

**EVALUATION OF MARKETING STRATEGY AND SERVICE QUALITY AND ITS  
IMPACT ON SALES PERFORMANCE OF MEDICAL DEVICE SUPPLIERS; THE  
GHANA MARKET PERSPECTIVE**

KNUST

**By**

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## DECLARATION

I hereby make a declaration of this dissertation as my own work submitted towards the attainment of a Master of Business Administration Degree (Marketing Option) and that, to the best of my knowledge, there are no traces of materials previously published by another person nor contains materials accepted for the award of any other University degree, except where due acknowledgement has been made in the text.

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## ABSTRACT

The aim of the study is to evaluate marketing strategy and service quality and its impact on sales performance of medical device suppliers; the Ghana market perspective. The specific objectives of the study were to find out the effect of marketing strategy and service quality of medical device suppliers in Ghana, to determine the effect of marketing strategy on sales performance of medical device suppliers in Ghana and to identify the effect of service quality on sales performance of medical device distributors in Ghana. The study uses a sample of 146 medical device suppliers selected using the convenience sampling technique. The analysis was done using the multiple OLS regression technique. Based on the findings, it can be concluded that the marketing strategy used by medical device suppliers in Ghana goes a long way to improve their quality of service and also improves their sales. Furthermore, the service quality of these firms can also be used as a source of competitive advantage to improve their sales performance in the industry. Additionally, based on the study's findings, it was recommended that medical device providers in the nation aim to implement measures that would help them improve the level of customer service they provide, such as CRM tools that can be used to understand consumer needs. The study concludes by advising medical device providers to choose more assertive and narrowly focused methods that can be utilized to successfully respond to market changes since these strategies can assist them to readily respond to market demands and, as a result, improve their performance.

## DEDICATION

This thesis is dedicated to the Almighty God giving me the knowledge and understanding to undertake such an insightful research. Also, I dedicate this book my parents and my family.



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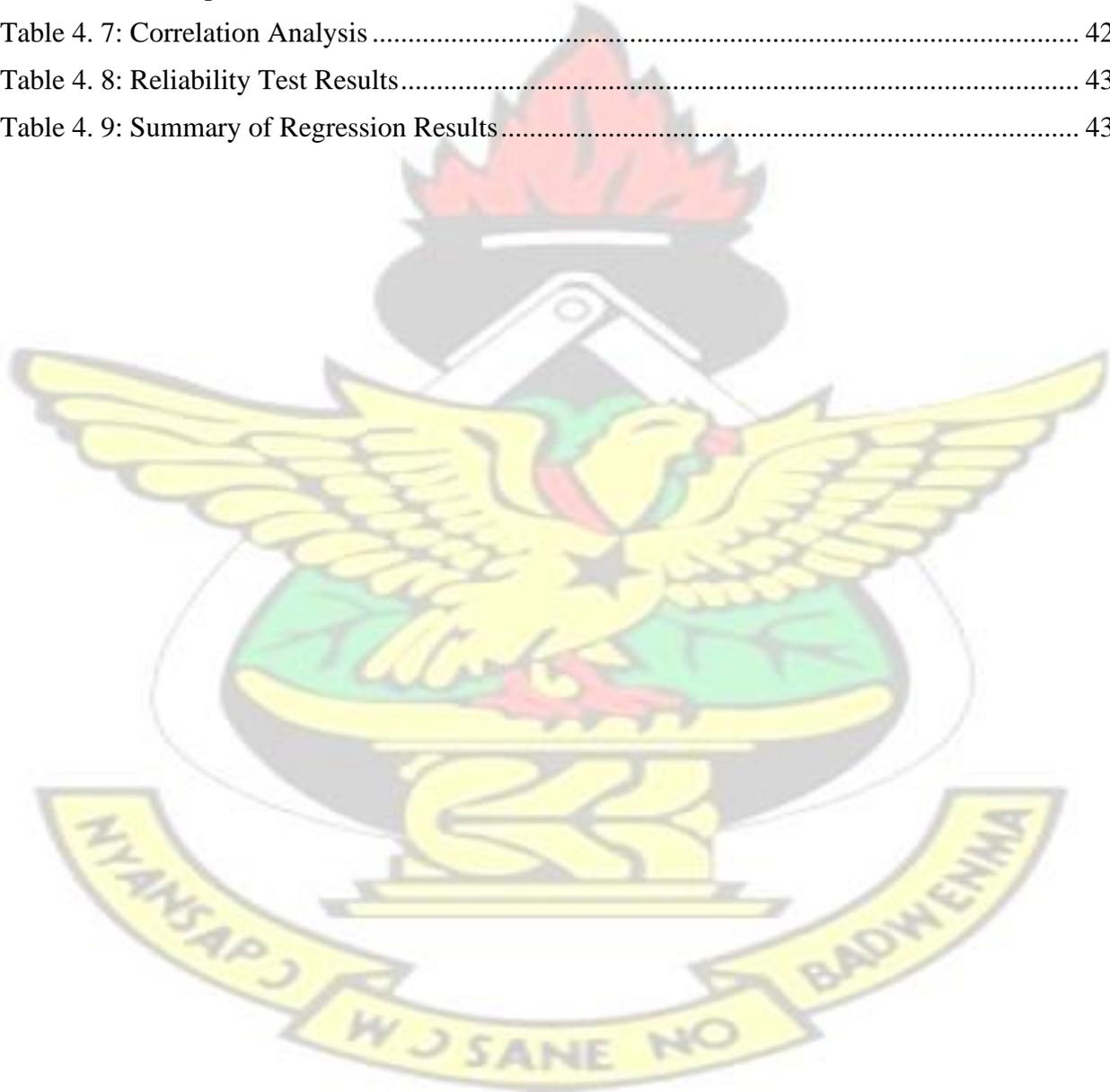
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## LIST OF ACRONYMS

CRM	Customer Relations Management
CSR	Corporate Social Responsibility
SM	Service Marketing
TCM	Total Quality Control Management
SPSS	Statistical Package for Social Science



# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

A general introduction to the study is intended to be provided in this chapter. The context of the study, the study's issue statement, its objectives, its research questions, and its significance are explored in this chapter.

### 1.2 Background of the Study

Healthcare is one of the most important issues and challenges facing society today, and it directly affects how economically efficient a nation is. Having a steady supply of the nation's essential medical devices is one of the key prerequisites for managing a functioning healthcare system, claim Katsikeas et al. (2019). This emphasizes how important it is for healthcare organizations to work with the medical device sector to enhance patient outcomes, reduce healthcare costs, increase efficiency, and find innovative methods to engage and empower people. A medical device, according to the World Health Organization (WHO), is any item, instrument, apparatus, or machine that is employed in the detection, measurement, restoration, correction, or modification of the structure or function of the human body for a health purpose.

Companies in the medical device industry are impacted by rapidly evolving technology; as a result, their business environments are extremely tumultuous, and management must create new tools, concepts, organizations, and ideas to satisfy market demand while preserving competitiveness (Ferrel et al., 2021; Hoerl & Snee et al., 2020). The cost base of medical device manufacturers must be optimized in order to manage price constraints, move resources to

markets with higher growth potential, invest in innovative solutions, market their products to a wider range of stakeholders, and meet ongoing performance requirements.

They use a range of methods to advertise their goods, including intermediaries, direct sales, and customer service. Medical device manufacturers now have the chance to build close, two-way relationships with stakeholders, frequently for less money, as healthcare professionals and patients increasingly use digital channels for medical information. The combination of personal and non-personal promotion presents potential and problems for medical device producers, according to a Cognizant article. The adoption of new technologies and analytical approaches, from social customer relationship management and marketing to multichannel promotion optimization models, has been prompted by the emergence of new information sources and the need to identify the best strategy for each channel and target audience.

However, the medical device sector is heavily regulated, and companies that produce medical devices must adhere to national laws in order to sell their goods on domestic markets. Panda et al. (2020) suggested that medical producers need to come up with a distinct strategic plan if they want to compete in these countries and beat the competition. Understanding the distinctive cultural environments of the markets and the potential opportunities in every country can help you choose the approach. Sub-Saharan Africa, which includes Ghana, is seen as a growing market for medical technology. Even though there are a few local offices or employees for medical device makers in Ghana, local businesses that represent these medical device brands control the majority of the distribution. Utilizing these suppliers has the advantage that they might already have a solid name in the country, making it simpler to introduce the product, and they might also invest in marketing this new product.

The medical device industry is fragmented, as seen by the enormous number of suppliers active in Ghana. As a result, the seamless availability of products and the overall operation of the medical device market are unsatisfactory, and this industry's performance needs to be enhanced. Medical device suppliers' performance is influenced by a variety of variables, some of which have to do with the company's marketing plan and level of customer service. If successful suppliers wish to compete in the marketplace of the future, they must put measures in place to enhance these aspects.

The effectiveness of a firm's operations can be impacted by its marketing strategy, which represents how a company interacts and interacts with its business environment (De Kervenoael et al., 2020). Contrarily, a company's strategy is its game plan for competing and surviving in a challenging environment. A medical device company's marketing strategy is crucial in determining whether its vision and mission will be accomplished. Marketing strategy, according to study by Morgeson et al. (2020), is a procedure that enables firms to concentrate their meager resources on the largest possibility to boost sales. There are a number of marketing techniques that, when properly applied, can transform any small or medium-sized firm from failure to success.

