

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME**

**EFFECT OF DIFFERENTIATION STRATEGY AND
COMPETITIVE ADVANTAGE ON PERFORMANCE OF
IT SYSTEM INTEGRATOR COMPANIES**

**THAN HTIKE PHYO
EMBA II-31
EMBA 18TH BATCH**

MARCH, 2023

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME**

**EFFECT OF DIFFERENTIATION STRATEGY AND
COMPETITIVE ADVANTAGE ON PERFORMANCE OF
IT SYSTEM INTEGRATOR COMPANIES**

ACADEMIC YEAR (2020-2023)

Supervised by:

Dr Myint Myint Kyi
Professor and Head
Department of Management Studies
Yangon University of Economics

Submitted by:

Than Htike Phyo
EMBA II - 31
EMBA 18th Batch
2020-2023

YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME

**EFFECT OF DIFFERENTIATION STRATEGY AND
COMPETITIVE ADVANTAGE ON PERFORMANCE OF
IT SYSTEM INTEGRATOR COMPANIES**

A 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 Myint Myint Kyi
Professor and Head
Department of Management Studies
Yangon University of Economics

Submitted by:

Than Htike Phyo
EMBA II - 31
EMBA 18th Batch
2020-2023

ACCEPTANCE

This is to certify that the thesis entitled “**Effect of Differentiation Strategy and Competitive Advantage on Performance of IT System Integrator Companies**” has been accepted by the Examination Board for awarding Master of Business Administration (MBA) degree.

Board of Examiners

(Chairman)

Dr Tin Tin Htwe

Rector

Yangon University of Economics

(Supervisor)

(Examiner)

(Examiner)

(Examiner)

March, 2023

ABSTRACT

This paper aims to investigate how value chain practices affect the differentiation strategies of IT system integrator companies in Myanmar. Specifically, it seeks to understand how these practices influence a company's ability to distinguish itself from competitors. The study endeavors to analyze the relationship between differentiation strategies and comparative advantage and how this relationship ultimately affects the performance of firms. To attain these objectives, the study utilizes primary as well as secondary sources of data. Primary data collection is through surveys conducted with key stakeholders in the IT system integration industry in Myanmar. Additionally, secondary data is gathered by carefully reviewing relevant literature and industry reports. The paper uses a sample size of 66 IT system integrator companies out of 132 comprising 50% of total population. The findings reveal that different elements within the value chain have varying impacts on the differentiation strategy. Notably, achieving differentiation through superior customer service is significantly influenced by factors such as postponement, customer relationships, and the level of information sharing. For differentiation in terms of technology leadership and strategic supplier partnerships play a crucial role. Additionally, strategic supplier partnerships and high levels of information sharing contribute significantly to achieving product differentiation. However, companies in Myanmar face challenges in achieving differentiation in logistics, potentially influenced by the global pandemic and armed conflicts disrupting normal trading activities. The survey data analysis demonstrates that differentiation strategies have varying impacts on competitive advantage. Quality customer service is found to be of paramount importance for gaining a competitive edge. To achieve this advantage, IT system integrator companies should focus on maintaining good customer relationships and incorporating postponement into their value chain. Delivery dependability requires a focus on customer service and product differentiation. Furthermore, product differentiation is a critical factor to achieve a competitive advantage in terms of product innovation and time to market.

ACKNOWLEDGEMENTS

I would like to express my heartfelt appreciations to Professor Dr Tin Tin Htwe, the Rector of Yangon University of Economics, for generously granting me permission to enroll in the Executive Master of Business Administration (EMBA) program.

I would also like to extend my sincere gratefulness to my supervisor, Professor Dr Myint Myint Kyi, who serves as both the MBA Programme Director and the Head of the Department of Management Studies. She has provided me with invaluable and constructive suggestions throughout my academic journey, and her excellent guidance, unwavering support, and insightful feedback were instrumental in helping me complete my thesis.

Additionally, I wish to express my heartfelt thanks to the following esteemed individuals from the Department of Management Studies at Yangon University of Economics: Dr Thin New Oo, Professor; Dr Hla Hla Mon, Professor; and Dr Than Thu Zar, Professor. Their invaluable guidance and kind comments have been instrumental in shaping this thesis.

Furthermore, I would like to extend my deepest gratitude to the professors, associate professors, and lecturers alike who have provided me with unwavering support and encouragement. I would also like to express my warmest thanks to my fellow EMBA-18 classmates, as well as all those who have provided me with valuable lecture documents, encouragement, comments, and advice throughout the entire process of writing this paper.

Finally, I wish to extend a special thanks to all the survey respondents from 66 IT system integrator companies who have generously supported and participated in this study. Their contributions have been invaluable.

Than Htike Phyoo

EMBA II -31

EMBA 18th Batch

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	viii
CHAPTER 1 INTRODUCTION	1
1.1 Rationale of the Study	3
1.2 Objectives of the Study	6
1.3 Scope and Method of the Study	6
1.4 Organization of the Study	6
CHAPTER 2 THEORETICAL BACKGROUND	8
2.1 Theories around Distinctive Value Chain, Differentiation Strategy, Competitive Advantage and Firm Performance	8
2.2 Empirical Studies	13
CHAPTER 3 PROFILES AND VALUE CHAIN PRACTICES OF IT SYSTEM INTEGRATOR COMPANIES	19
3.1 Profile of Selected Companies	19
3.2 Profile of Selected Executives	21
3.3 Reliability Analysis	24
CHAPTER 4 ANALYSIS ON EFFECT OF DIFFERENTIATION STRATEGY AND COMPETITIVE ADVANTAGE ON PERFORMANCE OF IT SYSTEM INTEGRATOR COMPANIES	26
4.1 Value Chain Practices of Selected IT System Integrator Companies	26
4.2 Differentiation Strategy Practices of Selected IT System Integrator Companies	34

4.3	Competitive Advantage Practices of Selected IT System Integrator Companies	40
4.4	Firm Performance Practices of Selected IT System Integrator Companies	46
4.5	Analysis on Effect of Value Chain Practices on Differentiation Strategy	48
4.6	Analysis on Effect of Differentiation Strategy on Comparative Advantage	52
4.7	Analysis on Effect of Competitive Advantage on Firm Performance	57
CHAPTER 5	CONCLUSION	59
5.1	Findings and Discussions	59
5.2	Suggestions and Recommendations	60
5.3	Limitations and Need for Further Research	61
REFERENCE		
APPENDICES		

LIST OF TABLES

Table		Page
Table 3.1	Profile of Selected Companies	19
Table 3.2	Profile of Selected Executives	22
Table 3.3	Reliability Analysis Results	24
Table 4.1	Descriptive Analysis Results on Value Chain Practices of Respondent Companies Regarding strategic Supplier Partnership	27
Table 4.2	Descriptive Analysis Results on Value Chain Practices of Respondent Companies Regarding Customer Relationship	28
Table 4.3	Descriptive Analysis Results on Value Chain Practices of Respondent Companies Regarding Level of Information Sharing	30
Table 4.4	Descriptive Analysis Results on Value Chain Practices of Respondent Companies Regarding Postponement	33
Table 4.5	Descriptive Analysis Results on Differentiation Strategy Practiced By Respondent Companies Regarding Their Customer Service	34
Table 4.6	Descriptive Analysis Results on Differentiation Strategy Practiced By Respondent Companies Regarding Technology Leadership	36
Table 4.7	Descriptive Analysis Results on Differentiation Strategy Practiced by Respondent Companies Regarding Product Differentiation	38
Table 4.8	Descriptive Analysis Results on Differentiation Strategy Practiced by Respondent Companies Regarding Logistic Differentiation	40
Table 4.9	Descriptive Analysis Results on Comparative Advantage Practices of Respondent Companies Regarding Quality	41
Table 4.10	Descriptive Analysis Results on Comparative Advantage Practices of Respondent Companies Regarding Delivery Dependability	42

Table 4.11	Descriptive Analysis Results on Comparative Advantage Practices of Respondent Companies Regarding Product Innovation	44
Table 4.12	Descriptive Analysis Results on Comparative Advantage Practices of Respondent Companies Regarding Time to Market	45
Table 4.13	Descriptive Analysis Results on Firm Performance of Respondent Companies	47
Table 4.14	Effect of Value Chain on Customer Service	48
Table 4.15	Effect of Value Chain on Technology Leadership	50
Table 4.16	Effect of Value Chain on Product Differentiation	51
Table 4.17	Effect of Value Chain on Logistic Differentiation	52
Table 4.18	Effect of Differentiation Strategy on Quality	53
Table 4.19	Effect of Differentiation Strategy on Delivery Dependability	54
Table 4.20	Effect of Differentiation Strategy on Product Innovation	55
Table 4.21	Effect of Differentiation Strategy on Time To Market	56
Table 4.22	Effect of Comparative Advantage on Firm Performance	58

LIST OF FIGURES

Figure		Page
Figure 2.1	Previous Model	14
Figure 2.2	Conceptual Framework of the Study	18

LIST OF ABBREVIATIONS

ASEAN	Association of South East Asian Nations
CEO	Chief Executive Officer
CPU	Central Processing Unit
CTO	Chief Technical Officer
e-ID	Electronic Identification
IBM	The International Business Machines Corporation
ICT	Information Communication Technology
IT	Information Technology
LSPs	Local Service Providers
MOS	Metal-oxide-semiconductor
MNTC	Myanmar National Tele & Communications
MS-DOS	Microsoft Disk Operating System
PCNSE	Palo Alto Networks Certified Network Security Engineer
PMP	Project Management Professional
ROI	Return On Investment
SPSS	Statistical Package for the Social Sciences
VMware	Virtual Machine System

CHAPTER 1

INTRODUCTION

Humans have engaged in the storage, retrieval, manipulation, and communication of information since the inception of written language systems. However, the foundation of contemporary information technology can be traced back to the demonstration of Boolean Logic (specifically, the operators "And," "Or," and "Not") by Claude Shannon at the Massachusetts Institute of Technology in the United States in 1938. Then the invention of transistors proved this Boolean logic as physical devices and later the transistors were integrated into metal-oxide-semiconductors (MOS) chipsets. This MOS acts as a central processing unit (CPU) function and later *the Intel 4004* is the first microprocessor in the market in 1971 which lead to the idea of the personal computer.

Microsoft was founded by Bill Gates and Paul Allen on April 4, 1975, capitalizing on the advancements in microprocessor technology. The company achieved significant success by dominating the market for personal computer operating systems with *MS-DOS* in the mid-1980s. Following this triumph, Microsoft released the *Windows* operating system on November 20, 1985. Concurrently, the growth of the internet in 1983 prompted the establishment of other prominent Information Technology firms such as IBM, Dell, Apple, and Yahoo, all of which emerged during the 1980s. Given the pivotal role played by the Information Technology industry in various aspects of contemporary global trends, including personal, commercial, educational, and political domains, it enables businesses to streamline their processes and systems, leading to cost reduction, revenue generation, and enhanced overall performance of the firms.

Turning to Myanmar, before 1960, data processing was conducted with punched cards and unit recording machines which were the predecessor of the computer. Limited access was given to selective governmental departments including Burma Railways, the Central Economics and Statistics Department, and the Tatmadaw's Records Office on a priority basis of national security and importance. The push for a computer began at the Institute of Economics (Now the Yangon University of Economics) in the 1960. The project leader was Dr. Chit Swe, head of the economics institute's mathematics department but discussion are not progressive due to political situations. But after ten years of hard work, in 1970, a grant contract was signed with United Nations and the Universities' Computer Centre Project was established the following year, delivered the first computer ICL 1902S UCC in December 1972. Gradually, the industry of Information

Technology became developed since but not significant until 2000. In 2001, a collaborative effort involving a consortium of 50 private companies was initiated to develop Information and Communication Technology (ICT) Parks. The inaugural ICT Park was officially opened on January 21, 2002, in Yangon, Myanmar, followed by the establishment of a second ICT Park in Mandalay on August 16, 2003. Those initiative companies in ICT parks became main operators of Myanmar's Information Technology industry by serving as wholesalers, retailers, service providers, enterprise solutions, and system integrator companies.

A system integrator company refers to a company that specialized in forming a new product or solution by bringing components or subsystems together. Currently, there are over thousands IT companies in Myanmar and 132 system integrator companies are working on customized projects for their target consumers, and example of their projects can be given as some projects with the Union Election Board for the electoral process, one with the Ministry of Immigration for e-ID. Therefore, system integrator companies need to focus on their company's distinctive value change, and specific marketing strategy to achieve better firm performance.

From the perspective of economics, a unique value chain encompasses a set of activities and functions that are essential for generating a product's value proposition. This value chain operates in a distinct manner, distinguishing it from competitors and making replication challenging. In light of a company's distinctive values, a suitable strategy must be employed to compete effectively. This competitive strategy pertains to the long-term plan implemented by a company to attain a competitive advantage within its industry. Three primary competitive strategies exist: cost leadership, differentiation, and a combination of broad and focused approaches.

A differentiation strategy entails a business offering customers unique and distinct products or options that are unlike those provided by competitors in the market. This strategy aims to create a competitive advantage by providing offerings that stand out and meet the specific needs or preferences of the target market. Competitive advantage refers to the factors that enable a company to produce goods or services in a manner that is superior or more cost-effective than its competitors. These advantages contribute to the productive entity's ability to generate higher sales or achieve superior profit margins compared to its rivals in the market. By leveraging such advantages, a company can position itself as a leader in the industry and gain a stronger foothold in the marketplace. Companies with good competitive advantage create a better firm performance which

reflects the ability of the firm in using human resources and material resources to achieve the targets of the firm. Since companies should practice appropriate business strategies to gain a competitive advantage as their strategy choice would be tied to their value chain, it is assumed that IT system integrator companies also need to apply their focused differentiation strategy to generate a desired competitive advantage.

This study emphasizes the effect of differentiation strategy and competitive advantage on the performance of IT system integrator companies in Myanmar. Moreover, it explores the role of value change in the implementation of a differentiation strategy in order to achieve sustainable success as a whole.

1.1 Rationale of the Study

Currently, the IT industry in Myanmar is experiencing significant growth, driven by the government's encouragement and the active involvement of local leading IT companies and organizations, including the Myanmar Computer Federation and the Myanmar Computer Professional Associations. The consensus among stakeholders is that the Information Technology (IT) industry plays a crucial role in advancing political, economic, and social objectives in Myanmar. This recognition underscores the importance of IT as a catalyst for progress and development in the country. Nowadays, IT companies in Myanmar are trying to improve in many areas such as *product innovation, time to market, reduction cost and quality improvement* so that they can create distinct value change and competitive advantages. In numerous other countries, it has been firmly established that the successful development of the IT industry relies on the presence of a conducive environment for fair competition and the active participation of the private sector in assuming a leading role. This understanding is grounded in the recognition that fostering a competitive landscape and empowering private enterprises are instrumental in driving innovation, productivity, and sustainable growth within the IT industry.

When it comes to Myanmar, many responsibilities lie in the hand of the public sector for establishing infrastructure, amalgamating law, rules and regulations, and setting standards that cannot be done by the private sector. That can be stated as one of the negative aspects in the sense of environment for fair competition. The absence of an officially adopted or approved Master Plan has been a significant challenge in addressing this issue. Although an ICT Master Plan for Myanmar (2006-2010) was previously drafted with funding support from the Republic of Korea through the Initiative for ASEAN Integration Program, it has not been fully implemented. As a result, the lack of

an ICT Master Plan or a comprehensive framework of ICT policies can be identified as one of the major weaknesses in Myanmar's IT development.

In 2013, the authorities in Myanmar awarded nationwide telecommunications licenses to Telenor, a Norwegian telecoms group, and Ooredoo, a telecommunications company from Qatar. This marked a significant development in the country's telecommunications sector. Additionally, the government-owned operator MPT (Myanma Posts and Telecommunications) formed a partnership with the Japanese operator KDDI, resulting in the establishment of the third operator in 2014. Subsequently, in 2017, Myanmar welcomed its fourth telecoms licensee, Myanmar National Tele & Communications (MNTC), which introduced its services under the brand name 'Mytel.' Notably, Mytel utilized the existing telecommunications infrastructure owned by Myanmar Economic Corporations, contributing to the expansion and modernization of Myanmar's telecommunications industry. Therefore, tight competitions among IT and telecom companies were evident in Myanmar in the last few years although there seemed to be unbalanced in infrastructure control and budget allocation between international telecom operators and the semi-government-operated ones.

In making strenuous efforts for the development of the communication sector, significant progress can be witnessed in mobile density on the other hand. There were 68.24 million mobile connections in Myanmar in January 2020, which was equivalent to 126% of the total population. Initially, the competition between these nationwide mobile operators created good job opportunities for Myanmar telecom companies, but some conflicts of interest emerged in the later stages.

