INFLUENCE OF PORTER'S FIVE FORCES ON THE COMPETITIVENESS OF SMALL AND MEDIUM-SIZED HARDWARE BUSINESSES IN IMENTI SOUTH SUB-COUNTY, MERU COUNTY, KENYA

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DECLARATION AND RECOMMENDATION

Declaration by Student

I declare that this thesis is my original work and has not been presented for a degree or other awards in any other university.

Signed: _____ Date: _____

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BUS-3-0256 -1/2016

Recommendation by Supervisors

We confirm that the work reported in this thesis was carried out by the candidate under our supervision.

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DEDICATION

This thesis is dedicated to my parents Mr. and Mrs. Kathurima, my wife Jane, my children Makena, Mwendwa and Mureti, and my friend Mutugi.

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ABSTRACT

Kenya aims to create internationally competitive and prosperous country's economy by supporting industrialization under the economic pillar as spelt out in vision 2030. Small and medium hardware enterprises play a critical role in this endeavor. However, the competitiveness in small enterprises hardware shops in Imenti South sub-county has continued to intensify to an extent of threatening their growth. This curtails the creation of a stable employment and can be a deterrent to affordable housing which is envisaged in Kenyan National Agenda 4. The purpose of this study was to assess the influence of porter's five forces on the competitiveness of hardware stores in South Imenti sub-county. It hypothesized that business rivalry, threat of new entrants, bargaining power of buyers, bargaining power of suppliers, and threat of substitute product have no significant influence on the competitiveness of hardware sector in South Imenti sub-county. The porters five competitive model was significant in guiding this study. Descriptive survey design was adopted. Data was collected from registered hardware stores in South Imenti using a structured questionnaire. Census sampling technique was used since population was small, 83. Content and construct validity ensured data quality, while Cronbach's alpha value was 0.767 which was used to test the reliability of the research instrument. Mean, standard deviation, and regression analysis were used in analyzing data which was presented using tables. Results indicate that all the five forces; threat of new entrants, competitive rivalry, bargaining power of buyers, bargaining power of suppliers and threat of substitute product were jointly statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti Sub-county, Meru County. However, when examining these forces separately, only competitive rivalry and threat of substitute products were found to be statistically significant in influencing competitiveness of hardware SMEs in South Imenti Sub-county, Meru County. It is concluded that the competitiveness of small and medium hardware enterprises in South Imenti Sub-county, Meru County is real and is largely influenced by competitive rivalry and threat of substitute products. The study recommends need for diverse innovative hardware products that are highly differentiated in terms quality and value addition. The hardware owners should utilize their economies of scale, foster collaborations and solidarity among themselves in order to push for quality products and better prices. This will also help to scale down business rivalry among traders. Manufacturers and major suppliers should embark on consumer awareness and education as well as on foster intensive promotion and advertising of various hardware products. Manufacturers should also control the quality of products to ensure value for money. The government should support the hardware sector by providing tax incentives in order to encourage local production/manufacture of quality hardware products. The findings of this study have enormous implications on business practices, pricing strategies, collaborations and poses challenge to the manufacturing companies to differentiate their hardware products in terms of the value they add.

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ACRONYMS AND ABBREVIATIONS

AICPA: Association of international certified professional accountants

SMEs: Small and Medium-sized Enterprise

US: United State

UNDP: United Nations Development Programme

GDP: Gross Domestic Product

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

This study was set out to do assess the influence of porter's five forces on the competitiveness of small and medium-sized hardware stores in Imenti south sub-county, Meru, Kenya. Michael Porter developed a model in 1979 which is widely referred to as Porters Five Forces Model. As the name implies there are five factors that describe how an industry's competitive environment is structured and measured. The five factors are: threat of new entrants, power of suppliers, power of buyers, threat of substitutes, which all contributes to the final factor Competitive Rivalry.

1.1.1 Competitiveness

Competitiveness arguments started in the 1980s, complementing the theories of Adam Smith, who was among the founding fathers of the classical economics. Other proponents included David Ricardo, Peter Drucker, Weber and, Schumpeter. Its full development was reached in the 1990s through the Michael Porter's publication. It was referred as the classical theory of economics. In the book the competitive advantage, Porter identifies the source of prosperity sustainability of global modern economy.

According to Teece (2010), competitiveness is the ability of a firm to offer products and services of high quality standards locally and internationally at competitive prices providing progressive returns for both employed and consumable resources. Indiatsy, Mwangi, Mandere, Bichanga and Gongera (2014); Minifie (2017) included the word

more effectively and efficiently to define competitiveness. The meaning in the trade sector was sustained success in global market without protection or subsidies. Even if transportation costs allow national firms to compete successfully in their local market or in adjacent markets, competitiveness usually refers to superior productivity obtained through competitive advantage. In the trade sector, competitiveness was measured through firms export quotient, firm profitability, foreign sales and international market share (Magaisa, Matipira & Kanhai, 2014). Performance in the traded sector, international marketplace provided a direct measure of the firm's competitiveness while in the non-traded sector, is defined as to matching ability of the best firms in terms of quality and cost of goods or services (Morrison, 2012).

Competitiveness, on one side comprises the ability of companies to compete in domestic and global markets. On the other side, it relates to the capacity of countries to support the development of businesses. For the markets to develop and work better, the sound policies are needed which are key part of the investment climate that can help investor confidence, and provide a level playing field for domestic small and medium-sized enterprises (SMEs). According to Schwab (2002) and Andrea (2010), the issue of competitiveness has become more relevant in terms of determining factors on which it is necessary to articulate the business success to achieve a competitive position in a given market, and what to do to maintain or improve that position in many companies in the US. The forces behind markets trigger rivalry in terms of sales and profitability. In developing counties however, Indiatsy, Mwangi, Mandere, Bichanga and Gongera (2014); and Hill (2010) noted that markets depend on time, effective competition, and are

usually harmed by inappropriate government policies and legislation, and by the anti-competition authority. Competitiveness is a multidimensional concept that involves different aspects, comparative advantages, competitive advantages, business strategies and results, among others (Teece, 2010; Indiatsy, Mwangi, Mandere, Bichanga & Gongera, 2014). The competitiveness of enterprises worldwide as noted by Ahmedova, (2015) is determined by efficiency and effectiveness, which includes, level of performance indicators, high resource productivity its complex character, and restricting enterprise competitiveness to high returns assets.