To thrive in today's market, it is crucial to have a solid and thorough marketing plan. Depending on the product, the firm, and the market environment, every marketing plan is unique (Kirylov et al., 2020). However, medical device suppliers also need to pay attention to the aspects of service quality. This is in addition to marketing strategy. By service quality, a business is implying that its quality standards fulfill customer expectations; hence, the better the level of customer satisfaction, the higher the subject business's performance is projected to be from repeat business

or word-of-mouth. The provision of high-quality services requires an act or an effort on the part of the company that cannot be carried out physically (Moisander et al., 2020).

Medical device suppliers' performance is influenced by the quality of their customer service and marketing plans, which contribute to the future development and expansion of their businesses. The ability of a company entity to run effectively, financially, withstand growth, and respond to environmental possibilities and dangers is typically referred to as performance (Wang, 2020). The concept of performance includes both behavioral and result measurements (Singh et al., 2020). Since many firms fail as a result of inadequate financial management or planning, performance evaluation is crucial to corporate operations. Most organizations will gauge the results of their sales performance using accounting-based sales measures.

The total amount of efforts put forth to deliver a good or service is referred to as sales performance. It also refers to a comparison between the volume of offers that are completed within a given period of time and the volume of sales that are anticipated (Sanchez-Teba, 2020). As a result, it is determined by the goods and services delivered in a specific time frame. In order to provide value beyond the device in 2030, medical device businesses would need to carefully assess their business and operating models, according to a report by KPMG in 2018. The purpose of this study is to investigate and assess how marketing strategy and service quality, two previously mentioned criteria, affect the sales performance of health device suppliers in Ghana.

### **1.3 Statement of Problem**

A complicated market has emerged in the medical device industry as a result of a number of factors, including heightened competition between domestic and foreign businesses, the rise of

more demanding customers, and significant technological advancements in medical devices. If a company delivers high-quality services that not only meet but exceed client expectations, its marketing approach may give them an edge over other businesses in this competitive market environment.

From the researcher's experience gained as a medical device sales professional, there is a realization that the market strategy and service quality among suppliers of medical devices on the Ghana market leaves much to be desired and there is more space for improvement. Thus, it has been noted that medical device suppliers find it extremely difficult to ensure service quality, manage the unique characteristics of their marketing strategy in order to meet the varying of potential and existing customers and subsequently compete in the target marketplace.

In order to assess the effects of marketing strategy and service quality on the sales performance of medical device suppliers on the Ghanaian market, this study is being conducted. There is no refuting that the relevance of variables of market strategy, quality service, and sales performance are of much importance in today's competitive medical device industry (Cromwell, 2018; Kohtamaki et al., 2020; Golgeci et al., 2020).

More importantly, an effort to review existing studies on the research problem also found generalized extant studies rather than an existing local study that involved the current research field. In consideration of the above gaps, the study is contextualized in suppliers of medical devices in Ghana.

#### **1.4 Research Objectives**

The main objective of this study is to evaluate marketing strategy and service quality and its impact on sales performance of medical device suppliers from the Ghana market perspective. However, the specific objectives are to;

1. Analyze and determine the effect of marketing strategy and service quality of medical device suppliers in Ghana.
2. Analyze and determine the effect of marketing strategy on sales performance of medical device suppliers in Ghana;
3. Analyzing and determine the effect of service quality on sales performance of medical device distributors in Ghana

#### **1.5 Research Questions**

The following research questions were designed to guide the study.

1. Does marketing strategy have significant effect on sales performance of medical device suppliers in Ghana?
2. Is there a direct relationship between marketing strategy and service quality of medical device suppliers in Ghana?
3. Does service quality have significant impact on sales performance of medical device suppliers in Ghana?

## **1.6 Significance of the Study**

This study aims to shed light on and better comprehend the significance of marketing plan and customer service to medical device suppliers. Medical device suppliers can create an efficient marketing plan and guarantee service quality by better understanding the effects of these variables. These strategies will be based on tried-and-true techniques. The findings of this study will help corporations establish marketing strategies that include high-quality service for medical equipment on the Ghanaian market since they will guide strategic decisions (Haenlein et al., 2020; Smith, 2015).

The study can be regarded as very significant in that it practically tends to highlight the nature of marketing phenomena of marketing strategy and service quality in the context of sales performance. This goes a long way to give much importance to these marketing issues.

Theoretically, it establishes the empirical relationships that exist among key marketing variables including; marketing strategy, service quality and sales performance, whose empirical measurements help direct the actions of business organizations towards achieving strategic objectives.

Policy-wise, it equips stakeholders concerned with the research proposition with the requisite know-how needed to make informed decisions in matters regarding marketing strategy, service quality and sales performance among medical device supplies in Ghana and even beyond.

## **1.7 Overview of Research Methods**

The research design employed in collecting, analyzing and interpreting the data is the case study strategy. The case study approach is adopted because the study concentrates mainly on medical device suppliers. Data is to be collected from suppliers of known medical device brands as well

as other key suppliers in Ghana all of which are registered with the Public Procurement Authority. Data will be collected using self-administered questionnaires. The questionnaires will be administered to top managers of these companies using purposive sampling technique. The structured questionnaires will be analyzed quantitatively with the use of SPSS (Statistical Package for Social Scientists) and the output to be presented in the form of tables and charts for easy interpretation and discussion.

### **1.8 Scope of the Study**

This study is being conducted with the view of evaluating the impact of marketing strategy and service quality on sales performance of medical device suppliers in Ghana. Due to time and resource constraints, it is important to restrict the study's focus to certain medical device providers in Ghana's Greater Accra and Ashanti Regions, which are home to the majority of the country's medical device suppliers. Using selected medical device suppliers will enhance the necessity for comparative analysis.

### **1.9 Organization of the Study**

The study is organized in five chapters. Chapter one consist of background of the study, problem statement, objective of the study, research questions, significance of the study, methodology, scope of the study and organization of the study. Chapter two covers the literature review whiles Chapter Three covers methodology the will be employed to conduct the study and organization profile. Chapter Four presents the analysis of data collected from the field. Chapter five also presents the summary of findings, recommendation and conclusion.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

In Chapter one of this study, the researcher focused on the general introduction of the entire study. The primary objective of this chapter is to review theoretical and empirical literature on service quality, sales performance and marketing strategy. Specifically, the chapter examines the key concepts of marketing strategy with focus on marketing capability, and other key concepts of service marketing and sales performance. In addition, both empirical and theoretical reviews are conducted to expose the researcher to the main issues under investigations.

#### 2.2 Marketing Strategy

Although different writers' definitions of marketing strategy differ in detail, the literature appears to contain a broad consensus regarding the content of marketing strategy, that is, a target market definition and a declaration of the product or value proposition targeted at that target are two essential elements of every marketing strategy, according to Paul & Criado (2020). They went on to say that this dual-component understanding of marketing strategy is sufficient to distinguish it from other marketing-related strategies and from non-strategic aspects of marketing management, such as tactical actions and strategies relating to other, non-marketing functions, like research and development or manufacturing. However, there was little guidance given regarding the caliber of a marketing approach.

According to a study by Dyllick & Muff (2016), no strategy can be created without first carrying out adequate planning because, generally speaking, a strategy outlines how to get from one location to the target location. It is crucial for a business to understand where it is right now and

where it wants to go. This would entail management making strategic choices on the company's objective. A key element in the success of a strategy is understanding how a firm will fight with its rivals and how it may position itself to gain a lasting advantage.

In summary, they came to the conclusion that once the study was completed and a strategy had been created, a business could begin putting the plans into practice. The competitive allocation of marketing resources is the behavior of interest in marketing. Understanding strategy begins with defining ambition. A company's strategic resource deployment must be in direct rivalry with the commitments of identified competitors if it has aspirations for a specific market share (Lyon & Maxwell, 2020).

In its simplest form, a marketing strategy consists of the tools and mechanisms required to steer an organization's production, promotion, distribution, pricing, relationship-building, and other operations (Donner et al., 2020). According to Farquhar et al. (2020), a marketing strategy is any feasible combination of four decisions linking strategic ambition to marketing mix components. The strategic marketing paradigm generates a large number of combinations that can be used for as many different marketing strategy instances as possible.

Marketing techniques are essential to the success of any business, and marketers face a variety of difficulties across all industries. However, Sayed et al. (2020) credit this to strict restrictions and the fact that purchase decisions are dependent on a number of considerations, including safety, efficacy, efficiency, and politics. Marketers in the medical device business face innovative and particular obstacles. In reality, marketing in the medical device sector necessitates a mix of business, scientific, and medical understanding. Because marketing methods in this area differ greatly from those in more conventional industries like the consumer products sector, medical

device companies must follow tried-and-true medical device marketing strategies in order for their advances to be accepted by the medical community (Shao et al, 2020).

Marketing, electronic content, prizes, exposed through trade shows and exhibits, direct marketing through sales teams, key opinion leader (KOL) initiatives, and scientific proof medicine (EBM) strategies are just a few of the marketing tactics used by medical device companies. Marketing in the healthcare field requires specialized knowledge and strategies (Owen, 2020; Heinonen, 2017).

### **2.2.1 Marketing Capability**

An integrated process called marketing capability is created to utilize corporate resources, knowledge, and expertise. Through the addition of value-added services to their products, it enables businesses to better meet the needs of their customers. Zemla (2020) defines a company's marketing capacity as its capacity to distinguish its goods and services from those of its competitors as well as to establish and preserve a powerful profitable brand.

Rahman (2020) discovered in a study on the effects of the marketing process on corporate performance that businesses that pay careful attention to their inputs in the marketing planning process will have much higher performance as a result. According to the marketing potential competitive advantage idea, businesses that focus on differentiating capabilities will significantly increase their competitive edge (Quesenberry, 2020).