The reason why such common issues could not be solved properly is generally pointed out by the fact that the responsible mediating body or the regulating authority, *Myanmar Post and Telecom* also serves as one of the telecom operators in the competing ground. Many Myanmar telecom companies serving as local service providers (LSPs) have addressed their challenges and inconveniences in operation work, and common cases are during fiber laying and tower erection processes, and insufficient legal coverage is frequently highlighted as a major cause.

Another noteworthy development in Myanmar's ICT sector between 2000 and 2020 was the establishment of a government fiber network that connects all ministries and head offices of government agencies. This network infrastructure facilitates efficient communication and data exchange among government entities. Additionally, the establishment of a central data center, which caters to the needs of all ministries, has

further contributed to the modernization of government operations and data management. These advancements have created a competitive environment for IT system integrators in Myanmar. The demand for integrating and maintaining the government fiber network and data center services has intensified competition among IT companies vying for contracts and projects in this sector. This heightened competition drives innovation and pushes companies to offer high-quality solutions and services to meet the growing needs of the government.

However, during this turbulent time, many sanctions and restrictions were imposed on many IT system integrator companies in Myanmar, and there has been a high degree of uncertainty for the firms whether to choose any differentiation strategy or to favor the price reduction. Although the nature of demand from focused customers is distinctive, it is uncertain for them if this differentiation will lead to a competitive advantage.

The implementation of various activities by IT system integrator companies within the distinctive value chain, including strategic supplier partnerships, customer relationship building, information sharing, information quality, and postponement, can enable organizations to develop the capacity necessary for implementing an effective differentiation strategy. By focusing on different dimensions of differentiation strategy, such as customer services, technology leadership, product differentiation, and logistic differentiation, companies can create a competitive advantage in the market. This competitive advantage can be measured through various factors, including quality, delivery dependability, product innovation, and time to market, which in turn contribute to higher firm performance. Firm performance, in this context, can be evaluated based on dimensions such as financial performance, customer-related outcomes, internal business processes, and learning and growth.

To sum up, examining the business strategies of targeted IT system integrator companies, with a specific focus on their distinctive value chain, differentiation strategy, and competitive advantage, is essential for the development of the ICT sector. These factors serve as important indicators to enhance the firm performance of IT companies and ultimately contribute to the overall growth and advancement of the sector.

1.2 Objectives of the Study

The objectives of the study are:

- (1) To analyze the effect of the value chain on the differentiation strategy of IT system integrator companies.
- (2) To examine the effect of differentiation strategy on competitive advantage of IT system integrator companies.
- (3) To explore the impact of competitive advantage on performance of IT system integrator companies.

1.3 Scope and Method of the Study

The primary focus of this study centers on the impact of the value chain on the differentiation strategy, the influence exerted by the differentiation strategy on competitive advantage, and the subsequent implications for firm performance. This study also emphasizes on the perception of owner / CEO/ Executive Officers of IT system integrator companies towards best ways to create a firm performance which is measured by financial indicators and non-financial indicators. Firm performance is assessed using a balanced scorecard framework, which encompasses key dimensions such as financial performance, customer-related outcomes, internal business processes, and learning and growth indicators. The research utilizes both primary and secondary data sources. The study focuses on a population of 132 IT system integrator companies, with a sample size of 66 companies, representing 50% of the total population. The selection of the sample is conducted using a simple random sampling method. Personal interviews are conducted with the owners, CEOs, and other executive officers of these companies to gather primary data. The data collection period was primarily planned between 2019 and 2021. However, with the unexpected outbreak of covid19, the collection period was extended until 2022.

1.4 Organization of the Study

This paper is structured into five chapters to provide a comprehensive analysis of the topic. Chapter 1 serves as the introduction, encompassing the rationale of the study, objectives, scope, research methodology, and overall organization of the paper. Chapter 2 focuses on the theoretical background, exploring the impact of various factors on firm performance, including financial performance, customer-related outcomes, internal business processes, and learning and growth indicators, within the context of IT system integrator companies. Chapter 3 presents the profiles of IT system integrator companies

in Myanmar. Chapter 4 delves into the analysis of the value chain, differentiation strategy, competitive advantage, and performance measures such as market share, return on investment, sales revenues, and profit margin, specifically within IT system integrator companies. Lastly, Chapter 5 concludes the paper by summarizing the findings, initiating discussions based on the results, offering suggestions and recommendations for practical implications, and identifying areas for further research.

CHAPTER 2

THEORETICAL BACKGROUND

This chapter is divided into two primary sections: the definition of key variables and the conceptual framework. The conceptual framework of this study revolves around four main variables: value chain, differentiation strategy, competitive advantages, and firm performance, specifically focusing on financial performance, customer-related outcomes, internal business processes, and learning and growth indicators. The chapter begins by presenting the conceptual understanding of these major variables, providing comprehensive explanations of value chain, differentiation strategy, competitive advantages, and firm performance. Subsequently, the conceptual framework of the study is presented, outlining the relationships and interactions between these variables.

2.1 Theories around Distinctive Value Chain, Differentiation Strategy, Competitive Advantage and Firm Performance

In this study, to reach the research objectives, the conceptual framework is developed by considering relevant background theories.

2.1.1 Distinctive Value Chain

The value chain refers to a sequential progression of steps involved in the creation of a finished product, commencing from its initial design to its ultimate delivery to the customer (Porter, 1985). Each stage within this chain is identified as a point at which value is added, encompassing activities such as sourcing, manufacturing, and marketing throughout the production process. To conduct a comprehensive value-chain analysis, a company assesses the intricate procedures associated with each step of its business operations, with the objective of enhancing production efficiency to maximize value while minimizing costs.

Porter (1985) is widely acknowledged for introducing and popularizing the concept of the value chain, which provides insight into the progression of a product from its raw material state to its ultimate consumption by end users. The value chain encompasses a diverse range of activities necessary for the handling of a product or service, starting from its initial conceptualization and extending through various production stages involving physical transformation and involvement of different service providers. It encompasses the delivery of the final product to consumers and its

subsequent disposal after use. The value chain consists of primary activities, such as inbound logistics, operations, outbound logistics, marketing and sales, as well as services. Additionally, supporting activities include a company's infrastructure, human resource management, technology development, and activities targeted at accomplishing specific objectives. To ensure consistent value addition to the product, it is imperative for each function within the organization to possess a comprehensive understanding of the product's progression at each stage. By incorporating value-adding elements, businesses are able to generate profits (Porter, 1985).

According to Pitelis (2009), value refers to the perceived worth of a subject matter to a socio-economic agent who can utilize and be exposed to that subject matter. This definition emphasizes the distinction between "subject matters" and the concept of "willingness to pay." Value encompasses the various characteristics of goods and services, including performance, facilities, attributes, and other aspects to which consumers are willing to allocate their resources (Prahalad & Ramaswamy, 2004). In essence, value consists of four components: the object itself, whether tangible or abstract; the attribute that determines the quality or nature of the object; the internal relationship between objects; and the environment in which the value network exists. Building upon this concept, a value chain refers to a sequence of organizational activities that generate, deliver, and capture value at each stage, starting from the processing of raw materials and concluding with the delivery of the final product to end users. Value chain management can be defined as the process of managing the integrated activities and information flows throughout the entire supply chain to transfer value (Pitelis, 2009).

2.1.2 Differentiation Strategy

The concept of differentiation has been extensively examined in the literature, exploring diverse dimensions including product or service features, market segmentation, and marketing strategy (Smith, 1956; Sharp & Dawes, 2001). While there is no universally agreed-upon definition for differentiation, it is frequently employed in the business context, either in a broad sense or with distinct alternative definitions within specific segments (Sharp & Dawes, 2001).

To successfully implement a differentiation strategy, a firm must develop something that is perceived as distinct and unique by customers. This necessitates the cultivation of distinctive capabilities in supply chain activities in order to offer a product or service that stands apart. Porter (1985) identified several dimensions of differentiation

strategy, such as product and service attributes, sales distribution, advertising intensity, and brand image, which impact value chain activities and generate uniqueness for customers. Yamin et al. (1999) examined differentiation strategy across four dimensions: customer service, technology leadership, product differentiation, and logistic differentiation. Drawing on previous strategic literature, it can be concluded that the pursuit of a differentiation strategy involves the creation of a unique product or the provision of a unique service based on customer needs (at the market level), the identification of distinctive ways to perform supply chain activities (at the organizational level), and ultimately, the offering of the product or service in a distinctive manner in the market (at the offering level - generic strategies).

Differentiation is a highly sought-after strategy due to its potential to generate a range of favorable outcomes for businesses. It has been observed that differentiation holds the capacity to drive sales growth, foster brand loyalty, facilitate customer retention, entice new customers, and potentially empower firms to command premium pricing for their offerings. However, Sharp and Dawes (2001) argue that differentiation does not always imply differences in manufactured product features, premium pricing, or higher costs, nor is it a prerequisite for earning higher profits. Nevertheless, scholarly discussions emphasize that differentiation is an inherent and virtually inevitable characteristic of competitive markets, yielding advantages for both customers and firms. Customers benefit from improved services and a better understanding of each firm's strengths and weaknesses through competitor sales pitches, enabling informed purchasing decisions. From a firm's perspective, competitiveness can be enhanced by analyzing competitors' performance, imitating their strengths, or pursuing differentiation strategies (Li & Calantone, 1998).

There are commonalities as well as distinctions between product and service differentiation. Effective differentiation strategies for tangible products often hinge on the quality of innovation, whereas successful service differentiation necessitates a focus on elements such as human resources, teamwork, and user collaboration (Alam, 2002). Product differentiation tends to emphasize technologies and final products, while service differentiation places more emphasis on processes. Implementing differentiation is a complex process that necessitates delivering offerings that are distinct from competitors. Acquiring information and knowledge is essential in business, and it can be obtained through various sources such as market research or customer interaction (Freng et al., 2011).

The choice and implementation of differentiation strategies can vary depending on the specific characteristics and stages of the market. Entrepreneurial approaches to differentiation can be diverse, as the market evolves and requires the development of customers and completion of product features. As the market matures, new services or products may be needed to create new market stages.

2.1.3 Competitive Advantage

In the business domain, competitive advantage pertains to the elements that empower a company to surpass its competitors by effectively producing goods or services at a lower cost. These factors contribute to the organization achieving greater sales or superior profit margins in comparison to its competitors in the market. Competitive advantages can arise from diverse aspects such as cost structure, brand recognition, product quality, distribution network, intellectual property, and customer service.

According to Porter (1985), there are three strategies that companies can utilize in order to attain competitive advantage: cost leadership, differentiation, and focus. A company can attain an edge over its rivals by offering lower prices while maintaining the same product value or quality. This can be achieved through economies of scale, efficient production processes, technological advancements, raw material availability and other determinants of cost reduction. Additionally, companies can pursue a differentiation strategy by establishing a perceived value in the minds of their customers. This may encompass elements such as product innovation, product performance excellence, exceptional service, and a robust brand reputation.

In any industrial environment, companies generally strive to surpass their competitors. This competitive strategy is typically implemented through the coordinated endeavors of various functional divisions within the organization. The development of a competitive strategy begins with formulating a general approach to business development, setting objectives, and identifying the necessary policies in pursuit of those desired outcomes. The concept of competitive advantage encompasses two distinct yet interconnected connotations. The first connotation emphasizes the superiority of an organization's expertise as well as resources. Organizations that possess marketing, manufacturing, and innovation capabilities can leverage these strengths to gain a competitive advantage. By focusing on these areas of competence, companies can devise strategies to produce highly marketable products.

The second connotation of competitive advantage centers around achieving superior performance relative to competitors. This pertains to the company's position within the competitive landscape. By continuously monitoring and improving its performance, a company can establish a strong competitive position and maintain its ability to compete effectively with other firms.

2.1.4 Firm Performance

Firm performance refers to the outcomes achieved by a company through the combination of strategies and capabilities aimed at specific goals. Lee et al. (2015) argue that companies evaluate their organizational performance by taking into account both financial and non-financial consequences associated with diverse dimensions of quality and operational practices. Goll and Rasheed (2004) highlight the significance of aligning organizational performance with the strategic environment. To measure firm performance, this study adopts the balanced scorecard theory, which was introduced by David Norton and Robert Kaplan in 1992 and encompasses both financial and non-financial information.

Financial performance is evaluated through the examination of data such as sales, expenses, and income. These financial indicators may encompass monetary values, financial ratios, budget variances, or income targets. Customer-related perspectives are analyzed to assess customer satisfaction regarding product or service quality, pricing, and availability. Customers provide feedback on their contentment with existing offerings. Internal business processes are assessed to determine the efficiency of product manufacturing. Operational management is scrutinized to identify any gaps, delays, bottlenecks, shortages, or waste. Learning and growth are evaluated by assessing training programs and available knowledge resources. By achieving a balance among these four perspectives, companies can leverage valuable insights from each perspective to establish a competitive advantage within the industry.

The balanced scorecard theory has been developed to promote positive behaviors within organizations through the systematic analysis of four distinct areas: learning and growth, business processes, customers, and finance. This approach entails the establishment of objectives, measurements, initiatives, and goals derived from these four fundamental functions of a business. By implementing the balanced scorecard theory, companies can readily identify factors that impede business performance and make strategic adjustments that can be monitored through subsequent scorecards. The balanced

scorecard offers a comprehensive perspective on the company's objectives and is frequently employed for strategy mapping to identify value-added areas within the organization. Furthermore, the balanced scorecard can be utilized to formulate strategic initiatives and objectives.

Furthermore, the balanced scorecard can serve as a performance metric in strategic management, enabling firms to identify and enhance critical functions and their corresponding outcomes in the business.

2.2 Empirical Studies

Several researchers have investigated the relationships among distinctive value chains, differentiation strategies, competitive advantages, and firm performance, developing conceptual models to examine these phenomena. Additionally, researchers have identified specific factors or criteria to analyze these relationships.

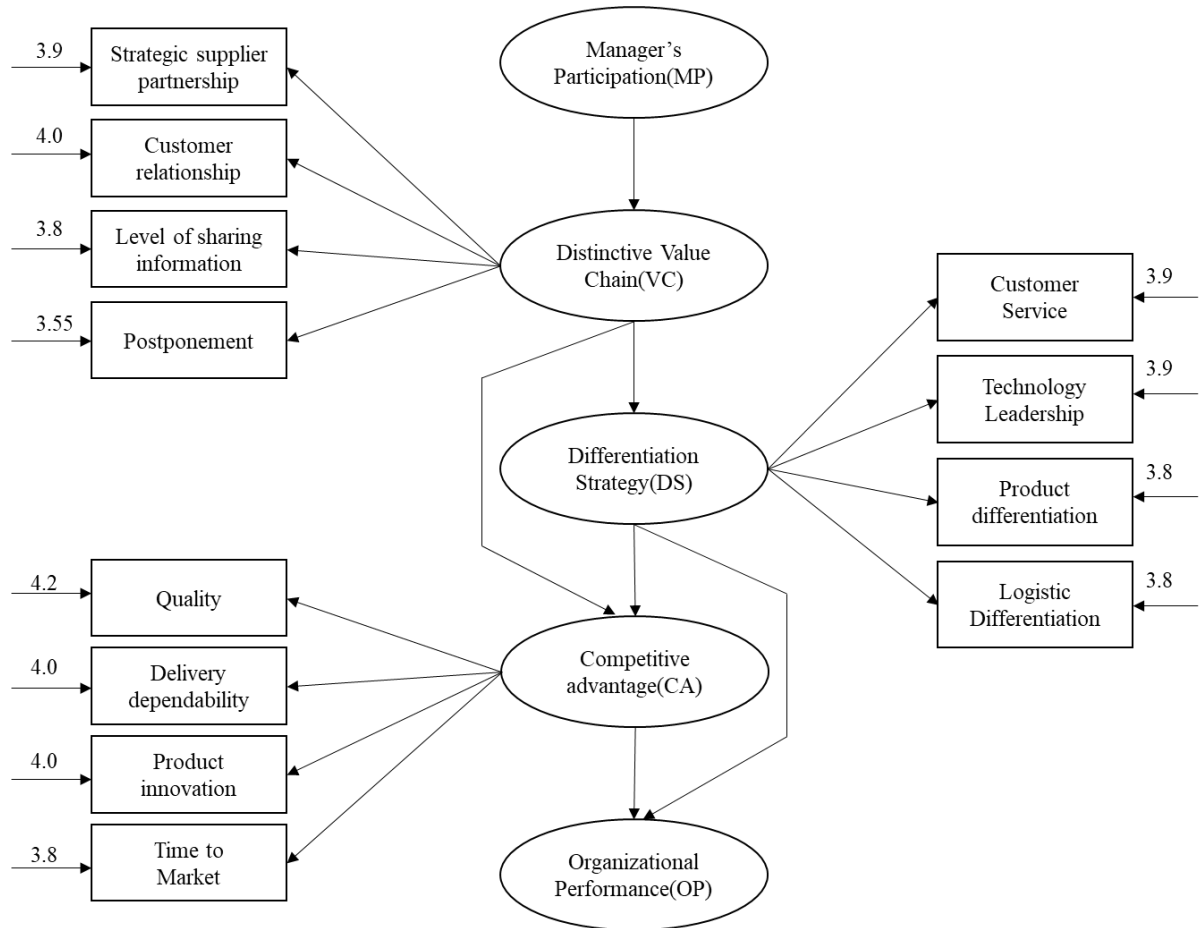
A differentiation strategy is a business approach that involves offering customers unique and distinct products or options that differ from those provided by competitors in the market. Competitive advantage pertains to the elements that empower a company to generate goods or services with greater efficiency or at reduced costs in comparison to its competitors, resulting in heightened sales and enhanced profitability. Companies with a strong competitive advantage tend to exhibit better firm performance, which reflects the firm's ability to effectively utilize human and material resources to achieve its objectives.