From a global perspective, many business organizations according to global competitiveness report of 2017-2018 are experiencing high levels of uncertainty as technology and geopolitical forces are increasingly getting reshaped by the economic and political order. Competition particularly among small enterprises is hence stiff due to generic and similarity in products and services (Grant, 2012; Wing & Lau, 2002). In Australia for example, small firms are highly concentrated although competition is not uniformly strong across the Australian economy (McGrath, (2013). To survival in the highly competitive industry, many small enterprises from developed countries such as Bulgaria usually conduct industry analysis in order to best defend themselves against competitive forces (Ahmedova, 2015).

In Africa, scholars such as Abuor (2014) noted a need for a framework through which competitiveness can be measured and understood. This is because; small enterprises in many African countries are less regulated. The majority rarely carry out industry analysis

using tool like the one that was developed by Michael Port. This causes serious disadvantages and culminates to poor planning and unhealthy competition (Nguyen, 2017). Pearce and Robinson (2010) described industry analysis is the basis of intelligent planning.

1.1.2 The Porters Five Forces Model

Michael Porter developed a model in 1979 which is widely referred to as Porters Five Forces Model. As the name implies there are five factors that describe how an industry's competitive environment is structured and measured. The five factors are: threat of new entrants, power of suppliers, power of buyers, threat of substitutes, which all contributes to the final factor Competitive Rivalry. If the conclusion is that there is a high competitive rivalry in the industry, it results in an unattractive environment.

Globally, organizations have used Porters Five Forces Model to address competitiveness as attested by studies such as by Siddiquee (2006) in Malaysia who identified that the characteristics of an entrepreneur which are considered in personality traits studies to examine whether factors have an effect on the business success (Teece, 2010).

Regionally, country like Botswana, Kenya and Uganda have used the Porters five forces to determine industry profitability because evidence exist to show that profitability influence the prices, costs and required investment of the firms. In determining the competitiveness, firms across various sectors and industries have used the Porters five forces model in attempt to understand the competition (Abuor, 2014; Barasa, 2010).

1.1.3 Small and Medium Sized Enterprises

The definition of Small and Medium sized Enterprise (SMEs) vary from one country to another. Some bases it on the number of employees while others are categorized according to the size of the business ranging from 500 employees to 500 employees. In Canada, small enterprises has less than 100 employee (U.S. Census Bureau, 2012) while in Africa, SMEs employ between 2 and 20 employees.

SMEs are very significant in supporting economic development. They create employment; generate income and leads to creation of wealth (Barasa, 2010). According to U.S Census Bureau Data of 2012, SMEs account for 99% and 48.4% of total employment, therefore making them important for innovation, economic growth and diversity. In African countries, SMEs in the formal sector contributes less than 20% to GDP as compared to 60% in developed countries. According to Sentsho, Maiketso, Sengwaketse, Ndzinge-Anderson and Kayawe (2007), small and medium enterprises in Sub-Saharan Africa are vehicles to employment, and job creation. Robinson further states that SMEs plays a critical role in nation building, nation advancement and a nation's innovativeness. According to the central Bank of Nigeria, 96% of businesses in that country are SMEs.

In South Africa, SMEs contribute to employment creation, wealth creation, poverty alleviation and income generation. However, they face numerous impediments, namely, lack of finance, lack of business skills and lack of operating space (Fiseha & Oyelana, 2017; Sentsho, Maiketso, Sengwaketse, Ndzinge-Anderson & Kayawe, 2007). According

to UNDP (2015) SMEs in Kenya share contribution to GDP has recorded increases through time, rising from 13% in 1993 to as much as 20- 25% between 2011 and 2014. The National Economic Survey (2018), SMEs in Kenya are vehicles for national development and play key role in poverty reduction. The report further shows that SMEs provide a sustainable opportunity to create numerous jobs and raise incomes for many households. Depending on the country, governments may use a range of policies to encourage the growth of SMEs. Inclusive growth can be achieved by positioning these SMEs to take advantage of the opportunities in the economy. The government of Kenya has mandated county government to come up with local trade and enterprise policy that would spur the growth of SMEs. The report however sites the unhealthy competitions among SMEs as a key deterrent to their growth across various sectors of the economy.

1.1.4 Hardware Sector in Kenya

The hardware sector is growing and transforming parts of Kenya. They are the cornerstone of all products quantity and quality. Over the past years, it has experienced significant changes in demand, financing, and technology that have caused the growth of hardware sector expenses, the need for restructuring, and public concern about hardware issues (Kenya National Bureau of Statistics, 2018). The sector is an important part of the history and economy of Kenya. It creates jobs and provide for workers throughout the counties and influences tax revenues in the counties. In today's world of do-it-yourself repairs and installations, learning how to start a hardware store could be one of the most lucrative business ideas available. This is not a small venture, however, and having a hardware store business plan were the difference between success and frustration. Not

only they needed a large space for your business, but also needed to stock that space with tools, materials, equipment and other necessity.

The booming real estate sector in Kenya has made hardware shops the most popular businesses across the country. The number of hardware shops is increasing every day where building of houses seems to be the only meaningful business going on. The Kenya National Bureau of Statistics report of 2018 indicated that the East Africa nation produces an average of 500,000 metric tonnes (MT) of cement in a month and consumes about 450,000MT (Xinhua, 2015). The Economic survey 2018 published by the Kenyan National Bureau of Statistics reported that approximately 148,000 people are formally employed in the domestic building and construction industry.

The 1999 National MSE Baseline survey by central bureau of statistics, International center for economic growth, and k-rep holdings Ltd established that there were 1.3 million SMEs in Kenya. According to Kenya National Bureau of Statistics (2018) estimated that there are 7.5 million SMEs in Kenya and the sector provides approximately 80% of employment and contributes over 92% of the new jobs created annually.

1.1.5 Hardware shops in Imenti South Sub- county, Meru County

According to the ministry of devolution and planning report of 2013, the unemployment rate in Meru County is high; at approximately 65% of the total labor force. It also has the highest level of poverty among the top five richest counties in Kenya. However, the opportunities to engage in business activities are curtailed by low investment in job

creation ventures, lack of financial resources and lack of business information (Meru County Government, 2013). Hardware sector is one of the categories of SMEs in Kenya which is growing at a high rate, hence contributing to the GDP, creation of jobs, income generating, and poverty alleviation.