Only when a marketing capacity is linked to high performance will it be useful. There are several scales available for evaluating marketing aptitude. Eight procedures are identified by Mady et al. (2020) for describing marketing competence. The quality of the sales team, supremacy in the

distribution and sales networks, allocation of necessary resources for advertising, marketing research, prowess in product differentiation, and speedy launch of new items are some of these. He thinks that developing marketing expertise is essential for gaining a competitive edge (Mintzber et al., 2020).

Other studies have identified a few other variables as benchmarks for measuring marketing capacity. These include market information management, sales, pricing, product creation, distribution channel management, marketing communications, and marketing plan and implementation. Customer happiness, market effectiveness, and present profitability are used as performance indicators in this way (Canhoto & Clear, 2020).

### **2.2.2 Market Strategy Measure**

Firms stake their futures on a collection of modern marketing tactics in an effort to establish differentiating advantages in product, promotion, place, and price (Bouncken et al., 2020). Marketing strategy is the result of the portfolio analysis's inputs (market share and primary demand growth rate). Henderson created portfolio analysis to be used in the creation of company strategies, but his strategic matrix did not have marketing as its main focus. His interests are in the divisional and strategic business unit (SBU) resource allocations. Because these are functional, not divisional issues, product portfolio analysis does not address the marketing issues of differential advantage in promotion, position, and pricing (Alamsyah et al., 2020).

It is crucial to avoid using classificatory systems when doing strategic marketing research of any particular investment choice because they divert attention away from the reasons why there is a potential for considerable competitive advantage (Blank & Dorf, 2020). He also said that according to PIMS statistics, costs and relative market share are inversely connected. The idea of

a marketing strategy, which was also put up by Kohtamaki et al. in 2020, adds a new layer to the intricate link between the price of securing a certain market share and the amount of that share. In contrast to the profit benefit of gaining market share, Kohtamaki et al. (2020) offered a fresh viewpoint on the costs of preserving market share. Military strategy concepts were also used into marketing literature.

These ideas have helped management concentrate their attention more directly on the impact of resource deployment in the marketplace when determining the impact of a firm's marketing strategy. The link between marketing strategy and rivals' behavior serves as the foundation for the operational measure of differentiated advantage provided here. In a new paradigm of marketing strategy, Kohtamaki et al. (2020) apply this idea to the marketing mix and construct a theoretical function connecting strategic aim with market share while introducing an operational measure of differentiated marketing advantage. He created a matrix centered on a company's products and its current and future markets, which was also considered by (Golgeci & Kuivalainen, 2020).

Companies can achieve their development goals by growing the market share of their existing products, taking into account the existing and new markets as well as the existing and new products (Katsikeas et al., 2019). The least dangerous tactic is this one. Maintaining market share in expanding marketplaces is regarded as growth in and of itself. In this situation, businesses frequently lower their prices while boosting sales, advertising, distribution methods, and other factors. They also mentioned that businesses look for new markets for their current items. If the business has a unique product or products, it will attempt to target a market segment that fits the product. Because it entails entering new, untapped markets, this is riskier than market

penetration. Additionally, businesses create new products for their current markets or modify and expand their current product portfolio.

This tactic is riskier than market penetration, much like market development. Additionally, businesses start new initiatives and operations that are unrelated to their current markets and goods. Because it involves both new markets and new products, this strategy is the riskiest one. When a high profit is assured by assuming a bigger risk, it is beneficial. However, other people think that diversification lowers risk by building a more varied and wide portfolio of items.

According to Katsikeas et al. (2019), additional research into the characteristics of these investments is necessary if marketing expenses are actually viable investment possibilities. He said that although the variables and their measurements vary from market to market, a basic number of variables and measurements for marketing investments can be found. Therefore, it is crucial to be more precise regarding the type of inputs. A limited list of the factors in the marketing mix where there may be considerable differential advantages is provided as a conclusion (Panda et al., 2020).

### **2.3 Service Quality**

Considered to be a key factor in determining competitiveness is service quality. An organization can stand out from competitors by paying close attention to the quality of its services and so establish a sustainable competitive advantage. High service quality is regarded as a crucial factor in determining the long-term profitability of both service and manufacturing firms, according to Kyrlov et al. (2020). Both current and potential consumers' inclinations to make subsequent purchases are influenced by service quality. According to market research, customers who are

unsatisfied with a service will tell more than three other people about it. As a result, it makes sense to draw the conclusion that poor service will result in fewer potential customers.

The Technical Assistance Research Project (TARP) estimates that acquiring new clients cost around four times as much. According to their data, a bad customer service experience is reported six times more frequently than a good one. Positive word of mouth has the potential to be a very effective technique for luring in new clients. When a firm is trying to recruit new consumers, the credibility and effectiveness of that endeavor can be severely damaged by unfavorable word of mouth (Wang et al., 2020). Customers are therefore more likely to switch to rival businesses that are thought to provide better service.

In general, it is seen as anything that is offered to a customer for the purpose of satisfying a want or need on both sides of the exchange process (Sanchez-Teba et al., 2020). To Sanchez-Teba et al., (2020) service can be regarded as a deed performed by one party for another. Wang (2020) refers to it as being the work done by one person or group for the benefits of another person or group. In sync with Zemke's viewpoint, Wang (2020) denotes it as the combination of outcomes (the results of service delivery to customers) and experiences (direct interactions with customers) delivered to, and received by customers in the target market (Sanchez et al., 2020).

Several researchers Sanche-Teba et al. (2020), who contributed to the concept of service, define service as any market-oriented activity or advantage that one party can provide to another that is primarily intangible and does not result in the ownership of something. When talking about customer happiness and service quality, the customer is the primary focus. Customers are crucial in determining how satisfied a company's customers are with a particular product or service. Paul & Criado (2020), who define satisfaction as the degree of feeling when someone describes a

comparison result on the product performance and/or service that was obtained and expected, are cited by Haenlein et al. (2020) in their definition.

According to Paul & Criado (2020), the five model dimensions of the Servqual (service quality) are palpable, reliable, responsiveness, assurance, and empathy (Donner et al., 2019). According to Grönroos, service quality has three components: the corporate image, the functional quality of the service interaction, and the technical quality of the conclusion. Image is influenced by technical and functional quality, price, external communications, physical location, website appearance, employee competency, and behavior (Donner et al., 2020).

They are interactive quality, corporate quality, which refers to the organization's image and profile, and physical quality, which comprises structures and supporting technology. The interaction between customers and employees of service businesses, as well as amongst customers, contributes to interactive quality (Dyllick & Muff, 2016).

### **2.3.1 Service Quality Measure**

The degree to which a service satisfies a customer's expectations is a measure of the service's quality. Both the service output and the service process have an impact on how quality is perceived. This suggests that the service outcome and actual service delivery procedure are compared to earlier expectations. The resulting comparison is how the apparent quality is created (Farquhar et al. 2020).

According to Geert Hofstede and Abraham Maslow, socio-cultural aspects can be linked to the determinants of service quality. Lyon & Maxwell (2020) identified four characteristics that separate country cultures in their benchmark study. Competence, civility, communication, and credibility are aspects of service quality that significantly correspond with two of Hofstede's

cultural dimensions. These are individualism/collectivism and power distance, which measure how much a society respects the unequal distribution of power in institutions and how closely or loosely linked a social structure is in a society, respectively.

Greater national wealth was shown to be related with lower power distance and individualism, and lower national wealth was found to be associated with higher power separation and collectivist. Finally, the Farquhar et al. (2020) hierarchy of individual demands is linked with the service quality characteristics of security and tangibility. It is believed that lower level requirements predominate higher level demands and control behavior until they are met. While people in rich countries have made significant progress in fully satisfying those requirements and are focused on addressing higher order demands, people in underdeveloped countries have yet to fully grasp and fulfill the lower - order needs.

#### **2.4 Sales Performance**

Both researchers and managers in sales and marketing must have a grasp of the variables that affect sales success and how they change depending on the circumstances. One of the most often cited studies in marketing research, Syed et al. (2020)'s foundational paper on the antecedents of sales performance was released 25 years ago. It has since influenced managerial and academic thinking on sales management (Shao et al., 2020). Shao et al. (2020) found six predictive categories to explain marginal variance in sales performance, namely role perceptions, skill levels, aptitude, motivation, personal characteristics, and organizational/environmental variables. They did this by applying a classification scheme of antecedents of sales performance previously developed by Owen (2020).

Additionally, their meta-analysis showed that the kind of products sold affected how well these categories predicted sales performance. The majority of empirical research has thus far examined persistent personal traits as predictors of sales performance. This meta-main analysis's takeaway was that these variables weren't the most significant predictors (Owen, 2020). Instead, Owen (2020) advocated for researchers to look into variables of sales performance that can be influenced. They also recommended concentrating on the dynamic character of sales (Zemla, 2020).

#### **2.4.1 Sales Performance Measure**

Since many businesses fail as a result of poor financial management or planning, measuring financial success is crucial to running one. Most organizations will gauge the results of their sales performance using accounting-based sales measures. Profitability is one of the most crucial aspects of financial performance. This is the capacity to turn a profit by raising more money than you spend overall. A company must take into account every connected expense involved in making a sale.

The quantity of sales required by a company to turn a profit can be influenced by marketing initiatives, production expenses, and supply costs. A company can discover the goods that are making the most money and concentrate on selling them by knowing the profit margin. While a profit of any kind is a good profit, successful businesses prioritize exceeding sales goals for their more lucrative products (Shao et al., 2020).