2.2.1 Review on the Conceptual Model of Islami et al. (2020)

In January 2020, Islami, Latkovikj, Drakulevski, and Borota Popovska conducted a study titled "Does differentiation strategy model matter? Designation of organizational performance using differentiation strategy instruments – An empirical analysis" (Islami, Latkovikj, Drakulevski, & Borota Popovska, Year). The aim of their research was to develop a conceptual model of differentiation strategy, create measurement instruments for differentiation strategy, and investigate the relationships among value chain dimensions, supply differentiation, competitive advantages, and organizational performance. The study collected data from 123 manufacturing organizations and employed quantitative methods to examine the proposed relationships. Primary data was collected using questionnaires, and the conceptual framework was tested using structural equation modeling. The findings indicated that the pursuit of a differentiation strategy positively influences competitive advantage and organizational performance. The study

also emphasized the significance of strategic flexibility and the integration of internal and external factors in the successful implementation of differentiation strategies by manufacturing organizations. This research contributes to the strategic literature by providing insights into an effective differentiation model and enhancing understanding of the implementation of differentiation strategies.

Figure (2.1) Conceptual model adopted from Islami et al. (2020)



Source: Adopted from Islami et al. (2020)

2.2.2 Empirical Studies on Criteria to Measure Variables

In this study, the conceptual framework includes four main variables, value change, differentiation strategy, competitive advantages and firm performance. Various researchers identified factors to measure these variables with different aspects.

(a) Criteria to Measure Value Chain

In order to establish a distinctive value chain, analysis should focus on two key aspects: internal settings, such as organizational resources, and external settings, such as

suppliers. According to Grant (1991), the resource-based approach to strategy formulation focuses on analyzing the connection between resources, capabilities, competitive advantages, and profitability. This approach places special emphasis on understanding the mechanisms through which competitive advantage can be maintained and sustained over an extended period of time. By utilizing these resources in a unique manner, organizations can attain competitive advantages. Barney (1991) outlined four attributes that must be present in a firm's resources to provide sustainable differentiation: value, rarity, imperfect imitability, and lack of equivalent substitutes.

In his study, Newbert (2008) examined the relationships between resource attributes and identified three key findings. First, he found that the attributes of value and rarity are closely connected to the achievement of competitive advantage. Second, competitive advantage was found to have a positive association with firm performance. Lastly, Newbert discovered that competitive advantage acts as a mediator between the attribute of rarity and firm performance. These findings shed light on the interplay between resource attributes, competitive advantage, and performance in organizations. Lioukas, Reuer, and Zollo (2016) acknowledged the complementary nature of the resource-based view (RBV) perspective and industrial organization (I/O) tools in explaining firm performance. They recognized that capabilities and internal resources play a crucial role in shaping strategic choices made by firms within the external business environment (Madhani, 2010). These capabilities and resources enable organizations to enhance their customer value chain, introduce new products, and explore opportunities in new markets. Johnson et al. (2008) highlighted the importance of key resources, such as people, technology, products, equipment, information, channels, partnerships, alliances, and brand, in effectively delivering the customer value proposition and ensuring profitable operations. By leveraging these resources, firms can strengthen their competitive position and achieve sustainable performance.

(b) Criteria to Measure Differentiation Strategy

To attain competitive advantages through a unique value chain, the evaluation should begin with the examination of suppliers as an external component of the business environment. Organizations, functioning as economic actors and legal entities, serve as dual participants in the market ecosystem, acting both as consumers of inputs from suppliers and as providers of products or services to their customers (Bowman & Ambrosini, 2007). This interactive dynamic establishes the buyer-supplier relationship as

a significant arena where the quest for control unfolds (Ramsay, 2001). The acquisition of human, organizational, and physical resources from factor markets and suppliers of production inputs plays a vital role in attaining a competitive advantage (Hedman & Kalling, 2003).

Through careful supplier selection, companies can strategically utilize their supply chain to gain a competitive advantage (Krause et al., 2000). The integration of suppliers' distinctive value chains serves as a differentiating factor from competitors. To address these considerations, purchasing firms are increasingly adopting supplier development strategies to enhance the performance of their suppliers (Watts & Hahn, 1993). Furthermore, Krause et al. (2000) conducted a study examining the influence of supplier development strategies on performance using resource-based theory, internalization theory, and structural equation modeling. Their findings revealed that direct involvement activities, where the buying firm internalizes a significant portion of the supplier development efforts, play a pivotal role in improving performance.

(c) Criteria to Measure Competitive Advantage

The decision-making process of managers plays a pivotal role in shaping the value proposition of organizations. The value proposition specifically focuses on the customer-facing aspect of the business and encompasses the choices made regarding the specific type of value that the company intends to offer (Magretta, 2011). Whether these choices are made consciously or unconsciously, they contribute to the overall value proposition. This study examined Porter's concept of the value proposition, which revolves around three fundamental questions: (1) which customers will the organization serve in terms of end users and distribution channels, (2) which needs will be addressed through specific products, features, and services, and (3) what will be the relative price in terms of premium, parity, or discount. By answering these three questions, a distinctive value proposition can be created, leading to a mutually beneficial outcome for both the company and its customers. Kim and Mauborgne (2005) demonstrated that the value proposition of the blue ocean strategy provides advantages for buyers. Adhering to the principles of this strategy allows a firm to differentiate its product or service while maintaining low costs. Therefore, managers and strategists must carefully consider the development of a value proposition. If they choose the same target consumers, address the same needs, and offer products at the same price as their competitors, they will not be

able to differentiate their company. Consequently, they would be competing solely based on operational effectiveness (benchmarking) rather than strategic differentiation.

Sustaining competitive advantages achieved through a differentiation strategy relies on the implementation of distinctive activities throughout the entire value chain, encompassing the identification of activities and the creation of enduring competitive advantage. Once managerial decisions are made regarding the offerings (products or services), resource allocation, and supplier engagement, the identification and evaluation of value chain activities become essential. Through effective execution of diverse business activities over time, organizations develop core competencies, and strategies should be centered around leveraging these strengths. As a result, certain core competencies transform into distinctive competencies, which represent significant competitive advantages. These distinctive competencies ultimately contribute to the organization's sustained competitive advantages. However, in today's dynamic business environment, maintaining a competitive edge over an extended period is challenging. This challenge stems from the temporary nature of firm-level differentiation and the ease with which competitors can access each other's business strategies through industry sources and regulatory disclosures (Collins et al., 2010). Faced with such pressures, organizations must establish a unique position that is difficult to replicate by competitors. To navigate complex external environments and high levels of uncertainty, companies must rely on well-developed internal capabilities as the foundation of their operations. Organizations equipped with resources such as capabilities, processes, and knowledge are better positioned to differentiate their product or service value for customers compared to their rivals. This differentiation leads to a competitive advantage and superior performance (Sirmon et al., 2007).

(d) Criteria to Measure Firm Performance

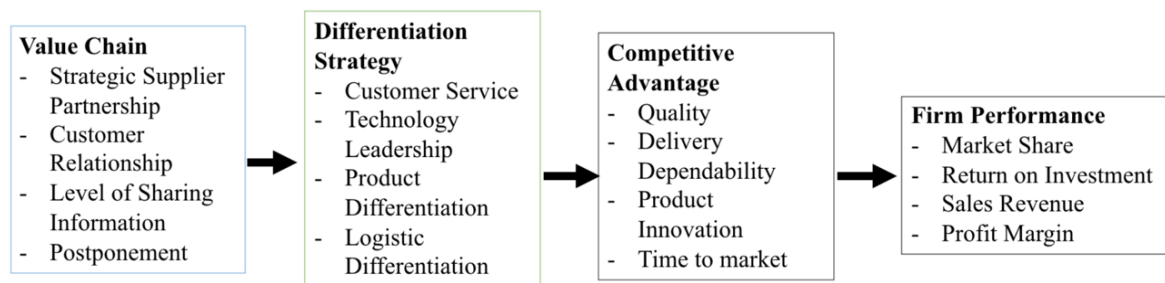
Performance in the context of a firm refers to the generation of profits that surpass the cost of capital. It is influenced by two key factors: the attractiveness of the industry in which the firm operates, known as the industry effect on performance, and the firm's competitive advantage (Bridoux, 2004). However, it is important to note that possessing a competitive advantage does not automatically guarantee superior performance compared to a break-even competitor in the industry. Numerous studies have investigated organizational performance using financial and market indicators, including metrics such as return on investment (ROI), market share, profit margin on sales, growth in ROI,

growth in sales, growth in market share, and overall competitive position. These indicators have been employed in previous research conducted by Vickery et al. (1999), Stock, Greis, and Kasarda (2000), and Li et al. (2006). This study adopts a similar approach by selecting dimensions to measure organizational performance.

2.2.3 Conceptual Framework of the Study

The conceptual framework depicted in Figure (2.2) is based on previous scholarly works, as cited in the references. In Figure (2.1), which displays the results of a prior research study, the focus was on the influence of generic strategies proposed by Porter (1980) in facilitating organizations to achieve competitive advantages and surpass their rivals. These generic strategies predominantly take into account the external context, particularly the industry environment.

Figure (2.2) Conceptual Framework of the Study



Source: Adopted from Islami et al. (2020)

The notion of the value chain is a valuable concept that classifies a company's activities into distinct tasks that vary in terms of their economic and technological characteristics. Efficient management of the value chain plays a crucial role in attaining success in the highly competitive business landscape of today (Islami et al., 2020). Differentiation strategy can only be accomplished if the firm is able to provide something that is perceived unique by the customers. To create a unique product or offer an unparalleled service, companies must develop excellent competencies in its supply chain activities.

CHAPTER 3
PROFILES AND VALUE CHAIN PRACTICES OF IT SYSTEM INTEGRATOR
COMPANIES

This chapter consists of three parts: profile of respondent companies, profile of respondent executives and reliability analysis.

3.1 Profile of Selected Companies

The process of analysing value chain practices in the IT System Integration industry requires accurate and reliable data from a representative sample of companies. To this end, a total of 66 companies were randomly selected for the data collection process, with the aim of capturing a wide range of practices and approaches within the industry. The profile of the selected companies is shown in Table 3.1, which provides a snapshot of the various characteristics of the participating companies.

Table (3.1) Profile of Selected Companies

Sr. No.	Particular	Frequency	Percentage
	Total	66	100.00
1	Company Registered Address - City		
	Yangon	42	63.64
	Mandalay	10	15.15
	Naypyidaw	14	21.21
2	Company Established Year		
	Before 2000	5	7.58
	Between 2000 - 2010	25	37.88
	After 2010	36	54.55
3	Type of Company		
	Local	48	72.73
	Foreign	7	10.61
	Other(please specify) - Rep Office	11	16.67
4	Type of Ownership		
	Partnership	18	27.27
	Public Limited	7	10.61
	Private Limited	32	48.48
	Other (Representative Office)	9	13.64

5	Company Target Market		
	Banking/ Finance	18	27.27
	Building Construction & Engineering	8	12.12
	Education & Training	7	10.61
	Government	8	12.12
	Healthcare Centres and Hospitals	5	7.58
	Manufacturing	4	6.06
	Telecommunication	16	24.24

Source: Survey Data, 2022

Table (3.1) reveals the profile of respondent companies. Among the 66 IT System Integrator Companies that were randomly selected for data collection, the majority (63.64%) are headquartered in Yangon due to the presence of highly capable and experienced workforce, while 21.21% of the companies are located in the capital city Nay Pyi Taw and the rest (15.15%) are located in Mandalay.

The establishment date of the companies also shows a diverse range. Only a few companies (7.58%) were founded before the year 2000, while 37.88% of the companies were founded between 2000 and 2010. The aforementioned evidence suggests that the IT sector in Myanmar was relatively underdeveloped prior to the year 2000, as evidenced by the paucity of IT companies established before that time. It wasn't until after 2000 that the sector began to show signs of growth, which accelerated significantly after 2010 as the country moved into democracy. Most of the companies (54.55%) in Myanmar's IT system integration industry were founded after 2010, which suggests a pattern of growth and progress. This trend coincides with Myanmar's transition to democracy and the lifting of international sanctions, as well as the emergence of a fully functioning market economy. The types of companies also differ from one another. The majority (48.48%) are private limited companies indicating that they are local IT companies, followed by partnership companies (27.27%), representative offices of international firms (16.67%), and public limited companies (10.61%).

Regarding the targeted markets, the majority of the respondent companies target the banking and finance sector (27.27%) as well as the telecom sector (24.24%). Other markets are also targeted, such as construction and engineering (12.12%), education and training (10.61%), government (12.12%), healthcare sector (7.58%) and manufacturing (6.06%). In terms of company ownership, the majority (72.73%) are local companies,

while only a (10.61%) are foreign companies. It is noteworthy that a significant percentage (16.67%) is representative offices of international firms, indicating the presence of multinational corporations in Myanmar's IT system integration industry. We can see a trend of growing local companies and highly competitive markets in the banking and telecom sectors.

To summarize, the majority of IT system integrator companies in Myanmar are situated in Yangon. This is primarily due to the city's role as the central hub for export and import trading, as well as the presence of a skilled and experienced workforce. Prior to 2011, very few IT system integrator companies were established in Myanmar. However, since the country's transition to a democracy and the introduction of a functioning market economy, many companies have emerged in the market. The majority of these companies are local businesses targeting the banking and telecom sectors. It is worth noting that the IT sector in Myanmar is still in its early stages of development. While Yangon has a significant concentration of IT system integrator companies, other regions in the country have experienced growth in this sector.

3.2 Profile of Selected Executives

To ensure that the data collected accurately reflects the perspectives and experiences of IT System Integrator Companies, a random selection of executive and administrative officials with a position of Project Manager and above were surveyed. These individuals were chosen based on their knowledge and experience in managing and overseeing the various aspects of value chain management within their organizations.

Table 3.2 provides a profile of the selected executives, highlighting key characteristics such as their job title, level of experience, and certification status. The data presented in this table provides important context for understanding the perspectives and experiences of the survey participants and how they may impact the analysis of value chain practices within the industry.

Table (3.2) Profile of Selected Executives

Sr. No.	Particular	Frequency	Percentage
	Total	66	100
1	Employment status		
	Executive Director	18	27.27
	Director	9	13.64
	CEO/CTO	29	43.94
	Project Manger	10	15.15
2	Work Experience		
	Less than 1 year	6	9.09
	1 to 5 years	21	31.82
	5 to 10 years	29	43.94
	10 years and above	10	15.15
3	Qualification of Leading Staff		
	PMP Project Management Professional	4	6.06
	Cisco Certified	22	33.33
	VMware Certified	15	22.73
	PCNSE / Security	8	12.12
	Non IT Related Qualification	17	25.76
4	Oversea Training		
	Oversea Training(Only)	11	16.67
	Local Training(Only)	33	50.00
	Both Training	22	33.33

Source: Survey Data, 2022

The data presented in Table (3.2) reveals several important insights into the characteristics of the survey respondents. The majority of the respondents are CEOs or CTOs, accounting for 48.48% of the total population. These individuals are widely regarded as most knowledgeable and experienced when it comes to IT system integrator companies. They are best placed to provide insights into the company's IT system integration practices. As the top-level decision-makers, CEOs and CTOs are responsible for the strategic direction of the organization and have a comprehensive understanding of the company's strengths, weaknesses, and overall performance. The second-largest group of respondents are Executive Directors, representing 30.30% of the total population. This

finding is not surprising, as these individuals play a crucial role in ensuring that the organization operates smoothly on a day-to-day basis and have a deep understanding of the overall function and performance of the firm.