The hardware subsector is a key contributor to the infrastructure and housing developments across the country. A casual look across the country and also specifically in Meru County shows numerous new infrastructure and housing projects coming up every other day. These projects require materials that are supplied largely by hardware dealers. The opportunity for growth of hardware in this county is equally characterized by increased competition which if not checked may lead to unprecedented growth.

1.2 Statement of the Problem

The Kenya vision 2030 is the country's long-term development blueprint which aims to create internationally competitive and prosperous country's economy; a key telnet that is transforming Kenya into an industrialized country (Government of Kenya, 2007). This is also supported by liberation of trade, which is meant to encourage competitiveness. Moreover, some of the key foundations for national transformation under the economic pillar are infrastructure, urbanization and housing (Kenya vision 2030); which are largely served by small and medium hardware enterprises (Kenya National Bureau of Statistics, 2018).

However, the competitiveness in these enterprises has continued to intensify to an extent of threatening their growth. In Imenti South sub-county, hardware stores, like other enterprises are witnessing intensified competition which is threatening the growth of SMEs (Meru County Government, 2013). According to porter (2008), industry structure and competitiveness are determined by the interplay of five forces that include bargaining power of buyers, bargaining power of suppliers, threat of new entrants, threat of substitute products, and intensity of industry rivalry. Many hardware dealers are not aware of the market forces (Njoroge, 2015) and hence, this study used the porters' model to analyze the competiveness in hardware sector in Imenti South Sub County. The intensive competition has been heightened by the many constructions of rental and commercial houses to meet the rising demand for housing. This situation is curtailing creation of stable employment and can be deterrent to affordable housing – one of National agenda

Consequently, the established hardware dealers are seeking to grow their market share while the new entrants are seeking to penetrate the sector and enjoy returns thereof. The situation is diminishing the wealth among the hardware owners hence forcing some of them to close doors. If the above problem is not addressed in time, may amounts to poverty due to loss of employment, the growth of hardware in Imenti South will decline and ultimately drag the desired economic development. None of the reviewed studies for example, Muteshi and Awino (2018), and Ngothi (2015) focused on hardware sector hence leaving a remarkable knowledge gap in terms of the context which this study sought to address.

1.3 The Purpose of the Study

The purpose of this study was to assess the influence of Porters five forces on competitiveness of small and medium hardware enterprises in South Imenti Sub-county, Meru County.

1.4 The objective of the study

The study sought to:

i. To examine the influence of barriers to entry on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

ii. To examine the effect of rivalry on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

iii. To assess the influence of bargaining power of buyers on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

iv. To examine the influence of bargaining power of suppliers on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

v. To assess the influence of substitute products on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

1.5 Research hypothesis

The following hypotheses of the study were tested:

- **Ho1:** The threat of new Entrants has no significant influence on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

- **Ho2:** Rivalry has no significant influence on competitiveness of hardware sector in South Imenti sub-county - Meru County.
- **H_{03}:** Bargaining power of buyers has no significant influence on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.
- **H_{04}:** Bargaining Power of suppliers has no significant influence on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.
- **H_{05}:** Threat of substitute products has no significant influence on competitiveness of hardware enterprises in South Imenti sub-county, Meru County.

1.6 Significance of the study

Small and medium hardware are very significant in contributing to national development and economic growth. However, very little have been done to improve competitiveness in the hardware sector with a view to fostering sustainable growth. The study was of great importance and act as a tool to educate and create awareness to different stakeholders as discussed below.

The manufacturer, as a stakeholder would understand how the hardware sector is important hence looking for ways of improving quality of the products. The government officials from various relevant ministries such as ministry of industrialization, enterprises, commence and trade development among others could understand how porter five forces

influence competitiveness of hardware sector. This would make these ministries to come up with policies that might improve hardware sector.

Besides, creating the framework conditions, setting the rules for competition and promoting entrepreneurial spirit, they would actively engage in, and promote, such approaches. The results of this study would enable other researchers to identify areas with a gap that is not filled and conduct a further research thus improving services provided to hardware sector.

More importantly, the study would contribute to new knowledge in the construction industry. Construction industry itself will appreciate the competing forces hence able to come with better coping strategies. The study would help hardware owners to overcome some of the challenges they have been facing and gain competitive advantages. The study would assist the society to set up small and medium sized enterprises hence contributing to the Gross Domestic Product in Kenya.

The findings of this study have enormous implications on business practices, pricing strategies and challenge the manufacturing companies to differentiate their hardware products in terms of the value they add. It is noted that hardware sector is essential in contributing towards achievement of affordable housing that is pursued in the big 4 agendas sought by national government in Kenya.

1.7 The scope and delimitations of the study

This study focused on assessing the influence of Porter's five forces on competitiveness of hardware SMEs. It specifically investigated the registered hardware enterprises within the Imenti South sub - County in Meru County, Kenya. The participants of this study were the hardware owners.

The study confined itself to the use of porters five forces model on competitiveness of small and medium enterprises. It did not investigate the financial performance of hardware stores but examined the competing capability aspects with a purpose of establishing their competitiveness.

1.8 The limitations of the study

In the process of conducting this study the researcher was faced with the lack of cooperation from some respondents and especially the hardware stores owners, since some viewed the time that was spent in filling the questionnaire as a wasting their precious business time. However, the research assistants expressed great patience with such respondents in order to get a high response rate. The questionnaire used Porters Five Forces as a framework while else there could be other factors that influence competitiveness for example regulatory, technology among others. The closed ended questions affected the respondents' answers to be somehow limited to the given choices. This probably meant that there are several other factors that affect the hardware's assessment of competitive environment.

The researcher relied and hoped that the information provided by hardware owners was correct although it was difficult to verify hundred percent. The researcher and the research assistants minimized the effects of this uncertainty by explaining to the respondents the importance of the study and assured them of the anonymity of the information. This made the respondents to feel free to give accurate information objectively.

1.9 Assumptions of the study

The study assumed that all respondents were cooperative and provided reliable responses. The participants answered the questionnaire questions in an honest and candid manner. It also assumed that the hardware's owners were aware of market forces and were employing competitive strategies in order to cope with the situation.

1.10 Definition of Operational terms

Competitiveness is defined as the ability to provide products and services as or more effectively and efficiently than the relevant competitors (Indiatsy, Mwangi, Mandere, Bichanga & Gongera, 2014).