Sales performance can be evaluated by contrasting the projected sales and revenues from the sales budget with the actual sales and revenues. A negative price variation means that sales were made at a cheaper price than the norm, whereas a positive price variation means that sales were

made at a higher price than the norm, maybe as a result of a lack of market competition. A negative variation in sales volume implies that less products were sold than anticipated, maybe as a result of a decline in demand or increased market competition, whereas a positive variation in sales revenue indicates the exact opposite (Owen, 2020).

Additionally, there are several ways to measure sales performance, including sales volumes, calls or visits made or visits made, leads generated per person, and sales made per person. Customers are the most crucial component of any business, thus it's critical to keep them satisfied because only happy customers will be motivated to make a purchase and may even recommend it to other people. Product, salesperson, and/or business performance can all be used to gauge customer satisfaction (Rahman, 2020).

Customer relationship management is used by businesses to guarantee that they can retain long-lasting, high-quality relationships and win new business. For a corporation to know that its sales methods are working, this measurement is crucial. A company will measure both its retention and churn rates, and it goes without saying that a company will desire to maintain high retention rates and low churn rates (Quesenberry, 2020).

## **2.5 Marketing Strategy and Service Quality**

Health professionals may establish, interact with, and offer value to their target market with the aid of marketing. Instead of beginning with items or services, modern marketers start with the customer. Instead than ensuring a financial payment, they are more concerned with developing a long-lasting relationship. High customer happiness is their goal, as they want customers to stick with the same supplier. Marketing research, product design, delivery, pricing, marketing, promotion sales, and sales management are just a few of the classic techniques that marketers have

used. To complement these strategies and draw clients in with messages and offers, new ones based on cutting-edge technology and novel ideas are required (Purcarea, 2019).

Understanding that today's medical consumers prefer to look for evaluations or reference from customers who previously involved with the provider is crucial to understanding the impact of marketing techniques on the quality of services. Healthcare organizations and experts are no longer required to understand what is effective and ineffective. Healthcare professionals and organizations can make well-informed decisions about how to improve their efforts with the use of marketing performance data, which also gives them the ability to continuously analyze and evaluate them (Mintzberg et al., 2020). The quality of services is a key component of the marketing plan for the healthcare industry.

Successful healthcare organizations have a distinct, aggressive strategy that both empowers and compels them to adjust to changing conditions. Any healthcare organization's primary goal must be customer happiness, which necessitates a full understanding of their requirements and expectations. In order to deliver a high-quality healthcare service that meets the customer's expectations, several requirements must be met. The professional personnel of the companies in the sector must become more sensitive to the worries of healthcare consumers while also becoming more receptive to their wants, ideas, and complaints in order to win their trust. The success of this strategy depends on the medical organization's ability to effectively communicate with customers, present the right image of the product and service, provide the promised service as promised, and consistently show concern for service improvement to go above and beyond the needs of the customer (Rahman, 2020).

Service and product quality have an impact on customer satisfaction. Customer satisfaction has an impact on an user's purchase intentions, customer commitment, and ultimately, an organization's income stream. The success of a business is dependent on the caliber of its services and products since client happiness is directly correlated with a healthy revenue stream. The specific metrics used to judge quality of the product and quality of service are different from one another (Bouncken et al., 2020).

Alamsyah et al. (2020) define the quality of service effect on marketing mix strategy as the ability to generate satisfaction via the use of quality of service in accordance with customer needs. In other words, customer satisfaction will rise at a higher rate the better the quality of service offered. It was further highlighted that increased customer service offered by the business would result in greater local economic growth because it would directly contribute to local sustainable economic growth. Through the marketing mix approach, the level of service had an impact on the expansion of the local economy.

## **2.6 Marketing Strategy and Sales Performance**

Establishing a profitable and long-lasting stance against the factors affecting industry rivalry is the goal of marketing strategy. According to Mady et al. (2020), a strategy is a cohesive, all-encompassing, and integrated plan that integrates a company's strategic advantages with environmental concerns and seeks to ensure that the organization's core objectives are realized. Marketing and sales tactics can be employed to fend off competition, strengthen the company's position in the market, or expand business, according to Canhoto & Clear (2020). The type of strategy needed will rely on a variety of variables, with the key ones being the quantity and power of competitors, firm power, scale of the business, financial situation, and influence of the

government. Marketing strategies are created to communicate with clients, according to Mady et al. (2020).

Corporate performance and innovation are significantly impacted by marketing, which also has a big impact on business strategy. Effective marketing helps with sales and growth, and it has significantly increased market share growth in the highly competitive sector (Bouncken et al., 2020). According to research, marketing tactics are crucial for boosting sales results. For instance, Alamsyah et al. (2020) discovered that strategic marketing tactics interact with several elements to enhance performance and have a substantial impact on performance indicators. Marketing capabilities have a strong beneficial impact on customers, according to Blank & Dorf's (2020) analysis of the organizational assumption of marketing capabilities and their impact on business performance.

A marketing strategy's success can be evaluated in a variety of ways. Sales/revenues, net income, the number of devices deployed, the adoption rate, and market penetration are examples of common indicators. Each organization must collaborate with management to establish measures of success and strategies for achieving them. Whether a marketing plan fits into the market environment and if the offering satisfies the needs of potential clients is a key determinant in whether it succeeds or fails at any level. Today's marketing objectives include long-term strategic relationships in addition to growing market share, profitability, or client base at the expense of direct competitors (Mintzber et al., 2020).

## 2.7 Service Quality and Sales Performance

Service quality has also been linked to profitability through activities for customer retention (Kohtamaki et al., 2020). Over time, a wide range of studies have been conducted into relationship between service quality and performance. Golgeci & Kuivalainen (2020) for instance contend in their study that service involves a deed, a performance, or an effort that cannot be physically assessed. Implicit in this assertion is the tacit idea that an effective service quality delivery has direct link with performance in organizational context. In order to maximize long-term sales performance, businesses must build and maintain mutually beneficial relationships with loyal buyers (Katsikeas et al., 2020). This view is in sync with another study, which noted that service quality adopting firms enjoy improved sales performance over non-service quality minded firms (Ferrel et al., 2021)

It should come as no surprise that more and more business marketers are realizing the advantages of creating a formal system to supply high-quality services and/or products in order to track customers' perceptions of the caliber of customer support in retail stores (Katsikeas et al., 2019). Most of these cutting-edge companies are preoccupied with not only providing excellent customer service, but also assessing various degrees of client happiness, loyalty, relationship quality, and other non-financial company performance factors (Panda et al., 2020).

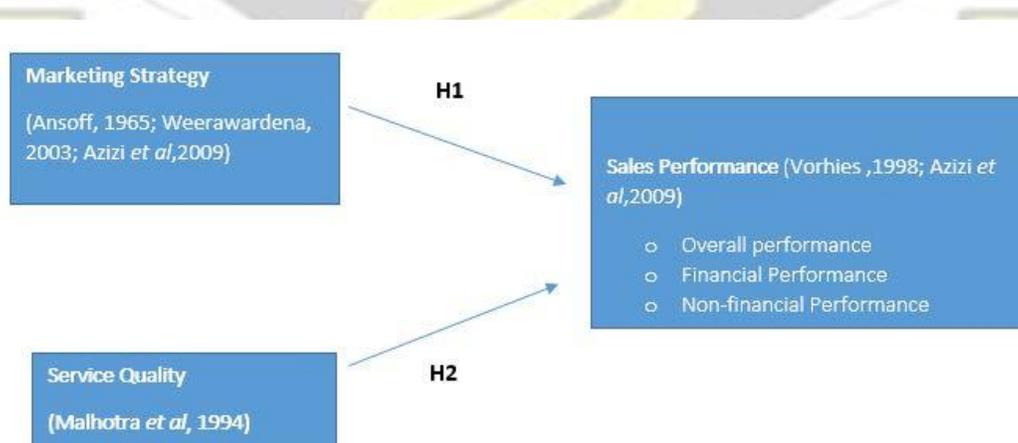
Hoerl & Snee (2020) establish that businesses who truly achieve high customer satisfaction also have superior economic returns in a thorough investigation of Swedish businesses. They discover that for the ordinary Swedish firm, a yearly rise of one point in customer satisfaction leads in a net present value that, over the course of five years, represents a cumulative increase of 11.5%. Similar to this, Golgeci & Kuivalainen (2020), who review the marketing literature linking customer satisfaction and service quality to performance, come to the conclusion that there is a

connection between quality and financial return; the challenge, however, is in offering practical methods for measuring the connection. Businesses' levels of business performance are favorably correlated with their level of service quality (Katsikeas et al., 2019).

Customer perception and a company's monetary performance have been demonstrated to be positively correlated, according to the Profit Impact of Marketing Strategy (PIMS) database. Companies that were thought to offer high-quality goods and services often had higher market shares, returns on investments, and asset turnover than those that were thought to offer low-quality products and services. This led to the conclusion that, over the long term, the organization's quality of goods and services given, in comparison to its competitors, is the most critical element impacting corporate performance (Moisander et al., 2020).

## 2.8 Framework & Hypotheses

The study models the pattern of assumed empirical linkages that exist among key variables that run through the literature review; including marketing strategy and its quality, service quality and sales performance. Figure 1 illustrates relationship that exists between the independent variables of marketing strategy and service quality and dependent variable of sales performance of medical device suppliers in Ghana.



## Figure 1.1 Conceptual Framework

Source: Author's own construct (2022)

Based on this assumed theoretical framework it can be hypothesized that:

**H1:** Marketing strategy and service quality has no effect on the sales performance of Medical Device Suppliers in Ghana.