In instances where neither CEOs/CTOs nor Executive Directors are available to respond to the survey, Directors and Project Managers are approached. These individuals possess a good working knowledge of the organization and its overall operations and are well-placed to provide meaningful feedback. They play a vital role in ensuring that the organization meets its objectives, and their input is crucial in shaping the company's IT system integration strategies. The survey seeks to capture the perspectives of a diverse group of individuals, including those at the highest levels of the organization as well as those involved in day-to-day operations. By doing so, it aims to provide a comprehensive understanding of the company's IT system integration practices and identify areas for improvement.

Regarding the working experience of the respondents, 29 of them have a working experience of 5 to 10 years, accounting for 43.94% of the total population. This group comprises the largest percentage of respondents, suggesting that they entered the IT sector sometime after 2011. This was the year Myanmar became a democracy and initiated reforms, including the development of the IT sector. In contrast, only 10 respondents have over 10 years of experience, implying that they were involved in the IT sector even before the country transitioned into a democracy. The remaining respondents have less than 5 years of working experience.

In terms of certifications, the majority of respondents are Cisco certified IT professionals, representing 33.33% of the total population, indicating that these companies focus on networking systems. This finding is not surprising, given Cisco's dominance in the networking industry. Approximately 22.73% of respondents are VMware certified, indicating the organization's growing emphasis on virtualization technology and server farms. Other certifications held by respondents include PMP (Project Management Professional), PCNSE (Palo Alto Networks Certified Network Security Engineer), and Security Professional certificates. However, it is worth noting that 17 respondents (25.76%) do not hold any of the above popular certificates except for non IT degrees and certificates.

In summary, the majority of respondents in the survey are CEOs or CTOs of IT integrator companies, and many of them have 5 to 10 years of working experience. This suggests that they entered the sector after Myanmar transitioned to a democracy in 2011

and began developing a functioning market economy. A significant proportion of the respondents hold Cisco certifications, indicating their expertise in networking systems. Approximately half of the respondents received training locally, while the other half received training overseas. It is noteworthy that the IT sector in Myanmar is still in its infancy, and as the country continues to attract foreign investment and promote the development of a digital economy, the demand for IT professionals is expected to increase. With a growing number of local and international players entering the market, there will be increasing opportunities for IT professionals to expand their skills and experience. Furthermore, the emergence of new technologies and trends in the industry means that ongoing training and professional development will be crucial for individuals and companies to remain competitive in the sector.

3.3 Reliability Analysis

Cronbach's alpha, a measure of reliability, assesses the extent to which the observed variation in a set of items can be attributed to the true score of the underlying construct. A higher alpha coefficient indicates greater reliability and suggests that the items collectively contribute to a more dependable scale. Typically, Cronbach's alpha reliability coefficient falls within the range of 0 to 1, with higher values indicating stronger internal consistency and reliability of the measurement scale.

Table (3.3) Reliability Analysis Results

Sr. No.	Variable Name	Numbers of Item	Cronbach's Alpha Value	Reliability Level
1	Strategic Supplier Partnership	6	0.72	Reliable
2	Customer Relationship	9	0.82	Reliable
3	Level of information Sharing	11	0.88	Reliable
4	Postponement	3	0.69	Reliable
5	Customer Service	7	0.74	Reliable
6	Technology Leadership	5	0.80	Reliable
7	Product Differentiation	8	0.79	Reliable
8	Logistic Differentiation	3	0.81	Reliable
9	Quality	5	0.82	Reliable
10	Delivery Dependability	6	0.79	Reliable
11	Product Innovation	4	0.61	Reliable
12	Time to Market	4	0.73	Reliable
13	Firm Performance	4	0.85	Reliable

Source: Survey Data (2022)

The study employed Cronbach's alpha coefficient, initially introduced by Lee Cronbach in 1951, as a measure of internal consistency for the test or scale utilized. Cronbach's alpha ranges from 0 to 1, with a higher value indicating greater internal consistency, meaning that the items within the scale or questionnaire consistently measure the same construct. Conversely, a lower value suggests lower internal consistency, implying that the items are measuring different constructs. In research, a Cronbach's alpha value of 0.7 or above is commonly regarded as acceptable for ensuring reliable measurement.

As shown in Table (3.3), the Cronbach's alpha value for strategic supplier partnership, customer service, product differentiation, delivery dependability, time to market are over 0.7 and all the variables are at the acceptable level of internal consistency. Furthermore, the Cronbach's alpha value of product innovation and postponement are above 0.6 and the internal consistency level is good. Meanwhile, the Cronbach's alpha values of firm performance, quality, technology leadership, level of information sharing and customer relationship are greater than 0.8 and it can be concluded that the internal consistency is excellent.

CHAPTER 4
ANALYSIS ON EFFECT OF DIFFERENTIATION STRATEGY AND
COMPETITIVE ADVANTAGE ON PERFORMANCE OF IT SYSTEM
INTEGRATOR COMPANIES

This chapter covers several key topics related to the analysis of survey data, including reliability of the data and the impact of value chain elements on differentiation strategy. It also examines the effect of differentiation strategy on competitive advantage, as well as its impact on firm performance in terms of market share, return on investment, sales revenue, and profit margin. By examining these topics, this chapter provides insights into the factors that serve to a company's success in the marketplace and highlights the importance of effective differentiation strategies in achieving competitive advantage and improving overall firm performance.

4.1 Value Chain Practices of Selected IT System Integrator Companies

In this study, the four value chain practices are focus to study strategic supplier partnerships, customer relationship, level of sharing information and postponement. To explore these practices, survey is conducted by personal interview with top executives from randomly selected 66 IT system integrator companies.

A structured questionnaire utilizing a 5-point Likert scale (1: very poor, 2: poor, 3: neutral, 4: strong, 5: extremely strong) has been employed to gather primary data. In accordance with the recommendations of Sullivan and Artino (2013), the average value of the Likert scale responses can be interpreted as follows:

- 1.00 - 1.80 means very poor
- 1.81 - 2.60 means poor
- 2.61 - 3.40 means neutral
- 3.41 - 4.20 means strong
- 4.21 - 5.00 means extremely strong.

4.1.1 Strategic Supplier Partnership

Strategic Supplier Partnership is crucial as an element of the value chain because it contributes to several aspects of the businesses such as supply chain efficiency, cost reduction, quality and reliability, innovation and product development, risk management, and sustainability. By nurturing strong relationships with suppliers, organizations can

deliver value to customers, and achieve long-term success in their respective industries. The paper has successfully identified six key elements that are crucial in identifying valid indicators of value chain for strategic supplier partnerships as presented in Table (4.1):

Table (4.1) Descriptive Analysis Results On Value Chain Practices Of Respondent Companies Regarding Strategic Supplier Partnership

Sr. No.	Strategic Supplier Partnership	Mean Score	Std. Dev.
1	Give top priority to quality when selecting suppliers.	4.1	0.677
2	Engage in frequent collaborative problem-solving with suppliers.	3.9	0.747
3	Assisting suppliers in enhancing product quality.	4.0	0.886
4	Implementing continuous improvement programs that encompass key suppliers	3.9	0.875
5	Incorporating key suppliers into planning and goal-setting endeavors.	4.0	0.753
6	Engaging key suppliers actively in new product development processes.	3.8	0.760
	Overall Mean	3.9	

Source: Survey data, 2022

Table (4.1) shows the descriptive analysis results on value chain practices of respondent companies regarding strategic supplier partnership. The research involved a group of respondents who were asked to rate each element on a scale of 1 to 5, with 5 being the highest score. The results revealed that all six elements received mean scores above 3.8, indicating that the respondents strongly agreed with each of these elements. Specifically, the mean scores for the six elements were 4.1, 3.9, 4.0, 3.9, 4.0, and 3.8, respectively.

The first element identified was the importance of considering quality as the top criterion when selecting suppliers. This suggests that organizations should prioritize suppliers that offer high-quality products or services to ensure that the value chain remains strong. The second element focused on regularly cooperating with suppliers to solve problems, indicating the significance of collaboration and communication between organizations and their suppliers to ensure smooth operations within the value chain.

The third element highlighted the importance of assisting suppliers in the organization's endeavours to improve product quality. By providing support and resources to suppliers, organizations can help ensure that their products meet the required standards. The fourth element emphasized the need for continuous improvement programs that include key suppliers. This suggests that organizations should work closely with their suppliers to continually improve their processes and products to maintain competitiveness in the market.

The fifth element involved engaging key suppliers actively in new product development processes. This emphasizes the importance of involving suppliers in the organization's strategic planning to align their goals and objectives. The sixth element highlighted the need for actively engaging key suppliers in new product development processes. This suggests that organizations should work closely with their suppliers to innovate and develop new products to align with the needs of their customers and stay ahead of the competition.

4.1.2 Customer Relationship

Customer relationship is a fundamental element of the value chain for organizations. It encompasses the strategies, processes, and technologies employed to manage and nurture relationships with customers. It drives customer satisfaction, loyalty, and retention. It enables organizations to create value, gather market intelligence, generate word-of-mouth marketing, identify upselling and cross-selling opportunities, and provide exceptional service and support. The paper has identified nine key elements that are essential in identifying valid indicators of the value chain for customer relationship as described in Table (4.2).

Table (4.2) Descriptive Analysis Results On Value Chain Practices Of Respondent Companies Regarding Customer Relationship

Sr. No.	Customer Relationship	Mean Score	Std. Dev.
1	Collaborating with customers to set standards for reliability, responsiveness, and other performance standards.	4.2	0.658
2	Evaluating and monitoring customer satisfaction levels.	4.2	0.800
3	Determining future customer expectations.	4.0	0.831

4	Enabling customers to easily seek assistance from the company.	4.0	0.753
5	Assessing the significance of the customer relationship.	4.0	0.753
6	Supplying customers with accurate information regarding product availability.	4.0	0.822
7	Providing prompt and accurate information in response to customer inquiries.	4.0	0.793
8	Offering customers a reliable order processing time.	4.1	0.653
9	Collaborating with each customer to establish an acceptable delivery schedule.	4.0	0.673
Overall Mean		4.0	

Source: Survey data, 2022

Table (4.2) shows the descriptive analysis results on value chain practices of respondent companies regarding customer relationship. The study involved a group of respondents who were asked to rate each element on a scale of 1 to 5, with 5 being the highest score. The results indicated that all nine elements received mean scores between 4.0 and 4.2, suggesting that the respondents strongly agreed with all of these elements. This indicates the importance of these elements in building and maintaining strong relationships with customers.

The initial aspect highlighted was the importance of regular customer interactions to establish reliability, responsiveness, and other standards tailored to their needs. This emphasizes the importance of building trust and setting clear expectations with customers to ensure a strong and long-lasting relationship. The second element focused on frequently evaluating and monitoring customer satisfaction levels. This indicates that organizations should continuously monitor their customers' satisfaction levels to identify areas that need improvement and provide excellent customer service. The third element highlighted the importance of frequently determining future customer expectations. This emphasizes the need for organizations to be proactive and anticipate their customers' needs to provide them with the best possible service.

The fourth element emphasized the importance of enabling customers to easily seek assistance from organizations. This suggests that organizations should make it easy for their customers to reach out to them for help or support when needed. The fifth element focused on periodically assessing the significance of the relationship with

customers. This indicates the need for organizations to periodically assess the value of their relationship with customers and take necessary steps to maintain or improve it. The sixth element emphasized the significance of supplying customers with accurate information regarding product availability. This suggests that organizations should keep their customers informed of product availability to ensure they are always up-to-date.

The seventh element highlighted the importance of providing prompt and accurate information in response to customer inquiries concerning their products or services. This emphasizes the need for organizations to provide their customers with timely and accurate information to build trust and credibility. The eighth element focused on offering customers a reliable order processing time. This indicates that organizations should strive to deliver their products or services within a reasonable timeframe to ensure customer satisfaction. The ninth and final element identified the significance of collaborating with each customer to establish an acceptable delivery schedule. This emphasizes the need for organizations to work closely with their customers to determine a delivery schedule that meets their specific needs and requirements.

4.1.3 Level of Information Sharing

The level of information sharing refers to the extent to which information is exchanged and shared among the various stakeholders involved in the value chain, including suppliers, manufacturers, distributors, and customers. It is important as an element of the value chain because it promotes supply chain collaboration, enables accurate demand planning, supports just-in-time inventory management, facilitates quality control and continuous improvement, aids in risk management, enhances customer satisfaction and service, and fosters innovation and new product development. The study presented in Table (4.3) identifies eleven elements that serve as valid indicators of the value chain for level of information sharing.

Table (4.3) Descriptive Analysis Results on Value Chain Practices of Respondent Companies Regarding Level Of Information Sharing

Sr. No.	Level of Information Sharing	Mean Score	Std. Dev.
1	Providing timely updates to trading partners regarding altering needs.	4.0	0.773
2	Sharing proprietary information to us by customers	3.8	0.789

Sr. No.	Level of Information Sharing	Mean Score	Std. Dev.
3	Keeping us informed by our trading partners about issues that affect our business.	3.8	0.776
4	Sharing core values with our trading partners	3.6	1.004
5	Facilitating information exchange between our trading partners and us to support business planning.	3.8	0.756
6	Maintaining open communication channels with our trading partners to exchange information about events or changes that may impact both parties.	3.7	0.859
7	Exchanging information timely.	3.8	0.766
8	Exchanging information accurately.	3.7	0.795
9	Exchanging information in complete.	3.7	0.841
10	Exchanging information adequately.	3.8	0.789
11	Exchanging reliable information.	3.8	0.789
	Overall Mean	3.8	

Source: Survey data, 2022

Table (4.3) shows the descriptive analysis results on value chain practices of respondent companies regarding level of information sharing. Each element in Table (4.3) was rated by a group of respondents on a scale of 1 to 5, with 5 indicating the highest level of agreement. The results showed that all eleven elements received mean scores ranging from 3.6 to 4.0, indicating that the respondents strongly agreed with each of them.

The first element identified the importance of providing timely updates to trading partners regarding altering needs. This suggests that organizations should keep their partners informed of any upcoming changes that could impact their business relationship to ensure that all parties can adapt accordingly. The second element highlighted the significance of sharing proprietary information. This indicates that organizations should be willing to share information that is critical to the success of their business relationship, even if it is sensitive or confidential. The third element emphasized the importance of trading partners keeping each other informed about issues that affect their business. This indicates the need for open communication between partners to identify potential challenges and address them promptly.

The fourth element focused on trading partners sharing their core values. This emphasizes the importance of aligning values between partners to ensure a strong and successful business relationship. The fifth element highlighted the importance of exchanging information that helps establish business planning. This indicates the need for partners to share information that can help each other plan and execute their business strategies effectively. The sixth element emphasized the need for partners to keep each other informed about events or changes that may affect the other partners. This suggests that partners should be proactive in sharing information to avoid any negative impacts on their business relationship.

The seventh element focused on exchanging information timely. This emphasizes the importance of sharing information promptly to ensure that all parties have the necessary information to make informed decisions. The eighth element highlighted the importance of accurately exchanging information. This indicates the need for partners to ensure that the information shared is correct and reliable. The ninth element focused on exchanging information in complete. This suggests that partners should ensure that all relevant information is shared, and nothing is left out that could impact their business relationship.

The tenth element emphasized the importance of exchanging information adequately. This indicates that partners should provide the necessary level of detail to ensure that all parties have a clear understanding of the information being shared. The eleventh and final element identified the significance of exchanging reliable information. This suggests that partners should ensure that the information shared is trustworthy and can be relied upon to make informed decisions.

4.1.4 Postponement

Postponement is a strategic approach within the value chain that involves delaying the final customization or configuration of products until closer to the customer demand. It emphasizes the need to maintain flexibility and responsiveness in the value chain. It is important as an element of the value chain because it improves responsiveness, reduces costs, mitigates risks, increases product variety, optimizes distribution, facilitates market expansion, and contributes to sustainability efforts. Based on the study presented in Table (4.4), the paper identifies three key elements to identify valid indicators of the value chain for postponement.

Table (4.4) Descriptive Analysis Results On Value Chain Practices Of Respondent Companies Regarding Postponement

Sr. No.	Postponement	Mean Score	Std. Dev.
1	Designing products for modular assembly.	3.61	0.875
2	Delaying the completion of final product assembly until customer orders are confirmed.	3.59	0.992
3	Delaying final product assembly activities until the last possible position (or nearest to customers) in the supply chain.	3.44	0.947
	Overall Mean	3.55	

Source: Survey data, 2022

Table (4.4) shows the descriptive analysis results on value chain practices of respondent companies regarding postponement. The mean scores for each element range from 3.44 to 3.61, indicating that the respondents generally agreed with each of these elements.