Competitive advantage refers to the position of superiority within an industry that a firm has developed in comparison to its competitors (Business Dictionary).

Enterprise competitiveness as defined by Teece (2010) as the ability through continuous renewal, improvement to create and maintaining sustainable competitive advantages, leading to higher economic performance over long periods.

Small and Medium sized Enterprise (SMEs) refer to businesses with fewer than 500 employees on the other hand firms with 500 or more employees are classified as large businesses U.S .Government.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter constitutes a review of related literature on the use of porters five forces model in assessing the competitiveness of SMEs. For the purpose of systematic and orderly review of the related literature, the researcher focused on research objectives by giving international, regional and national perspectives. The literature reviewed was obtained from journals, books and other relevant information sources. The chapter starts by providing empirical literature, followed by a theoretical framework that guided this study. It concludes by providing a conceptual framework which demonstrates the relationship of the study variables.

2.2 Threat of New Entrants and Competitiveness of SMEs

Threat of new entry refers to the ease with which new competitors can enter the market if they see that the existing businesses are making good profits and then drive the existing prices down. When the profitability levels are high, it attracts new players in the market, which reduces profitability margin. The existing players may be having strong and durable barriers to entry, for example, patents, economies of scale, capital requirements or government policies, and then profitability will decline to a competitive rate (Barasa, 2010). According to Barasa, threat of new entry has the following features: time and cost of entry, specialist knowledge, economies of scale, cost advantages, technology protection and barriers to entry.

Legislation and government's action can be a barrier for new entrants. A study conducted by Schein (2010) stated that unregistered business has an implication on the organizational structure in the SME sector. The findings were related to Magaisa (2014) who found out that small and micro-enterprise operates without legal registration. It is the industry where no barriers to entry or to exit are contestable. This is because; price and profits tend towards the competition level regardless of the number of firms within the industry (Grant, 2012). Contestability depends on the absence of sunk costs for example investments whose values cannot be recovered. Absence of such costs makes an industry vulnerable to 'hit- and run' entry wherever established firms raise their prices above the competitive level (Grant, 2012; Ater & Orlovo, 2010).

Moreno-Izquierdo, Ramón-Rodríguez and Perles-Ribes (2016) conducted a study on pricing strategies of the European low-cost carriers and applied the Porter's five forces model. The analysis revealed that RIVFAC had a total percentage of 24% of the total variance defined by the PCA, had a positive effect on price fixing. Moreno further states that the sample concentration increased final fares, coinciding with the results obtained by (Puller & Taylor, 2012).

Thuong (2017) conducted a study on applying strategic analysis in business strategy to enhance competition and innovation in the Finnish construction industry. The analysis revealed that there was little switching costs as 95% of the company's offered work were based on rate per hour service, hence no switching cost quite similar to other companies in the Finnish construction industry. Thuong further stated that capital requirement for

property development depends and varies a lot on different projects, but mostly for the big ones, it accounts for 75% of the entire project.

Rachapila and Jansirisak (2013) found that economics of scale had an effectiveness score of 0.92, possibility score of 4.58 and weighted score of 4.20 in Thailand sweet corn industry. They further explain that economy production was facing barriers to perform due to the high cost of investment and inadequate inputs. Also noted was that new competitors were encountering challenges due to existing players who have strong capital base, production advantages, inputs, distribution channels and promotion. The study further noted that existing manufactures have strategies of reducing cost of production to create entry barriers for the new players from entering the industry. According to Rachapila and Jansirisak, for the new players to survive in the market, they have to develop strong penetration plans to attract buyers.

Rachapila and Jansirisak (2013) also examined the product differentiation which had an effectiveness score of 0.25, possibility score of 3.50 and weighted score of 0.88. They reported that, what manufacturers produced were similar commodities originally from same source, most of them lacking their own brand and those who had, produces for personal consumption and the number was insignificant in comparison to total production. The study noted that capital requirement had an effectiveness score of 0.75, possibility score of 4.08 and weighted score of 3.06. Therefore new players attempt to penetrate the market using the established channels to maximize production capacity and are able to survive all the year round. In the process, it is risky for; investment in assets,

geographical, procurement system development, quality management, commodities, as well as inventory management resulting in high operating costs.

Shariff (2014) examined barriers that threaten entry into the insurance industry. They includes: price wars, high operating costs, economies of scale, government regulation, technology, capital requirement, brand identity, product differences, existing partnerships by competitors, and fraud by lawyers. Shariff found that price wars scored a mean of 3.21, high operating cost 3.24, economies of scale 3.26, government regulation policy 3.48, expected retaliation by competitors 3.97, technology 3.73, capital requirement 3.23, brand identity 4.00, product differences 4.24, existing partnerships by competitors 4.27 and fraud by lawyers 3.28. The results show that the entry into insurance industry is largely affected by retaliation by competitors, brand identity, product differences, and existing partnerships by competitors. Correia et al (2012) observed that good management has better prices for new products and hence increasing the competition for the entry of low-cost airlines. Bachis and Piga (2011) noted that extent of the threat depends on existing barriers to entry and the combined reactions from existing competitors. These factors deter potential small scale competitors by giving them a significant cost disadvantage and a high capital requirement in various ways (Magaisa, Matipira & Kanhai, 2014).

The study by Zaridis and Mousiolis (2014) regards economies of scale as the decrease in unit cost of a product or service resulting from large-scale operations such as mass production. If in an industry where most established firms have large scale economies in

for example, production, marketing, distribution, service, financing, R&D, and other sectors, the new players ought to have proven abilities of either entering on a large scale or bearing the cost of underutilized capacity, or on a small scale and accepting high unit cost (Robert, 2007).

Brand loyalty as noted by Shariff (2014) makes it difficult for new entrants to venture into a new industry and thus reduces a barrier to entry by potential competitors since they may perceive the task of breaking down well established consumer preferences as too costly (Magaisa, Matipira & Kanhai, 2014). Magaisa, Matipira and Kanhai further notes that distribution channels are the path through which commodities flow from seller to the end consumer. Distribution channel determines how fast and how wide the product can diffuse (Coulter, 2010). The distribution channels normally include wholesalers, retailers, distributors, even the internet, and so on. David (2013) point out that because the limitation of the distribution channels, and the existing competitors have tied the distribution channels up, the new entrants are difficult to enter in the industry, sometimes they have to establish their own distribution channels. Taking manufacturing industry as an example, the reason why retailers reluctant to carry a new manufacturer's product could be the limited capacity within distribution channels (such as shelf space), risk aversion by retailers, and the fixed cost associated with carrying an additional product (Thuong, 2017).