**H2:** Marketing strategy and service quality has influence on the sales performance of Medical Device Suppliers in Ghana.

**H3:** Marketing strategy has no effect on the sales performance of Medical Device Suppliers in Ghana.

**H4:** Marketing strategy has influence on the sales performance of Medical Device Suppliers in Ghana.

**H5:** Service quality has no effect on the sales performance of Medical Device Suppliers in Ghana.

**H6:** Service quality has influence on the sales performance of Medical Device Suppliers in Ghana.

## CHAPTER THREE

### RESEACRH METHODOLOGY

#### 3.1 Introduction

This chapter is designed to explain the methodology adopted and the sources of data for the study. This part is an overall plan or structure designed to help the researcher answer the research questions raised. The main issues considered in this chapter are the research paradigms, population of the study, sample and sampling technique, sources of data, data collection, data analysis techniques, quality of research, research ethics and limitation issues.

#### 3.2 Research Paradigms

A research paradigm is a model or technique for conducting research that is recognized as the gold standard by a substantial number of experts in the field (Furbass et al., 2020). In order to get findings, a researcher must use either a qualitative or quantitative technique, depending on the research plan. Qualitative research, which aims to understand a specific aspect of social life, is distinguished by its procedures, which often result in words rather than numerical data for analysis (Eckhardt et al., 2020). In quantitative research, which normally tries to establish causal correlations between variables by producing numerical data, statistical techniques are used to evaluate the strength and significance of the associations. In this study, a quantitative research design is employed. Quantitative research designs are preferred because they enable statistical assessment of the relationship between marketing plan, quality of service, and overall sales (Wang et al., 2020).

### **3.3 Purpose of the Study**

The general plan for answering the research questions is known as a research design. It serves as the direction for gathering, measuring, and analyzing data. A study design can be categorized into various sorts. A study's design can be categorized based on its main goal. This objective could have an exploratory, explanatory, or descriptive nature. In areas that are understudied and where the researcher wants to learn more from the study, exploratory studies are frequently performed (Singh & Hess, 2020). Descriptive studies, on the other hand, aim for truthful accounts of the circumstances and events. Explanatory or causal studies aim to pinpoint potential causes and consequences (Moisander et al., 2020). The descriptive design serves as the study's framework. Descriptive design is widely used for explanatory investigations, which are typically in quantitative formats. The descriptive strategy was chosen since the investigation is quantitative and uses means and standard deviations.

#### **3.3.2 The population of the study**

According to Saunders et al. (2009), a population is the full set of cases from which a sample is taken. It is the collections of individual elements, which are the main focus of a study. In this study, the population consists of suppliers of medical devices in Ghana. According to records obtained from Public Procurement Authority, the number of medical suppliers is 1604.

#### **3.3.3 The sample and sampling technique**

A sample measurement represents a smaller segment of the population (Alamsyah et al., 2020). Blank & Dorf (2020) believe that error restrictions of less than 5 percent and self-confidence levels of greater than 95 percent are reasonable because no survey can ever be said to be error-free or to yield 100 percent certainty. Stevens et al., (2020) claim that a pattern is sufficiently

representative of the population if the pattern size is between 10 and 30 percent and the number of elements is greater than 30. A sample size of between 10 and 30 percent of the population, according to Zimmer (2020), is adequate to permit the generalization of results to the full population.

This representative sample is selected using the non-probability sampling procedure of convenience. The choice of this sampling technique is premised on the fact that, it is primarily easy means to collect essential data inexpensively (Nicholson & Perego, 2020). The subset of the population taken as the representative of the collection of companies who are the main focus of the scientific enquiry is estimated to be about **one hundred and forty-six (n = 146)** research elements selected from a sampling frame of medical suppliers in Ghana registered with the Public Procurement Authority.

This is calculated by utilising the Finite Population Correction (FPC) factor, expressed mathematically as  $n^1 = nN \div N + n - 1$ .

Thus given initial sample (n) of 160.4 (representing a thumb of rule of 10% of the total population of 1604) yields:

$$\begin{aligned} n^1 &= nN \div N + n - 1 \\ &= (160.4 \times 1604) \div (1604 + 160.4 - 1) \\ &= 257,281.6 \div 1,763.4 \\ &\approx 145.9 \end{aligned}$$

This representative sample is selected using the non-probability sampling procedure of convenience. The choice of this sampling technique is premised on the fact that, it is primarily easy means to collect essential data inexpensively (Nicholson & Perego, 2020).

### **3.4 Sources of Data**

In order to make decisions, information from many sources is gathered, sorted, and transformed into data. Data is gathered from a variety of sources. Primary and secondary sources of information were used to gather the data for this investigation. Primary data are those gathered through interviews, questionnaires, or direct observation with the intention of being used in research to address a specific issue (Stevens et al., 2020). Primary data are acquired for this study's aims via field research components using a questionnaire as a research tool. Secondary data are those that already exist and may have served another function. Here, secondary data is gathered from already published academic-focused works as well as other outside material received from corporate organizations and other pre-existing business documents. It is interesting that the pattern of relationships between variables can be clarified or redefined with the use of secondary data (Stevens et al., 2020).

### **3.5 Data Collection Methods**

In essence, research is about acquiring the data you need to respond to a question and subsequently assist you in solving an issue, claim Singh & Hess (2020). Since getting the data was one of the important parts of the work, the researcher had to determine which kind of data that would help him better answer the research problem. This study uses structured questionnaire as instrument for collecting data from respondents on the field. It has standardized, worded and sequenced research items that measure various variables. It has four main sections: A, B, C and D. In all, there are about forty-four standardized and sequenced research items in the questionnaire.

Section A provides standardization and uniformity in measuring the bio-data of research elements of: gender; age group, educational attainment level, controlled variable and level in the organization of respondents.

Section B contains items measuring the type of marketing strategy being adopted by medical device suppliers in Ghana. It measures the dimension for marketing strategy, which can be protective, offensive, or focused.

Items in Section C measure the quality of the services provided and take into account factors like dependability, ease of access, customer knowledge, ability to respond, competence, courtesy, interaction, and legitimacy by utilizing the dimension of service quality between developed and emerging nations developed by (Zimmer, 2020). Five-point Likert scale that ranges from: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree will be used to measure these concepts on the ordinal level of measurement.

Section D presents items that measured sales performance of medical device suppliers in Ghana as utilized by Bermudez-Forero et al., (2021) to measure the business performance of Iran's medical equipment sector. Likewise, Five-point Likert scale that ranges from: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree will be used to measure these concepts on the ordinal level of measurement.

The questionnaires will be submitted to medical device suppliers whom are public procurement authority of Ghana registered, representatives of reputable brands and/or popular on the market. Based on the fact that the researcher was in frequent and close touch with the concerned companies, more than fifty sizable, well-known companies active in Ghana's medical device industry will be targeted.

### **3.6 Data Analysis**

Raw data that is collected through questionnaire has little or no meaning to end users. Data collected must be analysed and presented in a manner that makes sense to users of such information. Data analysis is important because it enables the researcher to make conclusions and meaningful recommendations based on the study. The various data analysis techniques will be considered to determine the ones that are applicable for the study. Based on the nature of the research questions, descriptive statistics such as frequencies, tables and graphs were employed; in addition, the responses from the interview will be examined and presented based on the objectives of the study (Havers et al., 2020). The researcher will be assisted in describing the data and determining the level of agreement between the respondent and the numerous assertions under each factor by descriptive statistical methods. The Statistical Package for Social Sciences (SPSS) and Microsoft Excel will also be utilized for analysis in accordance with the secondary or derived data used to produce quantitative reports that have been introduced in the form of tabulations, proportions, means, and standard deviation.

### **3.7 Quality of the research**

The reliability and validity of the research are highlighted in terms of how well it serves the intended aim (Havers et al., 2020). Two important principles that define the quality of a research study are validity and reliability. The validity and dependability of a research study play a significant role in how broadly it can be applied. Validity refers to measuring what was supposed to be measured, whereas reliability refers to how consistently an instrument or piece of study assesses an attribute (Liu et al., 2020). A variety of measures were taken during the study's execution to guarantee the validity and trustworthiness of the results. First, a thorough study of

the literature was conducted to make sure that the design of the research instrument took into account all pertinent aspects. Second, the research instrument's content was developed based on earlier studies on the issue. The validation of the research instrument will be completed by using the Cronbach's alpha to gauge its dependability. The alpha value of the Cronback, 0.845, was achieved. It was indicated by this that the test was valid.

### **3.8 Research ethics and limitations**

The different rules that regulate the research process are known as research ethics. To guarantee that all persons involved in the research are handled with the utmost respect, the ethical problems must be taken into account. Studies that employ humans as the basis for analysis frequently face ethical challenges that must be resolved. Informed consent from study participants must be obtained, according to Liu et al., (2020). This is done by first outlining the study's historical context. Responders might choose whether or not to participate as a result. Additionally, it's essential to guarantee that the subjects are willing to participate and are aware of how the information will be used. The participants were informed of the study's purpose and nature. As a result, the researcher made sure that everyone who participated in the survey and interviews was anonymous in order to preserve the identities of the participants who participated in the study.

## CHAPTER FOUR

### PRESENTATION OF FINDINGS, ANALYSIS AND DISCUSSION

#### 4.1 Introduction

The chapter of this research is focused with the presentation of data collected from respondents, its analysis, and subsequent discussion. The chapter is crucial in supporting the researcher in reaching the previously stated study aims.