The first element identified the importance of designing products for modular assembly. This indicates that organizations should design their products in a way that allows for flexibility and customization to meet the specific needs of their customers. By doing so, they can minimize the need for costly and time-consuming product redesigns, thereby reducing the overall time-to-market and enhancing customer satisfaction.

The second element highlighted the significance of delaying the completion of final product assembly until customer orders are confirmed. This suggests that organizations should delay final assembly until they have received a specific order from the customer. This allows for greater customization and reduces the risk of overproduction, which can lead to excess inventory and increased costs.

The third element emphasized the importance of delaying final product assembly activities until the last possible position in the supply chain, or nearest to customers. This indicates that organizations should delay final assembly until the product is as close to the customer as possible, reducing transportation costs and improving overall delivery times.

By implementing these three elements, organizations can improve their value chain for postponement, reduce costs, and enhance customer satisfaction. By delaying final assembly until they have received a specific order from the customer and by designing products for modular assembly, organizations can reduce the risk of overproduction and minimize the need for costly redesigns. Additionally, by delaying

final assembly until the last possible position in the supply chain, organizations can reduce transportation costs and improve delivery times, thereby increasing customer satisfaction.

4.2 Differentiation Strategy Practices of Selected IT System Integrator Companies

In this section, the paper will analyse mean score and standard deviations of different elements of each selected differentiation strategy and determine how each element effects on their respective strategy of choice.

4.2.1 Customer Service

Customer service refers to the support and assistance provided to customers before, during, and after the purchase of a product or service. Customer service is vital for a differentiation strategy as it enhances the customer experience, creates a competitive advantage, fosters brand loyalty and advocacy, drives repeat business and revenue growth, differentiates through service excellence, provides valuable feedback for improvement, and builds a positive reputation and trust. Table (4.5) reveals that seven elements of the value chain were identified as potentially affecting this strategy.

Table (4.5) Descriptive Analysis Results On Differentiation Strategy Practiced By Respondent Companies Regarding Their Customer Service

Sr. No.	Customer Service	Mean Score	Std. Dev.
1	Increasing speed and effectiveness of decision-making.	4.0	0.701
2	Having increased quality of product and services.	3.9	0.742
3	Having increased the training and human resource development.	3.9	0.791
4	Having dependable delivery.	3.8	0.808
5	Having higher price for higher value products.	3.9	0.787
6	Responding promptly and efficiently to changes in customer preferences for products or accompanying services.	3.9	0.650
7	Manufacturing products or providing services tailored for high-priced market segments.	3.8	0.684
	Overall Mean	3.9	

Source: Survey Data, 2022

Table (4.5) shows the descriptive analysis results on differentiation strategy practiced by respondent companies regarding their customer service. One of the seven elements of the value chain identified in the study is increasing the speed and effectiveness of decision making. This refers to the ability of companies to make quick and well-informed decisions that can lead to a competitive advantage in the marketplace. Companies that can make faster and better decisions have an edge over their competitors. This element scored a mean value of 4.0, indicating its high importance in utilizing customer service as a differentiation strategy.

Second element identified is improving the quality of products and services. This is a crucial factor in utilizing customer service as a differentiation strategy since customers are always looking for high-quality products and services. Companies that can provide superior quality products and services can attract and retain customers. This element scored a mean value of 3.9, highlighting its significance in creating a competitive advantage. The third element identified is the importance of increasing the training and development of human resources. This involves investing in the skills and knowledge of employees, which can lead to better customer service and satisfaction. Employees who are well-trained and knowledgeable can provide better customer service, which can lead to customer loyalty. This element scored a mean value of 3.9, emphasizing its importance in creating a differentiation strategy.

The fourth element of the value chain for customer service strategy is increasing the dependability of delivery. This refers to the ability of companies to deliver products and services on time and as promised. Companies that can deliver products and services reliably can build trust with customers, which can lead to increased customer loyalty. This element scored a mean value of 3.8, highlighting its significance in utilizing customer service as a differentiation strategy. The fifth element is the importance of having higher prices for higher value products. This means that companies should charge a higher price for products that offer more value to customers. Customers are willing to pay more for products that offer superior quality or features, which can lead to increased profits for companies. This element scored a mean value of 3.9, emphasizing its importance in creating a differentiation strategy.

The sixth crucial element identified in the study is responding promptly and efficiently to changes in customer preferences for products or accompanying services. Companies that can adapt quickly to changing customer preferences can gain an edge in the marketplace. By offering products and services that meet the changing needs and

preferences of customers, companies can increase customer satisfaction and loyalty. This element scored a mean value of 3.9, highlighting its importance in utilizing customer service as a differentiation strategy. The seventh element is the importance of manufacturing products or providing services tailored for high-priced market segments. Companies that target high-end customers can charge premium prices for their products and services, which can lead to increased profits. This element scored a mean value of 3.8, emphasizing its importance in creating a differentiation strategy. Companies that can successfully target high-end customers can gain a competitive advantage in the market.

4.2.2 Technology Leadership

Technology leadership refers to an organization's ability to innovate, develop, and leverage advanced technologies to gain a competitive advantage in the marketplace. Technology leadership is crucial for a differentiation strategy as it provides a competitive advantage, enables product differentiation, establishes market positioning, facilitates faster time to market, enhances operational efficiency, improves the customer experience, and fosters a culture of continuous innovation. By being at the forefront of technology, organizations can differentiate themselves, attract customers, and thrive in a dynamic and competitive business environment. The paper identified five elements in Table (4.6) as indicators of technology leadership.

Table (4.6) Descriptive Analysis Results On Differentiation Strategy Practiced By Respondent Companies Regarding Technology Leadership

Sr. No.	Technology Leadership	Mean Score	Std. Dev.
1	Having achieved differentiation using unique technology.	3.9	0.897
2	Having achieved innovation in technology and methods.	4.0	0.774
3	Having unique assets that make us different from others.	3.9	0.782
4	Having unique products.	4.0	0.803
5	Employees in our organization have unique skills.	3.9	0.930
	Overall Mean	3.9	

Source: Survey Data, 2022

Table (4.6) shows the descriptive analysis results on differentiation strategy practiced by respondent companies regarding technology leadership. Table (4.7)

identifies five critical elements of differentiation strategy that can impact the effectiveness of the 'technology leadership' strategy in achieving differentiation from competitors. Each element scored a mean value between 3.9 and 4.0, indicating their high importance over achieving technology leadership.

The first element identified is the ability to achieve differentiation using unique technology. Companies that can create innovative products or services using cutting-edge technology can gain a significant advantage over their competitors. This element scored a mean value of 3.9, highlighting its importance in achieving differentiation through technology leadership. The second element identified is the importance of achieving innovation in technology and methods. Companies that can continuously innovate and improve their technology can stay ahead of their competitors. This element scored a mean value of 4.0, emphasizing its significance in creating a competitive advantage through technology leadership.

The third critical element of the value chain is having unique assets that make them different from others. Companies that have unique assets, such as patents, trademarks, or proprietary technology, can create a competitive advantage in the marketplace. This element scored a mean value of 3.9, emphasizing its importance in achieving differentiation through technology leadership. The fourth element is importance of having a unique product. Companies that can create a product that is different from their competitors can gain a significant advantage in the marketplace. This element scored a mean value of 4.0, highlighting its significance in achieving differentiation through technology leadership. The fifth element is importance of having employees with unique skills. Companies that can hire and retain employees with specialized skills or expertise can gain a significant advantage over their competitors. This element scored a mean value of 3.9, emphasizing its importance in achieving differentiation through technology leadership.

4.2.3 Product Differentiation

Product differentiation is a strategy used by organizations to create unique and distinctive products or services that stand out from competitors in the marketplace. It involves developing features, functionalities, designs, or attributes that set a product apart and provide added value to customers. Product differentiation is important for a differentiation strategy because it provides a competitive advantage, increases customer value, enables market segmentation, enhances brand recognition and loyalty, reduces

price sensitivity, mitigates substitute products, and encourages innovation and adaptability. The paper has identified seven elements in Table (4.7) as indicators of having product differentiation.

Table (4.7) Descriptive Analysis Results On Differentiation Strategy Practiced By Respondent Companies Regarding Product Differentiation

Sr. No.	Product Differentiation	Mean Score	Std. Dev.
1	Concentrating efforts on innovating new products or services and enhancing existing ones to provide superior customer satisfaction.	3.9	0.857
2	The degree to which we release new products or services distinguishes us from our competitors.	3.8	0.916
3	Focusing on creating and cultivating a distinct brand identity and positive reputation helps us stand out.	4.0	0.668
4	Achieving differentiation by reducing project timelines and consistently meeting project deadlines.	3.9	0.771
5	Innovation in marketing techniques.	3.8	0.851
6	Ramping up the level of advertising and marketing activities.	3.8	0.786
7	Fostering the development of a wide array of innovative products and services.	3.8	0.670
	Overall Mean	3.8	

Source: Survey Data, 2022

Table (4.7) shows the descriptive analysis results on differentiation strategy practiced by respondent companies regarding product differentiation. Table (4.7) has identified seven essential elements that can impact the effectiveness of the product differentiation strategy in achieving a competitive edge. Each element scored a mean value ranging from 3.8 to 4.0, indicating their strong effect on achieving product differentiation.

The first element identified is concentrating efforts on innovating new products or services and enhancing existing ones to provide superior customer satisfaction. Companies that can create or adapt products that meet their customer's unique needs can

gain a competitive advantage. This element scored a mean value of 3.9, emphasizing its significance in achieving product differentiation. The second element identified is the degree to which we release new products or services distinguishes us from our competitors. Companies that can introduce new products/services faster and in greater quantities than their competitors can create a competitive advantage. This element scored a mean value of 4.0, highlighting its importance in achieving product differentiation. The third element of the value chain is focusing on creating and cultivating a distinct brand identity and positive reputation helps us stand out. Companies that can create a positive brand image and reputation can gain a competitive advantage. This element scored a mean value of 3.8, emphasizing its significance in achieving product differentiation.

The fourth element that the paper has identified is the importance of differentiating by reducing project timelines and consistently meeting project deadlines.. Companies that can complete projects faster than their competitors can gain a competitive advantage. This element scored a mean value of 3.9, highlighting its importance in achieving product differentiation. The fifth element identified is innovation in marketing techniques. Companies that can develop creative and innovative marketing strategies can create a competitive advantage. This element scored a mean value of 3.8, emphasizing its importance in achieving product differentiation.

The sixth element is increasing the intensity of advertising and marketing. Companies that can effectively promote their products/services through advertising and marketing can gain a competitive advantage. This element scored a mean value of 4.0, emphasizing its significance in achieving product differentiation. The seventh element is the importance of fostering the development of a wide array of innovative products and services. Companies that can create a diverse range of products/services can meet their customer's unique needs and gain a competitive advantage. This element scored a mean value of 3.9, highlighting its significance in achieving product differentiation.

4.2.4 Logistic Differentiation

Logistic differentiation refers to the strategic use of logistics and supply chain management practices to create a competitive advantage and differentiate an organization's offerings from competitors in the marketplace. It involves implementing unique logistics processes, systems, and capabilities that enhance customer value, reduce costs, and improve overall operational efficiency. The paper has identified eight elements in Table (4.8) as indicators of logistic differentiation.

Table (4.8) Descriptive Analysis Results On Differentiation Strategy Practiced By Respondent Companies Regarding Logistic Differentiation

Sr. No.	Logistic Differentiation	Mean Score	Std. Dev.
1	Flexibility in volume mix.	3.8	0.763
2	Flexibility in product mix.	3.8	0.763
3	Offering distinctive products that stand out in terms of functionality or design.	3.9	0.869
	Overall Mean	3.8	

Source: Survey Data, 2022

Table (4.8) shows the descriptive analysis results on differentiation strategy practiced by respondent companies regarding logistic differentiation. According to the results presented in Table (4.8), all of the respondents who participated in the survey strongly agreed with the three identified elements, which were having flexibility in volume mix, having flexibility in product mix, and offering distinctive products that stand out in terms of functionality or design.. This suggests that the respondents recognize the importance of these elements in their respective companies, and they believe that their companies possess these characteristics.

Having flexibility in volume mix means that a company can quickly adjust its production levels to meet changes in demand. This is a crucial element of the value chain, as it allows companies to respond to market fluctuations and avoid excess inventory. Similarly, having flexibility in product mix means that a company can quickly adapt its product offerings to meet changes in consumer preferences. This element allows companies to stay ahead of the competition and remain relevant in the market.

The third identified element, offering distinctive products that stand out in terms of functionality or design, is also a critical component of the value chain. This element allows companies to differentiate themselves from their competitors by offering products that are distinct in terms of their functionality or design. This uniqueness can lead to increased customer loyalty and can also allow companies to charge higher prices for their products.

4.3 Competitive Advantage Practices of Selected IT System Integrator Companies

In this section, the paper will study the potential impact of the four components of differentiation strategy on competitive advantage, by analyzing the mean score values.

The study aims to shed light on whether the four components of differentiation strategy, namely customer service, technology leadership, product differentiation and logistic differentiation have a significant impact on gaining a competitive edge.

4.3.1 Quality

Quality is essential for achieving a competitive advantage in the marketplace. It refers to the overall excellence, reliability, and performance of a product or service, meeting or exceeding customer expectations. By prioritizing and delivering high-quality products, organizations can generally gain a distinct edge over competitors and establish long-term success in the marketplace. The paper has identified eight elements in Table (4.9) as indicators of quality.

Table (4.9) Descriptive Analysis Results On Comparative Advantage Practices Of Respondent Companies Regarding Quality

Sr. No.	Quality	Mean Score	Std. Dev.
1	Being able to compete, based on quality.	4.2	0.756
2	Offering products that are highly reliable.	4.2	0.638
3	Offering products that are very durable.	4.0	0.753
4	Offering high quality products to our customer.	4.2	0.697
5	Offering products that are tailored to meet specific customer requirements.	4.2	0.706
	Overall Mean	4.2	

Source: Survey Data, 2022

Table (4.9) shows the descriptive analysis results on comparative advantage practices of respondent companies regarding quality. Table (4.9) shows that the respondents strongly agreed with several statements regarding their companies' ability to compete based on quality. They indicated that their companies are capable of competing based on quality, which implies that their focus on quality is a key factor in their competitive strategy. They strongly agreed that their companies offer products that are highly reliable, meaning that their customers can trust the quality of their products. The respondents also revealed that their companies offer products that are durable, indicating that they are capable of withstanding the wear and tear of regular usage. This is particularly important in industries where products are subjected to harsh conditions.

Fourthly, respondents also indicated that their companies offer high-quality products, which implies that they are committed to delivering products that meet or exceed customer expectations. The respondents noted that their companies offer products that are tailored to meet specific customer requirements. This suggests that the companies are focused on understanding and meeting the needs of their customers by developing products that align with their requirements. By offering products that function according to customer needs, companies can differentiate themselves from their competitors and gain a competitive advantage.

4.3.2 Delivery Dependability

Delivery dependability refers to the reliability and consistency of delivering products or services to customers as promised. It is an important factor in achieving a competitive advantage in the marketplace. Delivery dependability is vital for achieving a competitive advantage as it enhances customer satisfaction, builds brand reputation and trust, serves as a competitive differentiator, reduces customer churn, improves operational efficiency, facilitates customer expectation management, and contributes to service differentiation. The paper has identified eight elements in Table (4.10) as indicators of delivery dependability.

Table (4.10) Descriptive Analysis Results On Comparative Advantage Practices Of Respondent Companies Regarding Delivery Dependability

Sr. No.	Delivery Dependability	Mean Score	Std. Dev.
1	Delivering the kind of products needed.	4.0	0.712
2	Delivering customer order on time.	4.2	0.707
3	Providing dependable delivery.	4.1	0.742
4	Being flexible in developing delivery schedules.	4.1	0.717
5	Frequency of customer backorders being low.	3.5	0.881
6	Satisfying customers with level of completeness for routine shipments.	4.0	0.666
	Overall Mean	4.0	

Source: Survey Data, 2022

Table (4.10) shows the descriptive analysis results on comparative advantage practices of respondent companies regarding delivery dependability. Table (4.10) presents

the results of a survey that aimed to identify the effects of differentiation strategy on delivery dependability. The survey identified six key elements each of them receiving mean scores ranging from 3.21 to 4.20. The respondents strongly agreed with all six elements, indicating that they believe these elements are important for achieving delivery dependability.