Mutugi (2013) conducted a study on competitive analysis on bank loans interest in Meru County. He noted that there was a strong relationship between government regulation and

loan interest rate with a correlation of 0.114257 and standard error of estimate of 4.93403, where the confidence interval for the slope was -0.19321, the bivariate regression test was equivalent to 0.737998 for P- value and F. He concludes that the null hypothesis was accepted since the decision rule value of 0.119046 was less than the decision rule of 5.12, under level of significance 0.05. The findings were contrast with Piatkowski (2012) who advocated a policy of increasing interest rate.

Njambi, Lewa and Katuse (2015) conducted a study on porters five forces influence on competitive advantage in the Kenyan beverage industry. They carried out chi-square tests which indicated 33.8794 at 2 degrees of freedom. This value was > p value of 0.087. They rejected the null hypothesis. They also tested the correlation of the variables, which had value of 0.404($p<0.05$).The study found a positive correlation between competitive advantage and threat of new entrants. Finally, a multiple regression; $Y=2.466+0.289X_1$, Constant at zero, the attractiveness of the competitive advantage in the manufacturing industry was 2.466; a unit increase in the threat of new entrants lead to a 0.289 increase in desirability the competitive advantage in the industry. They concluded that the Kenyan beverage is attractive for long- term profitability hence can lure new entrants.

The above empirical literature on threat of new entrants indicated that barriers to entry or to exit are contestable. A sizeable number of researchers used chi-square tests while others used regression analysis to measure the variables and reported a positive correlation between competitive advantage and threat of new entrants. The studies have also isolated high cost of capital as a barrier to new competitors hence new entrants need

strong marketing plans to attract buyers. Other key determinants include economies of scale, technology, brand identity, partnership. It was however clear that the aforementioned studies have not clearly explained how the existing partnership by competitors influenced the competitiveness of the hardware sector in Kenya. Other issues that are insufficiently covered are how the technology advancement contributes to the growth of the hardware sector; what determines the degree of riskiness and uncertainties in any construction industry.

2.3 Competitive Rivalry among SMEs

Competitive rivalry refers to the strength of competition in the industry (Porter, 2008). The intensity of rivalry differs across industries and this may be due to various factors. Indicators of competitive rivalry are: number of competitors; capacity of competitors; quality differences; switching costs; customer loyalty; undifferentiated products or services, business size and market attractiveness (Barasa, 2010). Competition between the existing players is also one of the key to be considered by SMEs as reflected by Piatkowski (2012); Zaridis and Mousiolis (2014) who explained that how SME manage to maintain their size to be more competitive or to gain prerogatives over the large companies.

Rivalry is the competitive struggle between firms in an industry to gain market share from each other (Magaisa, Matipira & Kanhai, 2014). This force describes the intensity of competition between existing players (companies) in an industry. High competitive pressure results in pressure on prices, margins and profitability for every single company

in the industry. This is determined by the number of players of about the same size, number of players with similar strategies, differentiation between players and their products, price competition, market growth rates and barriers for exit.

The competitor is the first to be dealt with in competitive environment (McGrath, 2013). Diversity of rivals (competing rivals within an industry) has to fight in order to capture the market and thus develop very diverse ideas of how to compete. Warren (2008) explains that the competitive rivalry is varied because of the diversification of the origins, objectives, costs and strategies. The intensity of price competition depends on the different strategies (Warren, 2008).

Lad (2015) conducted a study on the effect of strategy implementation on competitive advantage for SMEs in Nairobi central business sub-county. Lad found that the coefficient of determination value of 0.501 which indicated that 50 percent of competitive advantage in SMEs was derived from the organization structure, which was significant at P value of 0.000 from the ANOVA table. Lad further states that there is a positive significant relationship between the elements of organization structure and competitive advantage. This indicated that surviving organizations kept on flexing their structures which created competitive advantage over their rivals.

Competitive rivalry leads to decrease of market shares, war prices hence lower profits (Rachapila & Jansirisak 2013). Rachapila and Jansirisak (2013) reported factors for measuring competitive magnitudes as follows: number of competitors, relative size of competitor, industry growth rate, fixed costs Vs variable costs, product differentiation,

capacity augmented in large increments, buying switching costs, density of competitors, exit barriers, and strategic stakes. The number of competitor had an effective score of 0.92, possibility score of 4.75, and weighted score of 4.35. These researchers noted that the most players shared the market and competed fiercely. They also noted that relative size of competitor had an effective score of 0.50, possibility score of 2.83, and weighted score of 42. There was an attempt for industry cluster for players, use of alliance strategy in the large medium, and small players; industry growth rate had an effective score of 0.75, possibility score of 4.42, and weighted score of 3.31. There was decrease of exportation of products caused by the lack of products; fixed costs Vs variable costs had an effective score of 0.92, possibility score of 4.50, and weighted score of 4.13. These included the value of machines, location and area, the manufacture needed to maintain high production to reach the best value. However they noted that it was highly risky if the demand of products decreases which it would cause an oversupply. This would further cause a price war.

Earlier on, Wing and Lau (2002) suggest that a competitive advantage can be developed from particular resources and capabilities that the firm possesses and which allow the firm to create superior value, relative to competitors. The transformation of available skills and resources into a strategic position can only take place under conditions that provide a customer benefit, and normally requires the transformation of multiple competitive methods (Barney, Wright & Ketchen, 2001).

Porter (2008) noted that to be a winner, a firm has to create, exploit, and sustain its competitive advantages vis-a-vis rivals and it has to do so consistently if it wants to be a perennial winner. Competitive advantage comes in various shapes and sizes. Understanding the anatomy of competitive advantage helps general managers improve their firms' chance of gaining and sustaining of competitive advantage hence their chance of winning. Strategy is about winning. Strategy involves choice. It involves choice of a firm's scope of product market activities David (2013) as well as the combination of its resources and capabilities (Coulter, 2010). Ahmedova (2015) points out that the competitive advantage theory suggests that everyone is better off if decisions are made based on the competitive advantage at all levels: national, organizational, local and individual. They noted that it involves asking for optimal utilization of resources and the globalization of manufacturing and services across the world as if we lived in a borderless society. This is because organizations are able to establish and gain success in other countries far from their original base.

