging customer comments and complaints.

Regarding to the analysis on the effect of market orientation on process innovation, all three market orientation variables (customer orientation, competitor orientation, and inter-functional orientation) have positive impact on process innovation of software companies in Yangon and they are statistically significant. The analysis result indicates that inter-functional orientation has strongest affect on process innovation. And then followed by competitor orientation and customer orientation. According to the result from the summary of analysis, most software companies in Yangon strongly believe that inter-functional orientation has strongly effect on process innovation. It assumes that software companies do discussion frequently for competitors' actions. Therefore they can develop periodically new ways of evaluating quality of service and develop frequently new sales and distribution methods.

According to the findings, it can be concluded that both product innovation and process innovation has the positive impact on financial performance. Software companies in Yangon strongly believe that they meet its sales objectives and achieve successful attainment of market share objectives by investing in innovation. Innovation positively effect to the sales and profitability and they achieved good return on investment.

The result also shows that product and process innovation has positive effect on non-financial performance. Software companies in Yangon strongly believe that they attract new customers and also retain loyalty of existing customers by innovating new

ways to improve customer relations. It is suggested that software companies get strong market reputation, gaining competitive advantage over other service providers and improve organization image by doing innovation periodically.

5.2 Suggestions and Recommendations

Business performance is important for every companies and organizations. To improve business performance, organization needs to regularly do product and process innovations based on the result of market orientation such as customer orientation, competitor orientation and inter-functional orientation. According to the result, it is suggested for software companies in Yangon to keep existing performance by doing current practices of market orientation and innovation.

It is recommended that, software companies in Yangon must take market orientation activities seriously as it plays an important role in how well their product and process innovation will increase. It is suggested that if software companies want to improve more in product innovation, they should focus more in customer orientation and they can reduce investment in inter-functional orientation. Software companies should encourage customer comments and complaints because they help companies do a better job. They should also taking care of customer by providing the best after-sales service.

If they want to more emphasize in process innovation, they must do more inter-functional orientation. It is suggested that software companies in Yangon should prepare business plan and strategies by all departments together. They should also do inter-organizational meetings regularly to discuss market trends and developments. Market orientation itself will form genesis of their capacity building as it will help them know the needs and wants of customers and adjust to address these needs. It is also recommended that there are the needs for software companies in Yangon to embark on market orientation to be able to improve their product and process innovation.

The study finds that, product innovation and process innovation is highly significant at financial performance and non-financial performance. As the product innovation, software companies should manage to cope with market demands and develop products quickly. It should be often first-to-market against competitors. It is suggested that not only developing new products but also modifying existing products design is important to raise the quality of products. For the process innovation, it is

recommended that to develop new ways of accomplishing work targets/ objectives. To improve service area, software companies should periodically initiate new customer supporting procedures and methods. Developing periodically new ways of evaluating quality of service is also recommended for software companies.

In summary, it is recommended that market orientation should be practiced continuously to improve product innovation and process innovation. This market orientation should promote elements of creativity such as technological expertise, teamwork and motivation in order to realize better performance. Likely, software companies in Yangon must develop strong innovative practices as their financial and non-financial performance will increase if they implement innovative moves.

5.3 Needs of Further Research

Study is only made on 69 software companies among many other information technology companies around Myanmar. There are different kinds of IT firms: Hardware, IOT, IT consulting, Data Analytics, Infrastructure and many others. This study only focuses on software firm. Further studies should be conducted to the other type of IT companies. In term of regions, there are many townships around the Myanmar. However, this study is only conducted in Yangon region and thus, further studies should be made to the other regional zonal area. There are many market orientations. This study only focuses on customer orientation, competitor orientation and inter-functional orientation. Further studies should conduct other market orientation.

Market orientation and innovation is important for not only software industry but also for other industries. It is also needed further studies should be conducted in different industries and sectors, in order to make more generic conclusions the effect of market orientation and innovation on performance. Moreover, the influence of market orientation with the use of other market orientation depending on the nature of study areas should be conducted.