The first element identified in the survey was the ability to deliver the kind of products needed by customers. The respondents strongly agreed with this statement, suggesting that they are committed to providing products that meet the specific needs and requirements of their customers. This is an important aspect of delivery dependability, as it ensures that customers receive the products they need in a timely and efficient manner.

The second element identified in the survey was the ability to deliver customer orders on time. The respondents strongly agreed with this statement, indicating that they prioritize timely delivery to ensure that customers receive their orders when expected. Timely delivery is a crucial aspect of delivery dependability, as it ensures that customers can rely on the organization to meet their needs and requirements.

The third element identified in the survey was the ability to provide dependable delivery. The respondents strongly agreed with this statement, suggesting that they are committed to providing reliable and consistent delivery services. This is an important aspect of delivery dependability, as it ensures that customers can trust the organization to deliver their products in a consistent and reliable manner.

The fourth element identified in the survey was the ability to be flexible in developing delivery schedules. The respondents strongly agreed with this statement, indicating that they are willing and able to adapt their delivery schedules to meet the changing needs and requirements of their customers. This is an important aspect of delivery dependability, as it ensures that customers can rely on the organization to be flexible and responsive to their needs.

The fifth element identified in the survey was the frequency of customer backorders. The respondents strongly agreed that the frequency of customer backorders was low, indicating that they are able to consistently meet customer demand without running out of stock or experiencing delays in delivery. This is an important aspect of delivery dependability, as it ensures that customers can rely on the organization to consistently provide the products they need.

4.3.3 Product Innovation

Product innovation involves the creation and introduction of new or enhanced products, services, or features that align with the evolving needs and preferences of customers. Product innovation is essential for achieving a competitive advantage as it allows organizations to differentiate themselves, enhance customer value, expand into new markets, differentiate from competitors, build brand reputation, adapt to market changes, and drive business growth and profitability. The paper has identified eight elements in Table (4.11) as indicators of product innovation.

Table (4.11) Descriptive Analysis Results On Comparative Advantage Practices Of Respondent Companies Regarding Product Innovation

Sr. No.	Product Innovation	Mean Score	Std. Dev.
1	Providing customized products.	3.8	0.821
2	Customizing product offerings to better address client needs.	3.9	0.650
3	Meeting customer expectations by incorporating desired "new" features.	4.0	0.679
4	Offering the products and services customers want.	4.2	0.707
	Overall Mean	4.0	

Source: Survey Data, 2022

Table (4.11) shows the descriptive analysis results on comparative advantage practices of respondent companies regarding product innovation. Table (4.11) presents the results of the survey conducted by the paper to investigate the impact of differentiation strategy on product innovation for achieving competitive advantage. The table identifies four elements that were surveyed, each of which received a mean score ranging from 3.8 to 4.2.

The first element in the survey was the provision of customized products, which received a mean score of 3.8. This indicates that the respondents agreed that their companies offer personalized products that meet the specific needs and preferences of their clients. This could potentially be a key factor in achieving a competitive advantage, as customers are more likely to choose a company that offers tailored products that align with their requirements.

The second element surveyed was the ability to alter product offerings to meet client needs, which received a mean score of 3.9. This suggests that the respondents agreed that their companies have the capability to modify their products to better suit the

changing demands of their clients. This could be an important strategy in staying ahead of competitors by continually adapting to the evolving needs of the market.

The third element surveyed was the ability to meet customer expectations by incorporating desired "new" features, which received a mean score of 4.0. This indicates that the respondents agreed that their companies are adept at incorporating new features and functionalities in their products in response to the changing demands of their customers. This could potentially provide a significant competitive advantage by allowing companies to stay ahead of the curve in terms of product innovation and differentiation.

The fourth element surveyed was the ability to offer the products and services that customers want to achieve competitive advantage from their competitors, which received a mean score of 4.2. This indicates that the respondents strongly agreed that their companies are able to provide the products and services that are most in demand by their customers, thus giving them an edge over their competitors in terms of meeting customer needs.

4.3.4 Time to Market

Time to market refers to the amount of time it takes for a product or service to be developed, produced, and made available to customers in the marketplace. Time to market is important for achieving a competitive advantage as it enables organizations to gain first-mover advantage, rapidly respond to market changes, enhance customer satisfaction, differentiate from competitors, generate revenue earlier, control costs, and establish innovation leadership. The paper has identified eight elements in Table (4.12) as indicators of time to market.

Table (4.12) Descriptive Analysis Results On Comparative Advantage Practices Of Respondent Companies Regarding Time To Market

Sr. No.	Time to Market	Mean Score	Std. Dev.
1	Delivering product to market quickly.	4.0	0.764
2	Being the first to bring innovative products to the market.	3.7	0.784
3	Having a shorter time-to-market compared to the industry average.	3.6	0.853
4	Having fast product development.	3.8	0.842
	Overall Mean	3.8	

Source: Survey Data, 2022

Table (4.12) shows the descriptive analysis results on comparative advantage practices of respondent companies regarding time to market. Table (4.12) presents the results of the survey conducted to investigate the effects of differentiation strategy on time to market to achieve a competitive advantage. The study identified four elements for the survey, and each element scored a mean value ranging from 3.6 to 4.0.

The highest mean score was obtained for the element "delivering product to market quickly," which suggests that the speed of product delivery is critical for achieving a competitive advantage through differentiation strategy. The respondents strongly agreed to this element, indicating that they recognize the importance of time to market in product development.

Second element which received a mean score of 3.7 is "being the first in the market to introduce new products." This result indicates that being an early mover in introducing new products can be a key factor in gaining a competitive edge through differentiation.

The respondents also agreed with the third element that they have a time to market lower than industry average, which suggests that they are efficient in their product development processes. Fourthly, the respondents also responded that they have fast product development, indicating that they have a streamlined product development process that allows them to bring products to market quickly.

4.4 Firm Performance Practices of Selected IT System Integrator Companies

Firm performance refers to the overall success and effectiveness of a business in achieving its objectives and generating desirable outcomes. Competitive advantage plays a significant role in improving firm performance. In this section, the paper presented how different elements of competitive advantage effect on improving firm performance.

4.4.1 Firm Performance

Performance measurement involves the evaluation of an action's efficiency and effectiveness through a systematic assessment process. (Neely et al., 1995). Performance measurement entails systematically assessing the efficiency and effectiveness of an action to evaluate its overall performance. (Lebas, 1995). There are several different types of measurement tools, both measurable and non-measurable, to evaluate performance of firms. Measurable tools for assessing firm performance typically include financial metrics such as market share, return on investment, sales revenue, profit margin or gross margin.

Non measurable tools include customer satisfaction, employee engagement, brand reputation, innovation and corporate social responsibility. In this paper, only measurable tools are used to access the performance of the firms for a three budget year period from 2019 to 2022. If there is a reduction of more than 50% from previous year, it is interpreted as ‘very decrease’; if there is a reduction of up to 50% from previous year, it is interpreted as ‘decrease’; if there is no reduction or a rise, it is interpreted as ‘no change’; if there is a rise of up to 50% from previous year, it is interpreted as ‘increase’ and if there is a rise of more than 50%, it is interpreted as ‘very increase’. The paper identified four measurement tools in Table (4.13) to address their significance over improving firm performance.

Table (4.13) Descriptive Analysis Results On Firm Performance Of Respondent Companies

Sr. No.	Firm Performance	Mean Score	Std. Dev.
1	Market share.	3.7	0.701
2	Return on investment (ROI).	3.7	0.760
3	Sales revenue.	3.7	0.739
4	Profit margin on sales.	3.6	0.739
	Overall Mean	3.7	

Source: Survey Data, 2022

Table (4.13) shows the descriptive analysis results on performance of respondent companies. In order to investigate the impact of competitive advantage on firm performance, the survey conducted in this study identified four key elements: market share, return on investment (ROI), sales revenue, and profit margin. The mean score values for each of these elements were analyzed, with each element scoring a mean value between 3.6 and 3.7. This indicates that the respondents generally agreed that competitive advantage has a positive effect on their firms' performance across these four key metrics.

The highest mean score of 3.7 was obtained for all four elements, with respondents strongly agreeing that their firms have been able to improve their performance through competitive advantages over their competitors. This suggests that the ability to differentiate from competitors is an important factor in achieving success in the marketplace, and can lead to improved market share, ROI, sales revenue, and profit margins.

4.5 Analysis on Effect of Value Chain Practices on Differentiation Strategy

Analysis of survey data using SPSS software shows the comparison of unstandardized coefficients and standardized coefficients of survey variables and thereby shows significance of each variable. The significance of variables can be determined by its value. If the value of the variable is less than or equal to 0.1, it can be inferred that the variable is significant by 90% (denoting with * in the following tables). If the value is less than or equal to 0.05, the variable is considered significant by 95% (denoting with ** in the following tables). And if the value is less than or equal to 0.01, the variable is deemed significant by 99% (denoting with *** in the following tables).

4.5.1 Effect of Value Chain on Customer Service

Survey data was collected and compiled using the Statistical Package for the Social Sciences (SPSS) software. The purpose of this data collection was to conduct regression analysis to examine the effect of the value chain on customer service. The survey was designed to gather relevant information from participants, and the data was then inputted into the SPSS software for analysis.

Table (4.14) Effect Of Value Chain On Customer Service

Variables	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.159	.359		1.836	.071
Strategic Supplier Partnership	.125	.087	.136	1.448	.153
Customer Relationship	.288**	.114	.292	2.521	.014
Level of Information Sharing	.209*	.110	.238	1.902	.062
Postponement	.217***	.056	.347	3.869	.000
R Square	.621				
Adjusted R Square	.596				
F Value	24.982***				

Source: Survey Data, 2022

Table (4.14) shows the results from regression analysis on effect of value chain on customer service. Based on the analysis of the value chain variables, it was found that only three variables, namely postponement, customer relationship, and level of sharing information, had a significant effect on customer service. The data revealed that allowing postponement in the value chain is crucial for creating value for customers, indicating that customers highly value flexibility and responsiveness in product delivery. In addition, having a strong customer relationship was also deemed important for providing good customer service, as it helps build trust and loyalty between the supplier and the customer. The level of information sharing between the supplier and the customer was also found to have a significant impact on customer service, suggesting that customers value transparency and open communication from their suppliers.

However, it is interesting to note that the strategic supplier partnership variable was found to be insignificant in creating value for customer service. This result implies that while having access to innovative technologies through strategic supplier partnerships may be beneficial for achieving technology leadership, it may not necessarily translate into improved customer service. Thus, companies may need to prioritize other value chain variables such as postponement, customer relationship, and information sharing in their efforts to enhance customer service.

4.5.2 Effect of Value Chain on Technology Leadership

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of value chain on customer service. The results are as presented in Table (4.15). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.15) shows the results from regression analysis on effect of value chain on technology leadership. Based on the Table (4.15), it appears that only the variable of strategic supplier partnership is statistically significant at a high level (99%). This suggests that in order to achieve a position of "technology leadership" relative to competitors, it is essential to establish strategic partnerships with suppliers in order to gain access to the most innovative and up-to-date technologies available in the market. On the other hand, the other three variables - customer relationship, level of sharing information, and postponement - do not seem to contribute significantly to achieving this goal of technology leadership. It is important to note that while these variables may not be

crucial for achieving technology leadership, they may still have other important effects on the overall performance and success of the company. Further research may be needed to fully understand the value and impact of each of these variables in different contexts.

Table (4.15) Effect of Value Chain on Technology Leadership

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.173	.602		.287	.775
Strategic Supplier Partnership	.517***	.145	.415	3.557	.001
Customer Relationship	.254	.192	.191	1.327	.189
Level of Information Sharing	.056	.185	.047	.301	.765
Postponement	.139	.094	.165	1.480	.144
R Square	.418				
Adjusted R Square	.379				
F Value	10.934***				

Source: Survey Data, 2022

4.5.3 Effect of Value Chain on Product Differentiation

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of value chain on product differentiation. The results are as presented in Table (4.16). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.16) shows the results from regression analysis on effect of value chain on product differentiation. Table (4.16) indicates that two variables, strategic supplier partnership and level of information sharing, are significant in achieving product differentiation, with 99% and 95% confidence levels respectively. The data suggests that in order to differentiate their products from competitors, companies must establish strategic partnerships with suppliers to gain access to the latest and most innovative products available in the market. Additionally, companies should focus on establishing a certain level of information sharing with both their suppliers and customers. This highlights the importance of collaboration and communication within the value chain to achieve product differentiation.

Table (4.16) Effect of Value Chain on Product Differentiation

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.921	.461		1.999	.050
Strategic Supplier Partnership	.340***	.111	.344	3.053	.003
Customer Relationship	.021	.147	.020	.147	.884
Level of Information Sharing	.330**	.141	.350	2.339	.023
Postponement	.073	.072	.110	1.020	.312
R Square	.456				
Adjusted R Square	.420				
F Value	12.772***				

Source: Survey Data, 2022

4.5.4 Effect of Value Chain on Logistic Differentiation

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of value chain on logistic differentiation. The results are as presented in Table (4.17). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.17) shows the results from regression analysis on effect of value chain on logistic differentiation. Based on the table above, none of the value chain variables are significant for logistic differentiation. This suggests that despite companies' best efforts to differentiate their logistic methods from their competitors, it may not create a significant difference or value for customers. Factors such as strategic supplier partnerships, good customer relationships, information sharing, and postponement do not seem to have a substantial impact on logistic differentiation strategies. On a side note, the survey was conducted between 2019 and 2021, mostly during the COVID-19 pandemic and political unrest across the country. The pandemic resulted in travel restrictions and political situations disrupted the trading routes, particularly along border such as the Mae Sot-Myawaddy-Yangon route, Muse-Lashio-Mandalay route, and other routes in upper

Myanmar (Sagaing and Kachin regions). The times of intense armed conflicts and the ongoing global pandemic are considered to be emergency situations rather than normal ones. These factors may have made logistic differentiation strategies insignificant.

Table (4.17) Effect of Value Chain on Logistic Differentiation

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.338	.699		.484	.630
Strategic Supplier Partnership	.265	.169	.197	1.573	.121
Customer Relationship	.177	.222	.123	.798	.428
Level of Information Sharing	.308	.214	.239	1.435	.156
Postponement	.160	.109	.175	1.464	.148
R Square	.329				
Adjusted R Square	.285				
F Value	7.480***				

Source: Survey Data, 2022

4.6 Analysis on Effect of Differentiation Strategy on Comparative Advantage

The survey data provided valuable insights into the effects of differentiation strategies on comparative advantage. These effects have been presented in the following tables, which demonstrate that each element of the value chain has a unique impact on the comparative advantage. The significance of the data has been indicated by asterisks (*) with one, two or three depending on the degree of its significance. The tables provide a comprehensive overview of the various components of differentiation strategies and their impact on comparative advantage, enabling firms to make informed decisions on how best to leverage their strengths and achieve a competitive edge in the market. The results of the study highlight the importance of carefully analyzing each element of the value chain to understand its role in creating a sustainable comparative advantage.

4.6.1 Effect of Differentiation Strategy on Quality

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of value chain on logistic differentiation. The results are

as presented in Table (4.18). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.18) Effect of Differentiation Strategy on Quality

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	1.036	.488		2.121	.038
Customer Service	.569***	.182	.490	3.133	.003
Technology Leadership	.128	.124	.149	1.033	.306
Product Differentiation	.194	.159	.179	1.222	.226
Logistic Differentiation	-.096	.117	-.121	-.819	.416
R Square	.409				
Adjusted R Square	.370				
F Value	10.564***				

Source: Survey Data, 2022

Table (4.18) shows the results from regression analysis on effect of differentiation strategy on quality. According to the results presented in table (4.18), among the variables of differentiation strategy, only one variable, good customer service, is highly significant (with 99% significance level) in achieving competitive advantage on quality for an IT system integrator company. This implies that allowing postponement, having good customer relationship and having some level of sharing information can help the company to differentiate itself from its competitors and gain a competitive advantage in terms of quality.

On the other hand, the other variables, such as technology leadership, product differentiation, and logistic differentiation, are largely insignificant in achieving competitive advantage in terms of quality. This suggests that focusing on these variables may not provide a significant advantage over competitors in terms of quality. Therefore, the IT system integrator company should prioritize improving its customer service to gain a competitive edge in the market.