#### 4.2 Background Information of Respondents and Medical Device Suppliers

Table 4.1 shows the demographic distribution of the questionnaire respondents. The demographics include the industry of the responding party and company, the year of creation, ownership, legal form, revenue, gender, age, and position.

**Table 4. 1: Demographics of Respondents**

Item		Frequency	Valid Percent
<b>Gender</b>	Male	117	80.1
	Female	29	19.9
<b>Age</b>	25-29 years	16	11
	30-34 years	28	19.2
	35 years or >	102	69.9
<b>Education</b>	Secondary (SHS / SSS)	4	2.7
	Tertiary	77	52.7
	Post-graduate	65	44.5
<b>Years of Working</b>	< 1-year	2	1.4
	1-4 years	51	34.9
	5-9 years	45	30.8

	10-14 years	34	23.3
	15 years or >	14	9.6
<b>Level</b>	Top-level	103	70.5
	Middle level	34	23.3
	Lower level	9	6.2

Source: Field Study, (2022)

From the table above, it can be observed that with respect to gender of the respondents, 80.1 percent were male respondents while 19.9 percent were female respondents. This implies that majority of the respondents were male. Also, in terms of age, the analysis showed that majority of the respondents were between the ages of above 35 years and this represented 69.9 percent. This is followed by respondents who were between the ages of 30 to 34 years and represented 19.2 percent with the remaining 11 percent being between the ages of 25 to 29 years.

For educational level, 52.7 percent of the respondents had tertiary education while 44.5 percent had post-graduate certificates with the remaining 2.7 percent being SHS/SSS certificate holders. Furthermore, the analysis showed that in terms of the years of working, majority representing 34.9 percent had been working between 1 to 4 years while 30.8 percent had been working between 5 to 9 years with another 23.3 percent working for 10 to 14 years and 9.6 percent working for 15 years and more with the remaining 1.4 percent working for less than 1 year. For their level of employment in the company, the analysis showed that 70.5 percent are top-level managers while 23.3 percent are middle level managers with the remaining 6.2 percent being lower level employees. This implies that majority of the respondents are top level managers and hence they would be able to provide accurate information for the study.

**Table 4. 2: Characteristics of Medical Device Suppliers Sampled**

<b>Items</b>		<b>Frequency</b>	<b>Valid Percent</b>
<b>Employees</b>	1 to 9	73	50
	10 to 20	53	36.3
	21 to 29	9	6.2
	30 to 39	7	4.8
	40 or >	4	2.7
<b>Organization Age</b>	1-10 years	92	63
	10-20 years	44	30.1
	21-29 years	8	5.5
	30-39 years	2	1.4
<b>Ownership</b>	Sole proprietor	29	19.9
	Partnership	3	2.1
	Limited liability company	114	78.1

Source: Field Study, 2022

The table above shows the characteristics of the medical device suppliers sampled for this study. The first part of the analysis relates to the number of employees in the company. From the analysis, it can be observed that 50 percent of these suppliers had between 1 to 9 employees while 36.3 percent had between 10 to 20 employees. This is followed by 6.2 percent who had between 21 to 29 employees with 4.8 percent having between 30 to 39 employees and finally the remaining 2.7 percent having above 40 employees.

In terms of the age of the organization, the analysis showed that majority of the suppliers have been operating between 1 to 10 years and represented 63 percent while 30.1 percent had been operating between 10 to 20 years with another 5.5 percent operating between 21 to 29 percent while the remaining 1.4 percent had been operating between 30 to 39 years. Finally, with ownership, it was found that 78.1 percent representing majority were limited liability companies

whiles 19.9 percent were sole proprietorship with the remaining 2.1 percent being partnerships. This indicates that majority of the supplying companies are not owned by a single individual.

### 4.3 Descriptive Statistics

The descriptive statistics on the variables are presented in this section of the study. The descriptive covers the dependent and independent variables used in this study.

#### 4.3.1 Marketing Strategy

Table 4.3 presents the frequency distribution on the marketing strategy being employed by the medical device suppliers used in this study.

**Table 4. 3: Marketing Strategy of Medical Device Suppliers**

	Frequency	Valid Percent
Our company tries to retain its current market share (defensive marketing strategy)	7	4.8
Our company tries to increase its sales volume via increasing sales to current customers (aggressive marketing strategy)	5	3.4
Our company tries to increase its sales volume via selling new products to current customers (aggressive	16	11
Our company tries to increase its sales volume via selling current products to new customers (aggressive	50	34.2
Our company tries to increase its sales volume via selling new products to new customers (aggressive marketing strategy)	63	43.2
Our company tries to concentrate on profitable segments and give up other segments (focus marketing strategy)	5	3.4
<b>Total</b>	<b>146</b>	<b>100</b>

Source: Field Study, 2022

From the table above, it can be observed that the most used marketing strategy by 43.2 percent of the suppliers was aggressive marketing strategy being “Our company tries to increase its sales volume via selling new products to new customers”. This is followed by 34.2 percent who used an aggressive marketing strategy in the form “Our company tries to increase its sales volume via selling current products to new customers”. Furthermore, 11 percent of the respondents uses the aggressive strategy in the form “Our company tries to increase its sales volume via selling new products to current customers”. Furthermore, 4.8 percent uses a defensive strategy in the form of “Our company tries to retain its current market share”. Finally, 3.4 percent uses aggressive strategy being “Our company tries to increase its sales volume via increasing sales to current customers” with another 3.4 percent also uses the focus strategy being “Our company tries to concentrate on profitable segments and give up other segments”.

#### 4.3.2 Service Quality

The descriptive statistics on the variables of service quality is presented in table 4.4 and covers the minimum, maximum, mean and standard deviation.

**Table 4. 4: Descriptive Statistics on Service Quality**

	N	Min	Max	Mean	Std. Dev.
The company places relative emphasis on technology	146	2	5	4.49	0.726
The company places relative emphasis on personnel	146	2	5	4.33	0.686
Non-personal contact means of connecting with customers is employed by the company	146	3	5	4.27	0.646
Personal contact means of connecting with customers is employed by the company	146	3	5	4.32	0.702
The company operates at a high level of relationship marketing	146	3	5	4.36	0.713

The company operate at a low level of relationship marketing	146	2	5	4.24	0.773
The company merely responds to customers' enquiries and satisfactorily resolve customers' complaints.	146	3	5	4.25	0.619
The company addresses customers' enquiries and resolved swiftly complaints.	146	3	5	4.18	0.743
The company focuses on the projection of competence down to the individual employees.	146	3	5	4.1	0.692
The company focuses on the projection of competence as being centralized in the organization.	146	3	5	4.29	0.724
The company places relatively more emphasis on respecting an individual's privacy and right.	146	3	5	4.25	0.594
Relative emphasis is placed on social norms by the company.	146	1	5	4.05	0.82
The company provides detailed and complex information to customers.	146	3	5	4.05	0.625
The company provides basic information to customers.	146	1	5	4.1	0.9
Credibility of the company is established based on performance standards.	146	3	5	4.24	0.708
The company places greater emphasis on tradition.	146	2	5	4.2	0.73
<b>Opinion Index</b>				4.2325	

Source: Field Study, 2022

From the table above, the first item “The company places relative emphasis on technology” recorded a mean of 4.49 and a standard deviation of 0.726 which implies that majority of the respondents agrees to this question. Also, the second item recorded a mean of 4.33 with a standard deviation of 0.686 which implies that majority of the respondents agrees that “The company places relative emphasis on personnel”. Furthermore, the third item recorded a mean of 4.27 with a standard deviation of 0.646 which implies that majority of the respondents agrees that “Non-personal contact means of connecting with customers is employed by the company”.

The next items also recorded means of 4.32 and 4.36 which implies that the respondents agree to the items “Personal contact means of connecting with customers is employed by the company” and “The company operates at a high level of relationship marketing” respectively.

In addition, the items “The company operate at a low level of relationship marketing” and “The company merely responds to customers’ enquiries and satisfactorily resolve customers’ complaints” recorded means of 4.24 and 4.25 respectively and shows that the respondents agree to the practice of these items. The next items also saw means of 4.18 and 4.10 respectively and also goes to show that the respondents agree that “The company addresses customers’ enquiries and resolved swiftly complaints” and “The company focuses on the projection of competence down to the individual employees”.

“The company focuses on the projection of competence as being centralized in the organization” recorded a mean of 4.29 which shows that the respondents agree to the practice of this question while a mean of 4.25 was recorded for “The company places relatively more emphasis on respecting an individual’s privacy and right” which also indicates that the respondents agree to the practice of this question. Furthermore, the next item recorded a mean of 4.05 which indicates that the respondents agree that “Relative emphasis is placed on social norms by the company”. This is followed by the next item which recorded a mean of 4.05 indicating that the respondents agree to “The company provides detailed and complex information to customers” and 4.1 which shows that the respondents agree that “The company provides basic information to customers”. “Credibility of the company is established based on performance standards” and “The company places greater emphasis on tradition” both recorded means of 4.24 and 4.20 respectively and shows that the respondents agree to these. The overall opinion index of 4.23 shows that

irrespective of the different responses, majority of the respondents agrees to the questions on this variable.

### 4.3.3 Sales Performance

The descriptive statistics on sales performance is presented in table 4.5 below showing its mean and standard deviations. The first is financial performance of the medical device suppliers and the second is the non-financial performance.