REFERENCES

Agarwal, S., Krishna Erramilli, M., & Dev, C. S. (2003). Market orientation and performance in service firms: role of innovation. *Journal of services marketing, 17*(1), 68-82.

Andreosso-O'Callaghan, B., Lenihan, H., & Reidy, P. (2015). The development and growth of the software industry in Ireland: An institutionalized relationship approach. *European Planning Studies, 23*(5), 922-943.

Assink, M. (2006). Inhibitors of disruptive innovation capability: a conceptual model. *European Journal of Innovation Management, 9*(2), 215-233.

Baker, W. E., & Sinkula, J. M. (2002). Market orientation, learning orientation and product innovation: delving into the organization's black box. *Journal of market-focused management, 5*(1), 5-23.

Communities, S. O. o. t. E. (2005). *Oslo manual: Guidelines for collecting and interpreting innovation data*: Publications de l'OCDE.

Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS quarterly*, 189-211.

Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of management studies, 47*(6), 1154-1191.

Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of management studies, 46*(4), 650-675.

Dawes, J. (1999). The relationship between subjective and objective company performance measures in market orientation research: further empirical evidence. *Marketing Bulletin, Research Note 3*, 65-75.

Deshpandé, R., Farley, J. U., & Webster Jr, F. E. (1993). Corporate culture, customer orientation, and innovativene (Jin K Han, 1998)ss in Japanese firms: a quadrad analysis. *Journal of Marketing, 57*(1), 23-37.

Desouza, K. C., Awazu, Y., & Kim, J. (2008). Managing radical software engineering: leverage order and chaos. *International journal of technology, policy and management, 8*(1), 22-40.

Dibrell, C., Davis, P. S., & Craig, J. (2008). Fueling innovation through information technology in SMEs. *Journal of small business management, 46*(2), 203-218.

Felcman, M. (2012). Reflections on the Market-Oriented Theory in the Behaviour of Real Organization. *Atlantic Marketing Journal, 1*(2), 4.

Fredriksson, T., Barayre, C., Gil, S., Jang, S., Korka, D., Lang, R., & Lakhe, S. (2012). *The information economy report: the software industry and developing countries.* Paper presented at the United Nations Conference on Trade and Develop. UN Publication.

Heitmeyer, C., Jeffords, R., Bharadwaj, R., & Archer, M. (2007). *Re theory meets software practice: Lessons from the software development trenches.* Paper presented at the 15th IEEE International Requirements Engineering Conference (RE 2007).

Homburg, C., & Pflesser, C. (2000). A multiple-layer model of market-oriented organizational culture: Measurement issues and performance outcomes. *Journal of marketing research, 37*(4), 449-462.

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *Journal of Marketing, 62*(3), 42-54.

Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal of Marketing, 57*(3), 53-70.

Jin K Han, N. K. (1998). *Market Orientation and Organizational Performance: Is Innovation a Missing Link?* Srivastava.

Jordan, G., & Segelod, E. (2006). Software innovativeness: outcomes on project performance, knowledge enhancement, and external linkages. *R&D Management, 36*(2), 127-142.

Kirca, A. H., Jayachandran, S., & Bearden, W. O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing, 69*(2), 24-41.

Kraa, J. J. (2016). *Effect Of Market Orientation On Performance Of Small And Medium Enterprises; Mediating Role Of Innovation* . Ghana.

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of Marketing, 54*(2), 1-18.

Kotler, P., & Keller, K. L. (2009). Marketing Management 13th Edition. New Jersey-America: Pearson International Edition.

Krishnan, V., & Ulrich, K. T. (2001). Product development decisions: A review of the literature. *Management science, 47*(1), 1-21.