4.6.2 Effect of Differentiation Strategy on Delivery Dependability

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of differentiation strategy on delivery dependability. The results are as presented in Table (4.19). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.19) Effect of Differentiation Strategy on Delivery Dependability

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.605	.422		1.435	.156
Customer Service	.698***	.157	.629	4.451	.000
Technology Leadership	-.105	.107	-.127	-.976	.333
Product Differentiation	.379***	.137	.365	2.761	.008
Logistic Differentiation	-.107	.101	-.141	-1.059	.294
R Square	.517				
Adjusted R Square	.485				
F Value	16.321***				

Source: Survey Data, 2022

Table (4.19) shows the results from regression analysis on effect of differentiation strategy on delivery dependability. Based on the results shown in table (4.19), it can be observed that customer service and product differentiation are highly significant factors in achieving competitive advantage in terms of delivery dependability for IT system integrator companies. The p-values of both variables are 0.000 and 0.008 respectively, indicating a high level of significance with a 99% confidence level. This suggests that by improving customer service and offering unique and differentiated products, IT system integrator companies can gain an edge over their competitors in terms of delivery dependability.

On the other hand, logistic differentiation and technology leadership were found to be insignificant in achieving competitive advantage in delivery dependability, with p-values larger than 0.2. This means that focusing on logistic differentiation or technology leadership may not yield significant results in terms of improving delivery dependability.

Therefore, based on the data presented, it is recommended for IT system integrator companies to prioritize customer service and product differentiation in order to achieve competitive advantage in delivery dependability. This could involve strategies such as improving customer communication and support, offering personalized solutions, and investing in research and development to create unique and innovative products.

4.6.3 Effect of Differentiation Strategy on Product Innovation

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of differentiation strategy on product innovation. The results are as presented in Table (4.20). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.20) Effect of Differentiation Strategy on Product Innovation

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.864	.407		2.122	.038
Customer Service	.222	.151	.206	1.466	.148
Technology Leadership	-.029	.103	-.036	-.280	.781
Product Differentiation	.517***	.132	.513	3.902	.000
Logistic Differentiation	.096	.097	.131	.989	.327
R Square	.524				
Adjusted R Square	.492				
F Value	16.761***				

Source: Survey Data, 2022

Table (4.20) shows the results from regression analysis on effect of differentiation strategy on product innovation. Based on the findings presented in Table (4.21), it can be observed that out of the four variables analyzed, only one variable - product differentiation - is highly significant at a level of 0.000 with a 99% confidence level, indicating its strong impact on product innovation. In contrast, the remaining three variables - technology leadership, customer service, and logistic differentiation - are found to be entirely insignificant, suggesting that they may not be critical factors for

achieving a competitive advantage in terms of product innovation for IT system integrator companies.

Therefore, to achieve a competitive edge in product innovation, IT system integrator firms should prioritize product differentiation strategies, such as creating unique and innovative products, investing in research and development, and continuously improving their products based on customer feedback and market trends. By doing so, they can differentiate their products from those of their competitors and attract more customers, leading to increased market share and profitability.

4.6.4 Effect of Differentiation Strategy on Time to Market

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of differentiation strategy on time to market. The results are as presented in Table (4.21). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.21) Effect of Differentiation Strategy on Time To Market

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	-.086	.489		-.176	.861
Customer Service	.269	.182	.205	1.479	.144
Technology Leadership	.053	.124	.055	.427	.671
Product Differentiation	.644***	.159	.526	4.050	.000
Logistic Differentiation	.028	.117	.031	.240	.811
R Square	.535				
Adjusted R Square	.505				
F Value	17.553***				

Source: Survey Data, 2022

Table (4.21) shows the results from regression analysis on effect of differentiation strategy on time to market. To expand on the given information, it can be inferred that IT system integrator companies should focus on developing and offering unique products to gain a competitive advantage in terms of time to market. This means that companies need

to prioritize investing in research and development to create innovative and differentiated products that can be brought to market quickly. By doing so, they can establish themselves as leaders in the industry and increase their market share.

Moreover, it is important to note that logistic differentiation, which includes supply chain and distribution efficiency, does not seem to have any significant impact on achieving competitive advantage in terms of time to market. This suggests that IT system integrator companies may not need to heavily invest in optimizing their supply chain or distribution networks to achieve faster time to market. Instead, they should focus on product differentiation as the key driver of achieving a competitive advantage in this area. The findings from Table (4.21) suggest that product differentiation is a crucial factor for IT system integrator companies to achieve a competitive advantage in terms of time to market, while logistic differentiation does not seem to be a significant factor.

4.7 Analysis on Effect of Competitive Advantage on Firm Performance

By analysing the survey data using SPSS software, the paper also identified which elements of competitive advantage has impact on improving firm performance in terms of increasing market share, return on investment, sales revenue and profit margin. Results can be seen as described in Table (4.22).

4.7.1 Effect of Competitive Advantage on Firm Performance

The collected data was processed using SPSS software to conduct a regression analysis to investigate the effect of competitive advantage on improving firm performance. The results are as presented in Table (4.22). The insights obtained from this analysis are valuable for informing strategic decision-making, enabling organizations to ascertain the level of significance for each variable and identify those that do not hold significance.

Table (4.22) shows the results from regression analysis on effect of comparative advantage on firm performance. As evident from Table (4.22), time to market is the only variable that has a marginal impact on enhancing firm performance. Even if an IT system integrator company strives to improve its quality, delivery dependability, and product innovation, these factors may not contribute to improving the firm's performance. The findings indicate that being the first to launch any product is crucial for attaining a competitive advantage and enhancing the firm's performance in terms of achieving higher yield or higher profit margin.

Table (4.22) Effect of Comparative Advantage on Firm Performance

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
Constant	.608	.572		1.063	.292
Quality	.142	.183	.124	.777	.440
Delivery Dependability	.201	.179	.168	1.119	.267
Product Innovation	.170	.246	.138	.690	.493
Time to Market	.271*	.146	.268	1.860	.068
R Square	.337				
Adjusted R Square	.293				
F Value	7.749***				

Source: Survey Data, 2022

CHAPTER 5

CONCLUSION

This chapter concludes the whole thesis by describing the extracted findings, discussions, suggestions and needs for further study. The discussions reflect on the implications of the research findings, their relevance and importance for the field, and their potential for future research. The suggestions for future research focus on areas that were not explored in this study but could benefit from further investigation.

5.1 Findings and Discussions

In this study, 66 IT system integrator companies are surveyed to analyze the effects of value chain on differentiation strategy, the influence of differentiation strategy on competitive advantage and ultimately on the firm performance.

According to the survey, various factors within the value chain have varying impacts on each element of the differentiation strategy. Notably, the study found that in achieving differentiation through superior customer service, the following factors are significant: postponement, customer relationships, and the level of information sharing. In pursuing differentiation from the competitors in terms of ‘technology leadership’, having strategic supplier partnership is found to be highly significant while other variables of the value chain show less significant. Similarly, the study identifies that having a strategic partnership with suppliers and a high level of information-sharing are significant factors in achieving product differentiation. The study also reveals that, despite their efforts, companies in Myanmar were unable to achieve differentiation from competitors in terms of logistics. None of the variables in the value chain process were found to be significant in achieving logistic differentiation. This may also be caused by the ongoing global pandemic and the escalating armed conflicts due to political unrest along border trading routes and upper Myanmar (Sagaing and Kachin regions) which have disrupted so called normal trading activities.

The findings from the survey data analysis indicate that differentiation strategies have varying impacts on achieving competitive advantage. The importance of customer service in achieving a competitive edge through quality cannot be overstated. IT system integrator companies should focus on maintaining good relationships with customers and allowing for postponement in order to achieve this advantage. On the other hand, for delivery dependability, the focus should be on customer service and product

differentiation. For product innovation and time to market, product differentiation is the key factor for achieving a competitive advantage.

Furthermore, the study emphasizes the importance of creating a value chain that is specific to the firm's goals and objectives. The impact of differentiation strategies on competitive advantage is closely linked to the value chain components, as illustrated in the conceptual framework. Despite achieving the initial stages of the framework, the study shows that competitive advantage is only marginally significant in relation to time to market.

5.2 Suggestions and Recommendations

Based on the survey findings, IT system integrator companies aiming to differentiate themselves through superior customer service should prioritize three key factors: postponement, customer relationships, and level of information sharing. Flexibility and responsiveness in product delivery are highly valued by customers, making it essential to incorporate postponement into the value chain. Furthermore, fostering a strong customer relationship is crucial for delivering excellent customer service, as it cultivates trust and loyalty between suppliers and customers.

IT system integrator companies can improve postponement in several ways such as using modular approach, just-in-time inventory method, scalable infrastructure and so on. By adopting a flexible architecture, the company can postpone hardware and software configuration until closer to the installation or delivery date, aligning the solution with the most current customer requirements. Moreover, companies need to foster strong collaboration and communication channels with suppliers, subcontractors, and customers. This facilitates timely coordination, enabling the company to respond quickly to customer demands and adjust project timelines accordingly.

The level of information sharing between the supplier and the customer was also found to have a significant impact on customer service, suggesting that customers value transparency and open communication from their suppliers. The IT system integrator companies should also focus on fostering a high level of information sharing to achieve product differentiation. In order to improve level of information, firms should establish clear and accessible communication channels between the supplier and the customer. Furthermore, companies should establish feedback mechanisms to gather input from customers regarding their experience with the IT system integration process. They should also seek customer feedback and use it to identify areas for improvement in terms of

information sharing and collaboration. Act on feedback to enhance future projects and continuously refine the information-sharing practices.

Research findings also suggests that companies seeking to establish a differentiation strategy based on technology leadership should prioritize the development of strategic partnerships with suppliers rather than on other factors such as customer relationship, level of information sharing or postponement. In order to achieve strategic partnerships with suppliers, IT system integrator companies should establish open and transparent lines of communication with suppliers. They should clearly communicate the company's goals, technological requirements, and expectations and regularly engage in discussions to exchange ideas, provide feedback, and address any challenges or concerns. Companies should also aim for long-term partnerships with suppliers rather than short-term transactions and foster trust and loyalty by investing time and effort in building strong relationships. This collaborative approach can drive technological advancements and help the IT system integrator company stay at the forefront of the industry.

However, it is important to note that creating value chain does not significantly affect for logistic differentiation, so companies should not place excessive emphasis on logistics especially in a turbulent and conflict-stricken times like this.

To attain a competitive advantage, companies should prioritize enhancing their customer service in terms of quality and dependable delivery. Subsequently, the company should shift its focus towards product differentiation to achieve a competitive edge in terms of production innovation, time to market, and dependable delivery. By emphasizing these factors, companies can improve their competitive position and will be able to stand out in the market.

5.3 Limitations and Need for Further Research

This research is built upon a survey conducted among sixty-six IT system integrator companies. It is important to note that the results of this study may not be applicable to other types of IT companies operating in the same industry. While the sample size was chosen randomly, it is possible that the responses received from the respondents may not be representative of the larger population. Moreover, there is a possibility that the respondents may have certain biases, which may have influenced their responses. Furthermore, the survey was conducted during the years 2019 to 2021 and a period marked by the COVID-19 pandemic and arms conflicts due to a political unrest that significantly disrupted the country including normal trading activities and logistic

routes along the borders to Thailand and China. This unique and turbulent time may limit the generalizability of the findings presented in this paper to normal situations.

Therefore, it is recommended that further research be conducted on a larger scale, including a broader range of IT companies in the country for a period of three budget year. This would provide a more comprehensive understanding of the industry and improve the generalizability of the study's findings. It is also recommended that a similar survey be conducted in a stable and normal situation to ascertain whether the results obtained in this study are reproducible. Additionally, using a mixed-method approach, such as combining surveys with interviews or focus groups, may provide more in-depth insights into the experiences and perspectives of IT companies. Overall, more research is necessary to better understand the complexities of the IT industry in Myanmar.

REFERENCE

- Alam, I. (2002). An exploratory investigation of user involvement in new service development. *Journal of the Academy of Marketing Science*, 30(3), 250-261.
- Burgess, N. & Radnor, Z. (2013) 'Evaluating lean in healthcare', *International Journal of Health Care Quality Assurance*, 26(3), 220–235
- Freng Svendsen, M., Haugland, S. A., Grønhaug, K., & Hammervoll, T. (2011). Marketing strategy and customer involvement in product development. *European Journal of Marketing*, 45(4), 513-530.
- Goll, I., & Rasheed, A. A. (2004). The moderating effect of environmental munificence and dynamism on the relationship between discretionary social responsibility and firm performance. *Journal of business ethics*, 49, 41-54.
- Hardyman, W., Daunt, K., & Kitchener, M. (2015). Value Co-creation through patient engagement in health care: a micro-level approach and research agenda, *Public Management Review*, 17(1), 90–107.
- Hoffman, D., & Aronnow, S. (2012). The supply chain top 25: raising the bar. *Supply Chain Management Review*, 16(5), 10–12.
- Humphrey, J. (2005). Shaping Value Chains for Development: Global Value Chains in Agribusiness, *Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)*.
- Islami, X., Topuzovska Latkovikj, M., Drakulevski, L., & Borota Popovska, M. (2020). Does differentiation strategy model matter? Designation of organizational performance using differentiation strategy instruments—an empirical analysis. Designation of organizational performance using differentiation strategy instruments—an empirical analysis. *Business: Theory and Practice*, 21(1), 158-177.
- Lee, D., Rho, B. H., & Yoon, S. N. (2015). Effect of investments in manufacturing practices on process efficiency and organizational performance. *International journal of production economics*, 162, 45-54.
- Li, T., & Calantone, R. J. (1998). The impact of market knowledge competence on new product advantage: conceptualization and empirical examination. *Journal of marketing*, 62(4), 13-29.
- Mayoux, L., & Mackie, G. (2007). Making the strongest links: A practical guide to mainstreaming gender analysis in value chain development. *ILO*.

- Murman, E., Allen, T., Bozdogan, K., Cutcher-Gershenfeld, J., McManus, H., Nightingale, D., Rebentisch, E., Shields, T., Stahl, F., Walton, M., Warmkessel, J., Weiss, S., & Widnall, S. (2002). *Lean Enterprise Value: Insights from MIT's Lean Aerospace*. Palgrave Macmillan Books. 65-70.
- Narayanan, V.G. and Raman, A. (2004). Aligning incentives in supply chains, *Harvard Business Review*, 82(11), 94–102.
- Osborne, S. Radnor, Z. and Nasi, G. (2013). A new theory for public service management? Toward a (Public) service-dominant approach. *The American Review of Public Administration*, 43, 135-158.
- Pitelis, C.N. (2009). The co-evolution of organizational value capture, value creation and sustainable advantage. *Organization Studies*, 30 (10), 1115–1139.
- Porter, M. E. (1985). *Competitive strategy: Creating and sustaining superior performance*. The free, New York.
- Prahalad, C.K., & Ramaswamy, V. (2004). *The Future of Competition: Co-creating Unique Value with Customers*, Harvard Business School Press, Cambridge.
- Rangkuti, F. (2015). *Personal SWOT analysis*. Gramedia Pustaka Utama.
- Sharp, B., & Dawes, J. (2001). What is differentiation and how does it work?. *Journal of Marketing Management*, 17(7-8), 739-759.
- Simatupang, T. M., Piboonrungraj, P., & Williams, S. J. (2017). The emergence of value chain thinking. *International Journal of value chain management*, 8(1), 40-57.
- Smith, W. R. (1956). Product Differentiation and Market Segmentation as Alternative Marketing Strategies. *Journal of Marketing*, (July), 3-8.
- Sullivan, G. M., & Artino Jr, A. R. (2013). Analyzing and interpreting data from Likert-type scales. *Journal of graduate medical education*, 5(4), 541-542.
- Trienekens, J.H. (2011). Agricultural value chains in developing countries: a framework for analysis. *International Food and Agribusiness Management Review*, 14(2), 53–82.
- Tukker, A., & Tischner, U. (2006). Product-services as a research field: past, present and future. Reflections from a decade of research. *Journal of Cleaner Production*, 14(17), 1552–1556.

Yamin, S., Gunasekaran, A., & Mavondo, F. T. (1999). Relationship between generic strategies, competitive advantage and organizational performance: an empirical analysis. *Technovation*, 19(8), 507–518.

APPENDIX A

QUESTIONNAIRE SURVEY

Dear Sir/Madam

The following survey questionnaires aim to explore the relationship of macro environment and organizational competencies to competitive strategy of IT System Integrator Companies and to analyze the effect of competitive strategy on firm performance (Market Share, Return on Investment, Sale Revenue, Profit Margin on Sales) of IT System Integrator Companies in Myanmar. Please answer the following questions that will take not more than ten minutes of your time. Completion of this information is voluntary and its confidentiality is assured. Your kind help is very much appreciated.

[Survey of Effect of Differentiation Strategy and Competitive Advantage on Performance of IT System Integrator Companies]

SECTION (A)

Respondent's Profile

Instruction: Please read the following questions carefully and answer.