Morrison (2012) observed that three distinct conditions must exist for a firm to gain competitive advantage. Customers must see a distinct difference between the firm’s product and those of competitors. Additionally, there must exists a capability gap between a firm and its competitors in form of specific differences in physical resources and operating systems. Lastly, the distinctive product attributes and capability gap must be enduring. Absence of such differentiation usually gives rise to competitive rivalry among firms.

The above empirical literature has indicated that rivalry occurs when competitors sense the pressure or act on an opportunity to improve their market segment. The intensity of rivalry differs across industries. It is clear that competitive rivalry leads to decrease of market shares, and war prices hence lower profits. It is also clear that similarity of products in the market pave way for competitiveness. As competition intensifies, competitors who are weak are not able to survivor in the market. The studies have revealed that there exist a relationship between rivalry among established firms and competitive advantage. Firms use their competitive advantages to stay ahead of other players. Through multiple regression, prices of products and services stood out as the strongest determinant of the degree of rivalry among existing small and medium sized enterprises in developed and developing countries, and that the intensity of price competition depends on the different strategies. However, most empirical literatures emphasizes competitive advantage argument when making the competing decisions of which there could other considerations, approaches and bases for conclusions.

2.4 Bargaining Power of Buyers and Competitiveness of SMEs

Bargaining power of buyers refers to the strength of the customers to drive down the prices (McGrath, 2013). It is also an assessment of how easy it is for buyers to drive up the prices. This is driven by the: number of customers in the market; size of each order; differences between competitors; price sensitivity; importance of each individual buyer to the organization; ability to substitute; and cost to the buyer of switching from one supplier to another (David, 2013). If a business has just a few powerful buyers, then those customers are often able to dictate terms (Barasa, 2010).

The buyer's pressure forces the market players to reduce the price and improve the quality of the products. This was demonstrated by Rachapila and Jansirisak (2013) who pointed out nine areas of concern namely: number of buyers relative to sales, product differentiation, switching costs to use other product, buyers profit margins, buyers use of multiple sources, buyers threat of backward integration, sellers threat of forward integration, importance of product to the buyer and buyers volume. Now, the statistics of each were provided as the number of buyers relative to sales had effectiveness score of 0.75, possibility score of 4.17, and weighted score of 3.13. This implies that the traders had a negotiation power as they used pre-sale, concludes that it was easier to manage than selling products to too many smaller traders. In this study, product differentiation had effectiveness score of 0.92, possibility score of 4.50, and weighted score of 4.13. However, the resistance level between the manufactures was low because the buying power belongs to the buyers and the managers who kept the costs lower than others were able to successfully make the sale without being resisted by others.

According to Rachapila and Jansirisak (2013), switching costs to use other product had effectiveness score of 0.75, possibility score of 4.75, and weighted score of 3.56. This indicated that there are risks of shifting to those who offer a lower price. Other determining factors were delay in delivery, poor quality and being sued by customers. The study also reported that buyers' profit margins had effectiveness score of 0.67, possibility score of 4.33, and weighted score of 2.89. In this case, buyers attempt to lower the cost and pressure the manufacturers by negotiating terms, then the buying/ selling prices accepted by both ends.

Rachapila and Jansirisak (2013) argued that buyers' use of multiple sources had effectiveness score of 0.83, possibility score of 4.67, and weighted score of 389, which implied that buyers can buy from any seller; hence, the competitive force is high. The results showed buyers' threat of backward integration had effectiveness score of 0.42, possibility score of 2.08, and weighted score of 0.87, which implied that there is an attempt of some buyers turning into manufacturers. The sellers' threat of forward integration had effectiveness score of 0.42, possibility score of 1.67, and weighted score of 0.69, which implied that it is not likely they would turn into buyers because the competition was low. Moreover, the importance of product to the buyer had effectiveness score of 3.83, possibility score of 3.83, and weighted score of 2.09, which implied that the clientele had choices of manufacturers to buy from. Therefore the importance level of products was low.

Thuong (2017) found that buyers bargaining power was higher because of few amount of construction clients compared to bigger amount of service providers available in the area to deliver projects. Thuong noted that clients could switch between companies at little or no cost and high chances that clients can postpone projects until a later stage when they can secure lower cost of the projects.

Njambi, et al. (2015) used chi-square tests, correlation and multiple regressions to measure bargaining power of buyers against competitive advantage. They carried out chi-square tests which indicated 12.046 at two degrees of freedom. Since this p-value was >than 0.05, it was concluded that there was no statistically significant association

between the two variables hence the null hypothesis was rejected. They further measured the correlation between the two variables; the value was 0.321($p<0.05$). The results indicated that there was a positive correlation between competitive advantage and intensity rivalry in the Kenyan beverage industry.

Shariff (2014) conducted a study on application of modified Porters five forces model in assessing attractiveness of insurance industry in Kenya. Shariff found that buyer information about demand, actual market price and suppliers had a cost mean of 4.76; buyer switching costs (low/high) 3.18, substitute product /service for buyers product differences 4.00, product differences mean 3.70, brand identity mean 4.03, buyer volume mean 4.24, threats of backward integration of buyers and their suppliers, 3.70 and buyer concentration 4.21. The study concludes that all the determinants affect the customers bargaining power because the mean score was greater than 3.00.

Muchiri (2008) noted that 72.4% of the courier operators invested heavily, 82.8% provided quality services, 79.3% provided value added additional services and 79.3% had established customer information systems. The study concludes that buyers had very insignificant influence on pricing of products and services, in house provision of postal services while the courier services had influence on costs of investments made, provision of value added services, provision of quality services, and investments in customer information systems.

The above empirical literature indicated that: information technologies enabled the buyers to compare prices and quality and to collect information about competitive products very quickly and easily, hence shifting the power to the end consumers and reduces the switching costs. Studies have shown that there exist a proven positive relationship between the buyer's volume and bargaining power of buyers, where the buyer's pressure forces the market players to reduce the price and improve the quality of the products. A number of researchers used chi-square tests, correlation and multiple regressions to measure bargaining power of buyers against competitive advantage. That notwithstanding, none of the above empirical literature could explain the nature of bargaining power of buyers when the supplying industry operates with high fixed costs and more so, when they are able to reduce the bargaining power of buyers through partnering, supply chain management, and value added where the ultimate pressure goes directly to final customer.