**Table 4. 5: Descriptive Statistics on Financial Performance**

	N	Min	Max	Mean	Std. Dev.
My company has a high market share compared to our competitors.	146	3	5	4.33	0.686
The company has increasing profit.	146	3	5	4.35	0.617
The company has an increasing sales volume to current customers.	146	2	5	4.16	0.734
The company achieves profitability of our standard business units.	146	3	5	4.29	0.664
The company has high return on investment.	146	1	5	4.22	0.809
The company attains a high profit to sale ratio.	146	3	5	4.31	0.71
The company achieves its financial objectives.	146	3	5	4.24	0.746
<b>Opinion Index</b>				4.271429	

Source: Field Study, 2022

From the table above, it can be observed that the first item recorded a mean of 4.33 with a standard deviation of 0.686 which indicates that majority of the respondents agrees that “My company has a high market share compared to our competitors” also, the next item recorded a

mean of 4.35 which implies that majority of the respondents agrees that “The company has increasing profit”. In addition, the next item recorded mean of 4.16 which indicates that the respondents agree that “The company has an increasing sales volume to current customers”. Furthermore, the next item recorded a mean of 4.29 which implies that majority of the respondents agrees that “The company achieves profitability of our standard business units” while the next item recorded a mean of 4.22 which implies that majority of the respondents agrees that “The company has high return on investment”. The next items also recorded means of 4.31 and 4.24 respectively which indicates that the respondents agree that “The company attains a high profit to sale ratio” and also “The company achieves its financial objectives”.

**Table 4. 6: Descriptive Statistics on Non-Financial Performance**

	N	Min	Max	Mean	Std. Dev.
Our customers are satisfied.	146	1	5	4.18	0.887
Our customers receive value.	146	2	5	4.03	0.796
Our customers receive what they want.	146	2	5	4.16	0.752
My company has the ability to absorb new customers.	146	1	5	4.2	0.868
My company has the ability to retain existing customers	146	1	5	4.11	0.976
<b>Opinion Index</b>				4.136	

Source: Field Study, 2022

From the above, it can be observed that the first item on non-financial performance recorded a mean of 4.18 which implies that majority of the respondents agrees that “Our customers are satisfied”, also, the next item recorded a mean of 4.03 which also implies that the respondents agrees that “Our customers receive value”. The third item recorded a mean of 4.16 followed by a mean of 4.20 which also implies that the respondents agrees that “Our customers receive what

they want” and “My company has the ability to absorb new customers” respectively. Finally, the item “My company has the ability to retain existing customers” recorded a mean of 4.11 which indicates that majority of the respondents agrees to this question.

#### 4.4 Analysis of Findings

In order to perform the analysis on the data, the study first conducted a few tests on the variables to ensure that when used for the analysis, they may not cause any problems with the results.

##### 4.4.1 Correlation Analysis

The table below presents the correlation analysis on the variables in the study. The objective of which is to determine if there is a strong link between the variables that might impact the conclusion of the study. Table 4.7 shows that there is no perfect connection between the variables utilized in this research, and hence this data may be used for the analysis.

**Table 4. 7: Correlation Analysis**

		<b>MktStrategy</b>	<b>SQ</b>	<b>FP</b>	<b>NFP</b>
<b>MktStrategy</b>	Pearson Correlation		1	.508**	.306**
	Sig. (2-tailed)			0	0
	N		146	146	146
<b>SQ</b>	Pearson Correlation	.508**		1	.576**
	Sig. (2-tailed)		0		0
	N	146	146	146	146
<b>FP</b>	Pearson Correlation	.306**	.576**		1
	Sig. (2-tailed)		0	0	
	N	146	146	146	146
<b>NFP</b>	Pearson Correlation	.363**	.559**	.706**	
	Sig. (2-tailed)		0	0	0

N	146	146	146	146
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Source: Field Study, 2022

#### 4.4.2 Reliability Test

The reliability test is done to check that the items on the scale are accurate measurements of the variables utilized in this research. The Cronbach's Alpha test in SPSS was used to assess reliability. According to Robinson et al. (1991), the Cronbach's Alpha should be larger than 0.70, which is the recognized criterion. According to table 4.8, the Cronbach's Alpha of all variables was more than 0.70, indicating that the questionnaires would be highly efficient under identical study conditions.

**Table 4. 8: Reliability Test Results**

Item	No. of Items	Cronbach's Alpha
Service Quality	16	0.891
Financial Performance	7	0.795
Non-Financial Performance	5	0.830

Source: Field Study, 2022

#### 4.4.3 Regressions Tests Results

The summary of the regression results is presented in the Table 4.9 below:

**Table 4. 9: Summary of Regression Results**

Variables/Dependent	Model 1 (Service Quality)	Model 2 (Sales Performance)	Model 3 (Sales Performance)

<b>Main Effect</b>			
Marketing Strategy	0.508*** (7.084)	0.366*** (4.661)	
Service Quality			0.614*** (9.109)
<b>Control Variables</b>			
Ownership	0.055 (0.745)	0.061 (0.748)	0.02 (0.296)
Age	0.117 (1.583)	0.055 (0.686)	-0.013 (-0.185)
Employees	0.066 (0.912)	0.057 (0.724)	0.017 (0.259)
Constant	3.142*** (17.88)	3.293*** (14.775)	1.165*** (3.404)
R-Square	0.285	0.144	0.378
Adjusted R-Square	0.264	0.120	0.361

\*\*\*=Significance at 1%, \*\*=Significance at 5%, \*=Significance at 10%. T-statistics in brackets.  
Source: Field Study, 2022

#### 4.4.4 The Effect of Marketing Strategy and Service Quality

From table 4.9 above, it can be observed that model 1 looks at the effect of marketing strategy on service quality whiles controlling for the effects of ownership, age of the organization and number of employees within the organization. From the model, it can be observed that the independent variable marketing strategy, recorded a coefficient of 0.508 which was found to be significant (t=7.084) which implies that marketing strategy has a positive and significant

influence on service quality. Furthermore, the study controls for ownership which recorded a coefficient of 0.055 which was however insignificant, therefore indicating that ownership type has no influence on service quality. Also, age of firm recorded a coefficient of 0.117 which was also found to be insignificant also showing that firm age has no influence on service quality. In addition, number of employees recorded a coefficient of 0.066 which was however insignificant further indicating that number of employees has no significant influence on service quality. The model recorded an overall R-squared of 0.285 which implies that the model can explain up to 28.5 percent of the changes in service quality.

#### **4.4.5 The Effect of Marketing Strategy On Sales Performance**

From table 4.9 above, it can be observed that model 2 looks at the effect of marketing strategy on sales performance whiles controlling for the effects of ownership, age of the organization and number of employees within the organization. From the model, it can be observed that the independent variable marketing strategy, recorded a coefficient of 0.366 which was found to be significant ( $t=4.661$ ) which implies that marketing strategy has a positive and significant influence on sales performance. Furthermore, the study controls for ownership which recorded a coefficient of 0.061 which was however insignificant, therefore indicating that ownership type has no influence on sales performance. Also, age of firm recorded a coefficient of 0.055 which was also found to be insignificant also showing that firm age has no influence on sales performance. In addition, number of employees recorded a coefficient of 0.057 which was however insignificant further indicating that number of employees has no significant influence on sales performance. The model recorded an overall R-squared of 0.144 which implies that the model can explain up to

#### **4.4.6 The Effect of Service Quality On Sales Performance**

From table 4.9 above, it can be observed that model 3 looks at the effect of service quality on sales performance while controlling for the effects of ownership, age of the organization and number of employees within the organization. From the model, it can be observed that the independent variable marketing strategy, recorded a coefficient of 0.614 which was found to be significant ( $t=9.109$ ) which implies that service quality has a positive and significant influence on sales performance. Furthermore, the study controls for ownership which recorded a coefficient of 0.02 which was however insignificant, therefore indicating that ownership type has no influence on sales performance. Also, age of firm recorded a coefficient of -0.013 which was also found to be insignificant also showing that firm age has no influence on sales performance. In addition, number of employees recorded a coefficient of 0.017 which was however insignificant further indicating that number of employees has no significant influence on sales performance. The model recorded an overall R-squared of 0.378 which implies that the model can explain up to 37.8 percent of the changes in service quality.

#### **4.5 Discussion of Findings**

The first objective of this study was to examine the effect of marketing strategy and service quality. From the analysis, it was evident that marketing strategy has a positive and significant influence on service quality. This implies that service quality is as a result of the strategy that the firm uses, hence higher marketing or more aggressive marketing strategies are expected to help improve a firm's quality of service. In terms of productivity and client loyalty, a company's marketing plan may result in increased profitability through superior quality (Amelia et al., 2019). Adopting a market strategy helps close perception gaps between management and

customers, improving corporate performance as a result of more efficient customer service (Voon, 2006). Therefore, a market-strategically minded company should produce premium service quality as a byproduct. The results of Amelia et al. (2019) who discovered that marketing strategy and direction play a significant influence in promoting service quality of service firms are compatible with this study.

The second objective of this study is also to examine the effect of marketing strategy on sales performance. From the analysis, the study found that marketing strategy has a positive and significant influence on sales performance of firms. This implies that when a firm adopts a more aggressive marketing strategy, it helps to improve its sales performance and this is found to be consistent with the findings of Ataman et al. (2010) who showed that long-term effects of marketing strategy exceed four times the short-term effects on brand sales.