1. Name of Company :

.....

2. Company Address - City

.....

3. Company Established Year

Before 2000

Between 2000 and 2010

After 2010

4. Your current position or employment status

Executive Director

Director

CEO / CTO

Project Manager, or specific your position

.....

5. How long have you worked with this company?

- Less than 1 year
- 1 to 5 years
- 5 to 10 years
- 10 years and above

6. What is type of the company?

- Local
- Foreign
- Joint Venture
- Others (please specify)

7. Company Registered as

- Sole Proprietor
- Partnership
- Public Limited
- Private Limited
- Other

8. Company Target Market

- Banking/ Finance
- Building Construction & Engineering
- Education & Training
- Entertainment
- Government
- Healthcare and Hospitals
- Manufacturing
- Wholesale/ Distribution / Retail
- Telecommunication
- Transport/ Storage/ Logistic
- Utilities
- Other

9. **Qualification of Leading Staffs**

No	Qualification	Number
1	PMP Project Management Professional	
2	ITIL IT Infrastructure Library	
3	Cisco Certified (CCNA,CCNP,CCIE)	
4	Microsoft Certified	
5	AWS Certified	
6	VMware Certified	
7	PCNSE / Security Certified	
8	IT Graduate	
9	Non IT Graduate	
10	Non of the above	

10. **Training**

No	Training	Staff Percentage
1	Oversea Training(only)	
2	Local Training(Only)	
3	Both Training	
4	None	

SECTION (B)

Value Chain

A distinctive value chain refers to several activities and functions that are particularly needed to create a product's value proposition which work together in a way that is different from what others are doing and difficult to replicate.

Instruction: Please read each statement carefully and decide and please choose one of the following numbers by ticking on each line according to the score for each statement.

1: Very Poor, 2: Poor, 3: Neutral , 4: Strong , 5: Extremely Strong

Strategic Supplier Partnership

No	Particular	1	2	3	4	5
1	We consider quality as our number one criterion in selecting suppliers.					
2	We regularly solve problems jointly with our suppliers.					
3	We have helped our suppliers to improve their product quality.					
4	We have continuous improvement programs that include our key suppliers.					
5	We include our key suppliers in our planning and goal setting activities.					
6	We actively involve our key suppliers in new product Development processes.					

Customer Relationship

No	Particular	1	2	3	4	5
7	We frequently interact with customers to set reliability, responsiveness, and other standards for us.					
8	We frequently measure and evaluate customer satisfaction.					
9	We frequently determine future customer					

	expectations.					
10	We facilitate customers' ability to seek assistance from us.					
11	We periodically evaluate the importance of our relationship with our customers.					
12	We supply customers with accurate information regarding product availability.					
13	We respond with accurate information to a customer inquiry concerning .					
14	We Offer customers a reliable order processing time.					
15	We work with each customer to develop ad delivery schedule that is acceptable.					

Level of information Sharing

No	Particular	1	2	3	4	5
16	We inform trading partners in advance of changing needs.					
17	Our share proprietary information with us.					
18	Our trading partners keep us informed about issues that affect our business.					
19	Our trading partners share ther of core values with us.					
20	We and our trading partners exchange information that helps establishment of business planning					
21	We and our trading partners keep each other informed about events or changes that may affect the other partners.					
22	Information exchange between our and us is timely.					
23	Information exchange between our and us is accurate.					

24	Information exchange between our and us is complete.					
25	Information exchange between our and us is adequate.					
26	Information exchange between our and us is reliable.					

* Trading partners include both supplies and customers.

Postponement

No	Particular	1	2	3	4	5
27	Our products are designed for modular assembly.					
28	We delay final product assembly activities until customer orders have actually been received.					
29	We delay final product assembly activities until the last possible position (or nearest to customers) in the supply chain.					

SECTION (C)

Differentiation Strategy

A differentiation strategy is an approach of businesses developed by providing customers with something unique, different and distinct from items that their competitors may offer in the marketplace.

Instruction: Please read each statement carefully and decide and please choose one of the following numbers by ticking on each line according to the score for each statement.

1: Very Poor , 2: Poor , 3: Neutral , 4: Strong , 5: Extremely Strong

Customer Service

No	Particular	1	2	3	4	5
1	We have increased speed and effectiveness of decision-making .					
2	The quality of product and services is increased.					
3	We have increase the training and development of human resource.					

4	Dependability of delivery in our organization is increased.					
5	We have higher price for our higher value products					
6	We respond well to changing customer preferences regarding products or accompanying services.					
7	Producing products/services for high price market segments.					

Technology Leadership

No	Particular	1	2	3	4	5
8	We have achieved differentiation using unique technology.					
9	We have achieved innovation in technology and methods.					
10	We have unique assets that make us different from others.					
11	Our product is unique.					
12	Employees in our organization have unique skills.					

Product Differentiation

No	Particular	1	2	3	4	5
13	Concentrating on developing new products/ services or adapting existing products to better serve customers.					
14	The degree of dumping of new products/services in the market makes us different from competitors.					
15	Set emphasis on creating and identifying by name and good image helps us to make difference.					

16	Differentiation through shortening the project time or completion within the project deadline.					
17	Differentiation through shortening the project time or completion within the project deadline.					
18	Innovation in marketing techniques.					
19	Increase the intensity of advertising and marketing.					
20	Developing a broad range of new products/ services.					

Logistic Differentiation

No	Particular	1	2	3	4	5
21	Flexibility in volume mix.					
22	Flexibility in product mix.					
23	Provide unique products with regard to function or design.					

SECTION (D)

Competitive Advantage

Competitive advantage refers to factors that allow a company to produce goods or services better or more cheaply than its rivals and these allow the productive entity to generate more sales or superior margins compared to its market rivals.

Instruction: Please read each statement carefully and decide and please choose one of the following numbers by ticking () on each line according to the score for each statement.

1: Very Poor , 2: Poor , 3: Neutral , 4: Strong , 5: Extremely Strong

Quality

Your firm emphasis on:

No.	Particular	1	2	3	4	5
1	We are able to compete, based on quality.					
2	We offer products that are highly reliable.					
3	We offer products that are very durable.					
4	We offer high quality products to our customer.					
5	We offer products that function according to customer needs.					

Delivery Dependability

Your firm emphasis on:

No.	Particular	1	2	3	4	5
6	We deliver the kind of products needed.					
7	We deliver customer order on time.					
8	We provide dependable delivery.					
9	We are flexible in developing delivery schedules.					
10	Our frequency of customer backorders is low.					
11	Our customers are satisfied with our level of completeness for routine shipments.					

Product Innovation

Your firm emphasis on:

No.	Particular	1	2	3	4	5
12	We provide customized products.					
13	We alter our product offerings to meet client needs.					
14	We respond well to customer demand for “new” features.					
15	We offer the products and services our customers want.					

Time to Market

Your firm emphasis on:

No.	Particular	1	2	3	4	5
16	We deliver product to market quickly.					
17	We are first in the market in introducing new products.					
18	We have time-to-market lower than industry average.					
19	We have fast product development.					

SECTION (E)

Firm Performance

Firm performance reflects the ability of a firm in using human resources and material resources to achieve its targets.

Instruction: Please read each statement carefully and decide and please choose one of the following numbers by ticking on each line according to the score for each statement.

1 = Very Decrease, 2 = Decrease, 3 = Unchanged, 4 = Increase, 5 = Very Increase

Your firm's performance: (2019 to 2021)

No	Firm Performance	1	2	3	4	5
1	Market share.					
2	Return on investment (ROI).					
3	Sales revenue.					
4	Profit margin on sales.					

APPENDIX B

Effects of Value Chain on Customer Service

Model Summary^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.788 ^a	.621	.596	.29666	.621	24.982	4	61	.000	1.678
a. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information										
b. Dependent Variable: Customer Service										

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.794	4	2.199	24.982	.000 ^b
	Residual	5.368	61	.088		
	Total	14.163	65			
a. Dependent Variable: Customer Service						
b. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information						

Coefficients^a														
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	.659	.359		1.836	.071	-.059	1.377						
	Strategic Supplier Partnership	.125	.087	.136	1.448	.153	-.048	.299	.515	.182	.114	.702	1.424	
	Customer RelationshipS	.288	.114	.292	2.521	.014	.060	.516	.632	.307	.199	.462	2.162	
	Level of Sharing Information	.209	.110	.238	1.902	.062	-.011	.430	.675	.237	.150	.398	2.516	
	Postponement	.217	.056	.347	3.869	.000	.105	.329	.592	.444	.305	.771	1.297	
a. Dependent Variable: Customer Service														

Effect of Value Chain on Technology Leadership

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.646 ^a	.418	.379	.49731	.418	10.934	4	61	.000	1.900
a. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information										
b. Dependent Variable: Technology Leadership										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.817	4	2.704	10.934	.000 ^b
	Residual	15.087	61	.247		
	Total	25.904	65			
a. Dependent Variable: Technology Leadership						
b. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information						

Coefficients ^a													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.173	.602		.287	.775	-1.030	1.376					
	Strategic Supplier Partnership	.517	.145	.415	3.557	.001	.226	.807	.585	.415	.348	.702	1.424
	Customer RelationshipS	.254	.192	.191	1.327	.189	-.129	.637	.466	.168	.130	.462	2.162
	Level of Sharing Information	.056	.185	.047	.301	.765	-.314	.425	.470	.038	.029	.398	2.516
	Postponement	.139	.094	.165	1.480	.144	-.049	.327	.391	.186	.145	.771	1.297
a. Dependent Variable: Technology Leadership													

Effect of Value Chain on Product Differentiation

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.675 ^a	.456	.420	.38061	.456	12.772	4	61	.000	1.860
a. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information										
b. Dependent Variable: Product Differentiation										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.401	4	1.850	12.772	.000 ^b
	Residual	8.837	61	.145		
	Total	16.238	65			
a. Dependent Variable: Product Differentiation						
b. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information						

Coefficients ^a														
Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	.921	.461		1.999	.050	.000	1.842						
	Strategic Supplier Partnership	.340	.111	.344	3.053	.003	.117	.562	.570	.364	.288	.702	1.424	
	Customer RelationshipS	.021	.147	.020	.147	.884	-.272	.315	.466	.019	.014	.462	2.162	
	Level of Sharing Information	.330	.141	.350	2.339	.023	.048	.613	.589	.287	.221	.398	2.516	
	Postponement	.073	.072	.110	1.020	.312	-.070	.217	.396	.129	.096	.771	1.297	

a. Dependent Variable: Product Differentiation

Effect of Value Chain on Logistic Differentiation

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.574 ^a	.329	.285	.57740	.329	7.480	4	61	.000	1.676
a. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information										
b. Dependent Variable: Logistic Differentiation										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.975	4	2.494	7.480	.000 ^b
	Residual	20.337	61	.333		
	Total	30.312	65			
a. Dependent Variable: Logistic Differentiation						
b. Predictors: (Constant), Postponement, Customer RelationshipS, Strategic Supplier Partnership, Level of Sharing Information						

Coefficients ^a														
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	.338	.699		.484	.630	-1.059	1.735						
	Strategic Supplier Partnership	.265	.169	.197	1.573	.121	-.072	.603	.437	.197	.165	.702	1.424	
	Customer RelationshipS	.177	.222	.123	.798	.428	-.267	.622	.439	.102	.084	.462	2.162	
	Level of Sharing Information	.308	.214	.239	1.435	.156	-.121	.736	.507	.181	.150	.398	2.516	
	Postponement	.160	.109	.175	1.464	.148	-.058	.377	.390	.184	.154	.771	1.297	

a. Dependent Variable: Logistic Differentiation

Effect of Differentiation Strategy on Quality

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin - Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.640 ^a	.409	.370	.43029	.409	10.564	4	61	.000	2.107
a. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service										
b. Dependent Variable: Quality										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.823	4	1.956	10.564	.000 ^b
	Residual	11.294	61	.185		
	Total	19.118	65			
a. Dependent Variable: Quality						
b. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service						

Coefficients ^a													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.036	.488		2.121	.038	.059	2.012					
	Customer Service	.569	.182	.490	3.133	.003	.206	.933	.598	.372	.308	.396	2.526
	Technology Leadership	.128	.124	.149	1.033	.306	-.120	.376	.499	.131	.102	.464	2.155
	Product Differentiation	.194	.159	.179	1.222	.226	-.123	.512	.512	.155	.120	.452	2.213
	Logistic Differentiation	-.096	.117	-.121	-.819	.416	-.329	.138	.413	-.104	-.081	.447	2.235

a. Dependent Variable: Quality

Effect of Differentiation Strategy on Delivery Dependability

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.719 ^a	.517	.485	.37152	.517	16.321	4	61	.000	1.441
a. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service										
b. Dependent Variable: Delivery Dependability										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.011	4	2.253	16.321	.000 ^b
	Residual	8.420	61	.138		
	Total	17.431	65			
a. Dependent Variable: Delivery Dependability						
b. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service						

Coefficients ^a														
Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.605	.422			1.435	.156	-.238	1.448					
	Customer Service	.698	.157	.629		4.451	.000	.385	1.012	.672	.495	.396	.396	2.526
	Technology Leadership	-.105	.107	-.127		-.976	.333	-.319	.110	.423	-.124	-.087	.464	2.155
	Product Differentiation	.379	.137	.365		2.761	.008	.104	.653	.578	.333	.246	.452	2.213
	Logistic Differentiation	-.107	.101	-.141		-1.059	.294	-.309	.095	.449	-.134	-.094	.447	2.235

a. Dependent Variable: Delivery Dependability

Effect of Differentiation Strategy on Product Innovation

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.724 ^a	.524	.492	.35860	.524	16.761	4	61	.000	1.926
a. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service										
b. Dependent Variable: Product Innovation										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.622	4	2.155	16.761	.000 ^b
	Residual	7.844	61	.129		
	Total	16.466	65			
a. Dependent Variable: Product Innovation						
b. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service						

Coefficients ^a													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.864	.407		2.122	.038	-.050	1.678					
	Customer Service	.222	.151	.206	1.466	.148	-.081	.525	.588	.185	.130	.396	2.526
	Technology Leadership	-.029	.103	-.036	-.280	.781	-.236	.178	.512	-.036	-.025	.464	2.155
	Product Differentiation	.517	.132	.513	3.902	.000	.252	.781	.683	.447	.345	.452	2.213
	Logistic Differentiation	.096	.097	.131	.989	.327	-.098	.291	.541	.126	.087	.447	2.235

a. Dependent Variable: Product Innovation

Effect of Differentiation Strategy on Time to Market

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.732 ^a	.535	.505	.43087	.535	17.553	4	61	.000	1.465
a. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service										
b. Dependent Variable: Time to Market										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.035	4	3.259	17.553	.000 ^b
	Residual	11.325	61	.186		
	Total	24.360	65			
a. Dependent Variable: Time to Market						
b. Predictors: (Constant), Logistic Differentiation, Technology Leadership, Product Differentiation, Customer Service						

Coefficients ^a													
Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.086	.489		-.176	.861	-1.064	.892					
	Customer Service	.269	.182	.205	1.479	.144	-.095	.633	.577	.186	.129	.396	2.526
	Technology Leadership	.053	.124	.055	.427	.671	-.195	.302	.559	.055	.037	.464	2.155
	Product Differentiation	.644	.159	.526	4.050	.000	.326	.962	.705	.460	.354	.452	2.213
	Logistic Differentiation	.028	.117	.031	.240	.811	-.206	.262	.497	.031	.021	.447	2.235

a. Dependent Variable: Time to Market

Effect of Competitive Advantage on Firm Performance

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.580 ^a	.337	.293	.52040	.337	7.749	4	61	.000	2.048
a. Predictors: (Constant), Time to Market, Delivery Dependability, Quality, Product Innovation										
b. Dependent Variable: Market Share										

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.394	4	2.099	7.749	.000 ^b
	Residual	16.520	61	.271		
	Total	24.914	65			
a. Dependent Variable: Market Share						
b. Predictors: (Constant), Time to Market, Delivery Dependability, Quality, Product Innovation						

Coefficients ^a													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.608	.572		1.063	.292	-.536	1.752					
	Quality	.142	.183	.124	.777	.440	-.223	.507	.451	.099	.081	.425	2.355
	Delivery Dependability	.201	.179	.168	1.119	.267	-.158	.559	.459	.142	.117	.484	2.068
	Product Innovation	.170	.246	.138	.690	.493	-.323	.662	.526	.088	.072	.271	3.690
	Time to Market	.271	.146	.268	1.860	.068	-.020	.562	.490	.232	.194	.524	1.909

a. Dependent Variable: Market Share