2.5 Bargaining Power of Suppliers and Competitiveness of SMEs

Bargaining power of suppliers refers to the ability of suppliers to drive up the prices of the inputs (Warren, 2008). It also refers to an assessment of how easy it is for suppliers to drive up prices. This is driven by the: number of suppliers in the market; size of suppliers; uniqueness of service or product; strength of the supplier; and cost of switching from one supplier to another ((Barasa, 2010).

This was demonstrated by Rachapila and Jansirisak (2013) who pointed out eight areas of supplier power concern namely: concentration of suppliers; substitute availability;

importance of suppliers input to buyer; product differentiation; important of industry to supplier; buyers switching cost; forward integration of suppliers; backward integration of suppliers and buyers backward integration. Now, the statistics of each were provided as the supplier concentration had effectiveness score of 0.75, possibility score of 4.67, and weighted score of 3.50, this implies that having few suppliers and many buyers meant that suppliers had power exceeding the buyers in terms of terms of trade, price and quality.

Rachapila and Jansirisak (2013) further reported that availability of substitute input had effectiveness score of 1.00, possibility score of 4.75, and weighted score of 4.75, which indicated that there was some restrictions in substitute products and that the contribution of substitutes lead to the high level of competitive force and effect. Findings also showed important of suppliers input to buyer had effectiveness score of 0.92, possibility score of 4.67, and weighted score of 4.28, which indicated a growing space factored by both parties. The negotiation powers were altered by growing substitute products; suppliers' product differentiation which had effectiveness score of 0.42, possibility score of 2.50, and weighted score of 1.04. This implies that the more different the products are, the more negotiation power of suppliers.

The study further showed that products were differenced by varieties, size, quality appearance and quality standard whose importance of industry to supplier had effectiveness score of 0.92, possibility score of 4.75, and weighted score of 4.75. This implies that buyers must approve before the change of variety were made, then, one has

to consider appearance, color, scent, taste, texture, and over all of the products before making such changes. In this study, buyers switching cost to other input had effectiveness score of 0.67, possibility score of 3.17, and weighted score of 2.11. This indicates that they were facing high cost and therefore needed switching costs. The forward integration of the suppliers had effectiveness score of 0.33, possibility score of 1.92, and weighted score of 0.64, implied that the grower and brokers did not have a potential of being a manufacturers because their forward integration level was low and finally, buyers backward integration had effectiveness score of 0.42, possibility score of 2.58, and weighted score of 1.08, in this case a number of companies used the strategy to enter other industries.

Thuong (2017) analyzed the suppliers bargaining power in enhancing competition and innovation in construction industry. He states that the bargaining power of the suppliers is high given the shortages of labor and the constantly rising prices of the inputs. Construction project costs and input costs of property investment, plant and equipment, materials and man power have been always increasing. The constantly rising input prices and the shortages of skilled workers and supervisors in the construction work help enhance the strong power of the suppliers in adjusting the price. The company therefore has tried to make contracts with crucial suppliers to make it easier when switching for better deals, and the materials straight away from the factory without going through much agency in the middle to reduce additional costs. The study by Njambi, et al. (2015) showed that there was a positive correlation between competitive advantage and bargaining power of suppliers.

Shariff (2014) found that the presence of substitute suppliers scored a mean of 4.24, supplier concentration 3.73, impact of supplier on cost 3.97, supplier difference 3.48 and importance of volume of business to the supplier's mean of 3.97. This revealed that suppliers' power is on average in determining attractiveness of insurance industry. However, presence of substitute suppliers exerts most pressure as a determinant with a mean of 4.24 and standard deviation 0.728.

Muchiri's study of 2008 indicated that 79.3% of the suppliers were significant stakeholders of insurance sector and playing a crucial role in restructuring and future evolution. Her study further, indicated that 77.8% of the respondents preferred sticking to specific suppliers because of the switching costs from one supplier to another was high, 78.5% of the suppliers were influential in determination of the quality and price of the final products offered to customers and finally 88.7% of the mail or courier operators are able to obtain discounts from suppliers as opposed to small operators. The finding concludes that suppliers switching costs in the insurance industry was high, hence operators are locked into particular suppliers.

The foregoing empirical literature on bargaining power of suppliers shows that suppliers have advantages over the buyers in terms of quality, price, and term of trade. There are some restrictions in substitute products and the availability of substitute inputs contributes to the high level of competitive force and effect. The constantly rising input prices and the shortages of skilled workers and supervisors in the construction work help enhance the strong power of the suppliers in adjusting the price. The researchers used chi-square tests, correlation and multiple regressions to measure the bargaining power of

suppliers against competitive advantage. A gap was however noted in the local context of construction industry.

2.6 Threat of Substitute Products and Competitiveness of SMEs

Threat of substitute refers to the differentiation of commodities in place of the existing one (Warren, 2008), where close substitute increases the likelihood of customers switching to alternatives in response to price increases. Therefore, the power of suppliers and the attractiveness of the market were reduced (Barasa, 2010).

Rachapila and Jansirisak (2013) examined the two elements of substitutes which include: relative price of substitute and relative quality of substitute. They found that relative price of substitute had an effectiveness score of 0.50, possibility score of 4.25 and weighted score of 2.13. They divided substitute products into two categories; products physically similar and products having similar nutrition. However, costing more than the first category; relative quality of substitute had an effectiveness score of 0.42, possibility score of 3.25 and weighted score of 1.35, while a better quality was the reason for substitute. The study also noted that when the product is most popular to the customers, the players employs switching cost to buyers instead of quality improvement.

Thuong (2017) noted that threat of substitute products was strong in the construction industry. Thuong's study reported that new emerging innovative methods and processes within construction industry do not have big impacts on the work. However, companies are constantly paying close attention to any new and innovative techniques that can be suitable to be implemented in their operations, which also depends on the situation and

the company's projects. He concludes that despite the strong threats of substitutes, the company has an established reputation especially on its high quality of work in the local area, therefore can increase its competitiveness.

The study by Njambi et al. (2015) concluded that threat of substitute and competitive advantages were associated with the threat of substitute product and competitive advantage. They further tested the correlation of the two variables which had a value of 0.166($p<0.05$); indicating competitive advantage and substitute of products were positively correlated in the industry.