The final objective looks at the effect of service quality on sales performance. From the analysis, it was evident that service quality positively influences sales performance of the firms in this study. It is crucial to recognize that higher quality can result in higher levels of operational performance. Customers' perceptions of the delivery service quality, including tangibles, dependability, responsiveness, and empathy, affect an organization's performance as measured by financial and value gain (Cook and Verma, 2002). Additionally, Gounaris et al. (2003) thought that service quality was a crucial element in helping a firm stand out from its rivals and acquire a durable competitive advantage. The findings confirm that of Ramayah et al. (2011) who found a positive effect of service quality on performance.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS & RECOMMENDATIONS

#### 5.1 Introduction

This chapter of the study reveals the summary of the findings of the study, conclusion that can be made from these findings and recommendations made based on the findings of this study. The chapter has three main sections that helps to address the above.

#### 5.2 Summary of Findings

The summary of the findings reveals the objectives of the study which identifies the effect of marketing strategy and service quality, the effect of marketing strategy on sales performance and the effect of service quality on sales performance.

##### 5.2.1 The Effect of Marketing Strategy and Service Quality

The first objective of this study was to examine the effect of marketing strategy and service quality. From the analysis, it was evident that marketing strategy has a positive and significant influence on service quality. This implies that service quality is as a result of the strategy that the firm uses, hence higher marketing or more aggressive marketing strategies are expected to help improve a firm's quality of service.

##### 5.2.2 The Effect of Marketing Strategy On Sales Performance

The second objective of this study is also to examine the effect of marketing strategy on sales performance. From the analysis, the study found that marketing strategy has a positive and

significant influence on sales performance of firms. This implies that when a firm adopts a more aggressive marketing strategy, it helps to improve its sales performance.

### **5.2.3 The Effect of Service Quality On Sales Performance**

The final objective looks at the effect of service quality on sales performance. From the analysis, it was evident that service quality positively influences sales performance of the firms in this study. Customers' perceptions of service quality, including tangibles, dependability, ability to respond, and empathy, have an impact on an organization's performance measured by financial and value gain. It is equally important to recognize that higher quality can result in higher levels of operating efficiency.

### **5.3 Conclusion**

The cost base of medical device manufacturers must be optimized in order to manage price constraints, move resources to markets with higher growth potential, invest in creative solutions, market their products to a wider range of stakeholders, and meet ongoing performance requirements. They use a range of methods to advertise their goods, including intermediaries, direct sales, and customer service. This business is fragmented, as seen by the enormous number of medical device providers active in Ghana. As a result, the seamless availability of products and the overall operation of the medical device market are unsatisfactory, and this industry's performance needs to be enhanced. Medical device suppliers' performance is influenced by a variety of variables, some of which have to do with the company's marketing plan and level of customer service. Successful suppliers must establish measures to improve on these factors if they want to compete in the marketplace of the future. Therefore, this study sort to examine the marketing strategy and service quality and their impact on sales performance of medical device

suppliers in Ghana. The study uses a sample of 146 medical device suppliers selected using the convenience sampling technique. The analysis was done using the multiple OLS regression technique. Based on the findings, it can be concluded that the marketing strategy used by medical device suppliers in Ghana goes a long way to improve their quality of service and also improves their sales. Furthermore, the service quality of these firms can also be used as a source of competitive advantage to improve their sales performance in the industry.

## **5.4 Recommendations**

Based on the findings of this study, the following recommendations are made for medical device suppliers and also for future studies.

### **5.4.1 Recommendations for Medical Device Suppliers**

- This study discovered that service quality contributes to medical equipment companies' increased sales performance. In order to improve their performance, the study advises medical device suppliers in the nation to try and implement measures that would help them increase the quality of service they are providing to customers, such as CRM devices that can be used to know customer needs and enhance their products and service delivery to meet those needs. The effectiveness of firms' quality initiatives depends heavily on their capacity to comprehend and address consumers' needs.
- Additionally, the study discovered that marketing strategy aids businesses in enhancing both their performance and service quality. Based on the aforementioned, the study advises medical device providers to use more aggressive and targeted methods that may

be utilized to effectively respond to market changes, as these strategies can assist them to readily adjust to market needs and so improve their performance.

#### **5.4.2 Recommendations for Future Researchers**

This study uses data 146 medical device suppliers in the country. However, it is worth noting that the number of medical device suppliers are more than 146. Therefore, the study recommends that future research should try and increase the sample size in order to provide a more conclusive evidence on the marketing strategy, service quality and sales performance of these medical device suppliers.

Furthermore, this study revolves around medical device suppliers however, the medical industry has a lot of suppliers and not only suppliers of medical devices. Therefore, future studies should consider examining this study using data from other medical suppliers in order to ascertain if the findings would be similar to this.

#### **5.5 Limitations of the Study**

The findings of the study can only be used in the health sector since that was the main population for the study. Also the study had a small sample size due to lack of resources and the presence of COVID 19 Pandemic which made it difficult for the researcher to get access to most of the respondents. Again, since the study used the quantitative approach, the study could not provide an exploratory analysis so the study lacked qualitative analysis.

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## APPENDICES

### KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF BUSINESS QUESTIONNAIRE

**Dear Respondent,**

This questionnaire collects a cross section of quantitative data as a requirement for an academic study at Kwame Nkrumah University of Science & Technology on the topic - **Evaluation of Marketing Strategy and Service Quality and Its Impact On Sales Performance of Medical Device Suppliers; The Ghana Market Perspective.**

You can contribute to make this study a success by responding to the questions in this research instrument. Your responses will be treated with the utmost confidentiality they deserve.

Thank You.

#### **SECTION A: GENERAL INFORMATION**

Please tick [] the option that best suits your response

1. Gender of respondent:

- Male
- Female

2. Age group cohort:

- 19 years or <
- 20-24 years
- 25-29 years
- 30-34 years
- 35 years or >

3. Educational attainment level:

- Basic (JHS / MS)
- Secondary (SHS / SSS)
- Tertiary
- Post-graduate
- Others

4. Number of years working in the company:

- < 1-year
- 1-4 years

- 5-9 years
- 10-14 years
- 15 years or >

5. Level of respondent in the organisation's structure:

- Top-level
- Middle level
- Lower level
- Non-supervisory level
- Others

6. What is the size of the organisation in terms of number of employees?

- 1-9
- 10-20
- 21-29
- 30-39
- 40 or >

7. How long has the organization been in existence?

- 1-10 years
- 10-20 years
- 21-29 years
- 30-39 years
- 40 years or >

8. Please indicate below the type of ownership of the organization?

- Sole proprietor
- Partnership
- Limited liability company
- Joint Venture
- Others

## **SECTION B: MARKETING STRATEGY**

Please mark only one option:

9. Which marketing strategy is being adopted by your company?

- Our company tries to retain its current market share (defensive marketing strategy)
- Our company tries to increase its sales volume via increasing sales to current customers (aggressive marketing strategy)
- Our company tries to increase its sales volume via selling new products to current customers (aggressive marketing strategy)
- Our company tries to increase its sales volume via selling current products to new customers (aggressive marketing strategy)

- Our company tries to increase its sales volume via selling new products to new customers (aggressive marketing strategy)
- Our company tries to concentrate on profitable segments and give up other segments (focus marketing strategy)

**SECTION C: SERVICE QUALITY**

INSTRUCTION: Please indicate the extent to which you agree or disagree with the following statements.

Please be guided by the following keys: Strongly Agree (SA); Agree (A); Neutral (N); Disagree (D); Strongly Disagree (SD).

Please answer by ticking [√] the appropriate boxes.

No.	Variables	Responses				
		SA	A	N	D	SD
<b>Service Quality</b>						
<b>a. Reliability</b>						
10.	The company places relative emphasis on technology					
11.	The company places relative emphasis on personnel					
<b>b. Accessibility</b>						
12.	Non-personal contact means of connecting with customers is employed by the company					
13.	Personal contact means of connecting with customers is employed by the company					
<b>c. Understanding/Knowing the customer</b>						
14.	The company operates at a high level of relationship marketing					
15.	The company operate at a low level of relationship marketing					
<b>d. Responsiveness</b>						
16.	The company merely responds to customers' enquiries and satisfactorily resolve customers' complaints.					
17.	The company addresses customers' enquiries and resolved swiftly complaints.					
<b>e. Competence</b>						

18.	The company focuses on the projection of competence down to the individual employees.					
19.	The company focuses on the projection of competence as being centralized in the organization.					
<b>f. Courtesy</b>						
20.	The company places relatively more emphasis on respecting an individual's privacy and right.					
21.	Relative emphasis is placed on social norms by the company.					
<b>g. Communication</b>						
22.	The company provides detailed and complex information to customers.					
23.	The company provides basic information to customers.					
<b>h. Credibility</b>						
24.	Credibility of the company is established based on performance standards.					
25.	The company places greater emphasis on tradition.					

#### **SECTION D: SALES PERFORMANCE**

INSTRUCTION: Please indicate the extent to which you agree or disagree with the following statements.

Please be guided by the following keys: Strongly Agree (SA); Agree (A); Neutral (N); Disagree (D); Strongly Disagree (SD).

Please answer by ticking [√] the appropriate boxes.

No.	Variables	Responses				
		SA	A	N	D	SD
<b>Sales Performance</b>						
<b>i. Financial Performance</b>						
26.	My company has a high market share compared to our competitors.					
27.	The company has increasing profit.					

28.	The company has an increasing sales volume to current customers.					
29.	The company achieves profitability of our standard business units.					
30.	The company has high return on investment.					
31.	The company attains a high profit to sale ratio.					
32.	The company achieves its financial objectives.					
<b>j. Non-financial Performance</b>						
33.	Our customers are satisfied.					
34.	Our customers receive value.					
35.	Our customers receive what they want.					
36.	My company has the ability to absorb new customers.					
37.	My company has the ability to retain existing customers					

**Thank You for Your Time!**

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