Linåker, J., Munir, H., Runeson, P., Regnell, B., & Schrewelius, C. (2015). *A survey on the perception of innovation in a large product-focused software organization.* Paper presented at the International Conference of Software Business.

Lippoldt, D. C., & Stryszowski, P. (2009). Innovation in the Software Sector, OECD

Menguc, B., & Auh, S. (2006). Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. *Journal of the academy of marketing science, 34*(1), 63-73.

Muhammad, M. (2009). The combine effect of market orietation and owner/manager's innovation and business performance of small and medium sized manufacturing firms in Pakistan. *Sintok, Kedah, Malaysia: PhD Thesis, UUM.*

Muhammad M, A. (2010). Effect of market orientation on small business performance in small town in malaysia: An empirical study on malaysian small firms. *University of Craiova Journal of Management & Marketing*, 111, 91-104.

Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research, 36*(1), 15-23.

Nambisan, S. (2002). Software firm evolution and innovation–orientation. *Journal of engineering and technology management, 19*(2), 141-165.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing, 54*(4), 20-35.

Narver, J. C., Slater, S. F., & Tietje, B. (1998). Creating a market orientation. *Journal of market-focused management, 2*(3), 241-255.

Ojasalo, J., Nätti, S., & Olkkonen, R. (2008). Brand building in software SMEs: an empirical study. *Journal of Product & Brand Management, 17*(2), 92-107.

Patibandla, M., & Petersen, B. (2002). Role of transnational corporations in the evolution of a high-tech industry: the case of India's software industry. *World development, 30*(9), 1561-1577.

Pikkarainen, M., Codenie, W., Boucart, N., & Alvaro, J. A. H. (2011). *The art of software innovation: eight practice areas to inspire your business*: Springer Science & Business Media.

Porter, M. E., & Advantage, C. (1985). Creating and sustaining superior performance. *Competitive advantage, 167*.

Quinn, J.B. (1986). *Innovation and Corporate Strategy: Managed.* New York: Pergamon Press.

Ruokonen, M. (2008). Market orientation and product strategies in small internationalising software companies. *The Journal of High Technology Management Research, 18*(2), 143-156.

Ruokonen, M., & Saarenketo, S. (2009). The strategic orientations of rapidly internationalizing software companies. *European Business Review, 21*(1), 17-41.

Sohn, S. Y., Joo, Y. G., & Han, H. K. (2007). Structural equation model for the evaluation of national funding on R&D project of SMEs in consideration with MBNQA criteria. *Evaluation and program planning, 30*(1), 10-20.

Tidd, J., Bessant, J., & Pavitt, K. (2005). Managing Innovation: Integrating Technological, Market and Organizational Change.

Tidd, J., & Bessant, J. R. (2018). *Managing innovation: integrating technological, market and organizational change*: John Wiley & Sons.

Trkman, P. (2010). The critical success factors of business process management. *International journal of information management, 30*(2), 125-134.

Utterback, J. M., & Abernathy, W. J. (1975). A dynamic model of process and product innovation. *Omega, 3*(6), 639-656.

Vieira, V. A. (2010). Antecedents and consequences of market orientation: a Brazilian meta-analysis and an international mega-analysis. *BAR-Brazilian Administration Review, 7*(1), 40-58.

Vieites, Á. G., & González, J. L. C. (2011). A study of innovation activities in software and computer services companies. *Paper presented at the 6th Iberian Conference on Information Systems and Technologies* (CISTI 2011).

Webster, C. (1988). The Health Service Since the War. Problems of Health Care. The National Health Service before 1957. *London: Her Majesty's Stationery Office, 1*, 20.

Wolff, J. A., & Pett, T. L. (2006). Small-firm performance: modeling the role of product and process improvements. *Journal of small business management, 44*(2), 268-284.

Zhou, K. Z., Yim, C. K., & Tse, D. K. (2005). The effects of strategic orientations on technology-and market-based breakthrough innovations. *Journal of Marketing, 69*(2), 42-60.

Appendix-1

Questionnaires

Dear Participants,

I am a student of Yangon University of Economics, Department of Management Studies. I am doing a study on the "**The Effect of Market Orientation and Innovation on Performance of Software Companies in Yangon**". I am going to explore how market orientation and innovation is important to improve financial and non-financial performance of software companies in Yangon.

I request you to kindly respond to the questions in the questionnaire as sincere and thoughtful as possible to contribute for accuracy of finding of the study. It will take around 15-20 minutes to provide your response. This is not related to any other business purpose. Please kindly answer the following question.

I would like to say thank you for your kind cooperation and if you have any questions or concern, please feel free to contact me.

Sincerely,

Mya Myint Zu

EMBA – 75

Section A: General Information

Completion of information is voluntary and its confidentiality is assured. No individual data will be reported.

1. What is your gender?

   Male □

   Female □

2. What is your age?

   Under 36 Years □

   36 – 40 Years □

   41 – 45 Years □

   46 – 50 Years □

   Above 50 Year □

3. What is your highest level of Education?

   Diploma or the equivalent □

   Bachelor Degree □

   Post Graduate Degree □

   Master Degree and above □

4. Level of your position

   Managing Director □

   Director □

   Senior Management Position □

   Manager □

5. How long have you been working in software industry?

   Under 4 years □

   4 - 6 Years □

   7 – 10 Years □

   Above 10 years □

6. How long have you been working in current company?

   Under 4 years □

   4 - 6 Years □

   7 – 10 Years □

   Above 10 years □

Section B: Market Orientation

This section of questionnaire is to describe the **market orientation of software companies in Yangon**. Please judge how far you agree with the following statement to your company's market orientation. Use the following scale to select the number.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Customer Orientation	Scale				
		1	2	3	4	5
1	Having a strong commitment to customers					
2	Looking at ways to create customer value in company's products					
3	Encouraging customer comments and complaints because they help company do a better job					
4	Driving company business objectives by customer satisfaction					
5	Measuring customer satisfaction on a regular basis					
6	Believing after-sales service is an important part of company business strategy					

No	Competitor Orientation	Scale				
		1	2	3	4	5
1	Monitoring regularly competitors' marketing efforts					
2	Collecting marketing data frequently on competitors to help direct marketing plans					
3	Instructing staff to monitor and report on competitor activity					
4	Responding rapidly to competitors' actions					
5	Doing discussion frequently by managers for competitors' actions					
6	Monitoring competitors who want to take company's customers					

No	Inter-functional Orientation	Scale				
		1	2	3	4	5
1	Sharing market information inside organization					
2	Preparing business plans/strategies by all departments together					
3	Integrating the activities inside organization					
4	Doing inter-organizational meetings regularly to discuss market trends and developments					
5	Doing employees meeting regularly to take collective decision					
6	Doing well all department function to promote growth of the business					

Section C: Innovation

The following items indicate to product innovation and process innovation. For each item, please circle the number that best represents your appropriate response based on the following rating scale.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Product Innovation	Scale				
		1	2	3	4	5
1	Being first-to-market frequently in new products introduction					
2	Taking up against new competitors with new products					
3	Managing to cope with market demands and develop new products quickly					
4	Modifying continuously design of products and rapidly enter new emerging markets					
5	Managing to deliver special products flexibly according to customers' orders					
6	Improving continuously old products and raise quality of new products					

No	Process Innovation	Scale				
		1	2	3	4	5
1	Developing innovative ways of accomplishing work targets/objectives					
2	Initiating new procedures and methods periodically in providing services					
3	Developing frequently new sales or distribution methods, such as internet sales, franchising, direct sales or distribution licenses					
4	Developing periodically new ways of evaluating quality of service					
5	Developing periodically new supporting methods for the business of the enterprise					
6	Reviewing and innovating periodically new ways of improving customer relations					

Section D: Business Performance

The sets of statements aimed at helping you assess your business performance. You are requested to rating yourself against each statement to indicate your level of agreement with what the statement is suggesting. Use the following scale to select the number.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

No	Financial Performance	Scale				
		1	2	3	4	5
1	Increasing sales growth in the company within recent 3 years					
2	Meeting company's sales objectives within recent 3 years					
3	Achieving attainment of market share objective within recent 3 years					
4	Achieving return on investment within recent 3 years					
5	Achieving attainment of profit targets within recent 3 years					

No	Non-Financial Performance	Scale				
		1	2	3	4	5
1	Increasing numbers of new customers within recent 3 years					
2	Retaining loyalty of existing customers within recent 3 years					
3	Getting strong market reputation within recent 3 years					
4	Gaining competitive advantage over other service providers within recent 3 years					
5	Improving organization image within recent 3 years					

Section E: Appreciation

I wish to thank you very much for your spending your valuable time to respond to this questionnaire.

Appendix-II

The Effect of Market Orientation on Product Innovation

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.900[a]	.810	.801	1.77625	1.816

a. Predictors: (Constant), INTERO, CUSTO, COMPO

b. Dependent Variable: PROINNO

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	873.123	3	291.041	92.246	.000[b]
	Residual	205.080	65	3.155		
	Total	1078.203	68			

a. Dependent Variable: PROINNO

b. Predictors: (Constant), INTERO, CUSTO, COMPO

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.668	1.531		1.742	.086		
	CUSTO	.365	.113	.404	3.241	.002	.188	5.318
	COMPO	.311	.151	.297	2.060	.043	.141	7.113
	INTERO	.226	.134	.233	1.688	.096	.153	6.532

a. Dependent Variable: PROINNO

The Effect of Market Orientation on Process Innovation

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.911[a]	.830	.822	1.60737	1.494

a. Predictors: (Constant), INTERO, CUSTO, COMPO

b. Dependent Variable: PROCEINNO

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	818.671	3	272.890	105.622	.000[b]
	Residual	167.937	65	2.584		
	Total	986.609	68			

a. Dependent Variable: PROCEINNO

b. Predictors: (Constant), INTERO, CUSTO, COMPO

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.583	1.386		2.585	.012		
	CUSTO	.177	.102	.205	1.734	.088	.188	5.318
	COMPO	.248	.137	.247	1.809	.075	.141	7.113
	INTERO	.455	.121	.491	3.758	.000	.153	6.532

a. Dependent Variable: PROCEINNO

The Effect of Innovation on Financial Performance

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.916[a]	.840	.835	1.30401	1.892

a. Predictors: (Constant), PROCEINNO, PROINNO

b. Dependent Variable: FINPER

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	588.379	2	294.190	173.007	.000[b]
	Residual	112.229	66	1.700		
	Total	700.609	68			

a. Dependent Variable: FINPER

b. Predictors: (Constant), PROCEINNO, PROINNO

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.306	1.145		2.013	.048		
	PROINNO	.316	.123	.392	2.568	.012	.104	9.582
	PROCEINNO	.453	.129	.537	3.521	.001	.104	9.582

a. Dependent Variable: FINPER

The Effect of Innovation on Non-Financial Performance

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.920[a]	.847	.842	1.29316	1.98

a. Predictors: (Constant), PROCEINNO, PROINNO

b. Dependent Variable: NON-FINPER

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	611.283	2	305.641	182.771	.000[b]
	Residual	110.369	66	1.672		
	Total	721.652	68			

a. Dependent Variable: NON-FINPER

b. Predictors: (Constant), PROCEINNO, PROINNO

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.081	1.136		1.832	.071		
	PROINNO	.439	.122	.537	3.601	.001	.104	9.582
	PROCEINNO	.339	.127	.396	2.658	.010	.104	9.582

a. Dependent Variable: NON-FINPER