Shariff (2014) noted that threat of substitute products affect the Kenyan insurance companies' profitability. He found that relative quality to substitute scored a mean of 3.76, buyer propensity to substitute 3.73, relative price of substitute 3.97, switching cost by buyers 3.24 and ready availability of substitutes and emergent of new ones mean of 3.70. He concludes that all the determinants are responsible in determining threat of substitute but at varying degrees as indicated by the standard deviation. Puller and Taylor (2012) argued that if employees are not satisfied with the information received, they are likely to be uncertain about a range of organizational issues as well as their responsibilities hence an impact on the competitive advantage.

The above empirical literature on threat of substitute products shows that despite the strong threats of substitutes, organizations can still counter by establishing reputation especially on its high quality of work in the local area which can go a long way in increasing its competitiveness. However, none of the empirical literature addressed how

to reduce the competitive rivalry among the small and medium sized hardware enterprises in Kenya.

2.7 Theoretical Framework

This study was guided by Porters Five Forces model which help to explain how industries cope with competition and sustain desired levels of profitability in ever-changing business environment.

2.7.1 Porter's Five Forces Theory

The Porters Five Forces Model was first published by Michael Porter in his book referred to Competitive Strategy in 1980. The model has been used to analyze the industry structure of companies and its corporate strategy. He noted that five forces can be used to shape every market and industry, measure competition intensity, as well as determine attractiveness and profitability of the market. The five forces propagated by Michael Porter are: threat of new entrants, power of suppliers, power of buyers, threat of substitutes and competitive rivalry.

Rachapila and Jansirisak (2013) stated that the principle behind Michael Porters ideas of profit came from two sources namely: operating in an industry with an attractive structure and having a sustainable competitive advantage. Paul argued that an attractive industry is about the balance of supply and demand. That, if the demand is greater than the supply, then businesses should find it easy to make a profit. If the supply is greater than the demand, then the business needs a competitive advantage to survive the competition process.

In 2008, Michael Porter emphasized on how the five forces analysis model works, where the customers, suppliers and competitors compete for the profit from the value created by the industry, and limited by substitutes or alternative solutions to the underlying customer needs. Porter further states that the ideal industry structure is one where the five forces are weak: both suppliers and customers willing to accept the terms offered by the business, there is no viable substitute to the product or service sold which meets the customer's needs and wants, any potential new companies would find it very difficult to enter the market effectively and competitors focus on enlarging the total industry profits rather than competing away profits unnecessarily through crazy pricing because there are no viable substitutes. McGrath (2013) argued that competitive advantage have to be transient rather than sustainable. McGrath describes the creative economy of companies by identifying the people needs and their willingness to pay for, through better experiences designs, and new efficient from existing assets. McGrath concludes that to sustain competitive is counterproductive rather than ineffective.

In this study, the five forces analysis is very significant because it will be applied to determine the attractiveness of the hardware sector, provide insights on profitability, and support decisions about entry to or exit from or a given market segment. Moreover, In Imenti South sub-county hardware stores will compare the effect of the above mentioned forces.

2.8 Conceptual Framework

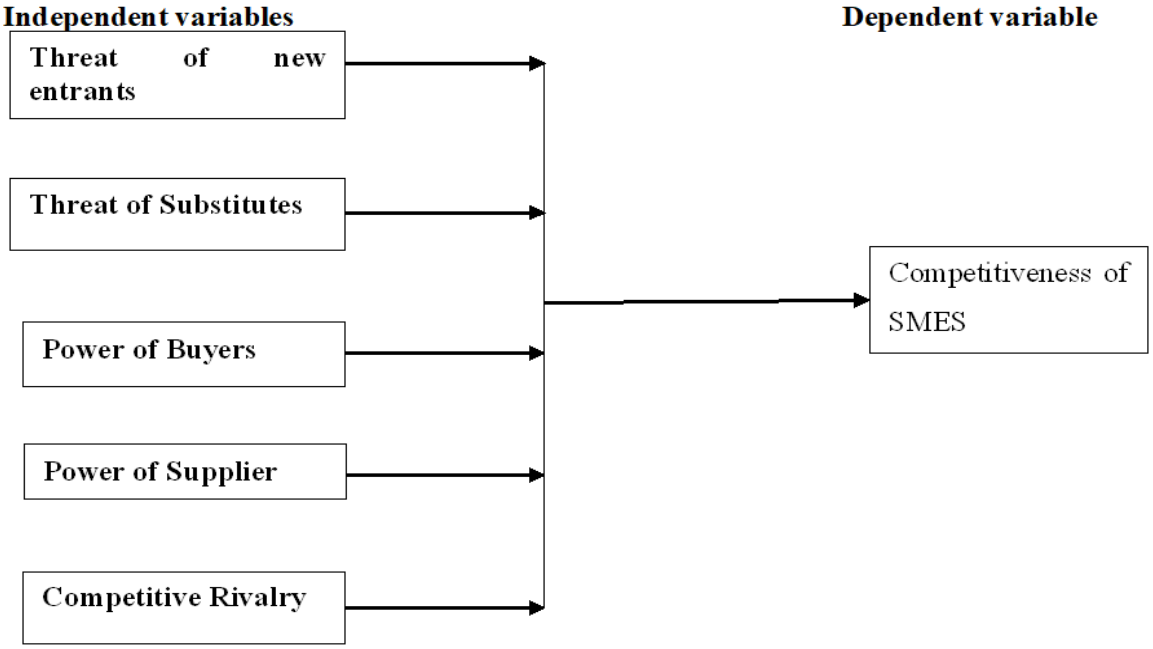

Figure 2.1: **Conceptual Framework**

Source: Author, 2018

Independent variables influence the dependent variables. Increase in threat of new entrants influences competition in the hardware sector, therefore leading to decrease in profitability margin. Increase of threat of substitutes influences the competition in the hardware sector, hence decrease in demand of commodities and related price of products falls. The more powerful the buyers are the more there are able to buy more products hence accelerating the growth of hardware sectors. Power of suppliers' influences competition, increase of suppliers makes the products easily available hence encouraging establishment of more hardware shops, leading to high competition in the market. Finally competitive Rivalry increases SMEs competiveness in the hardware sector.

2.8.1 Operationalization Framework

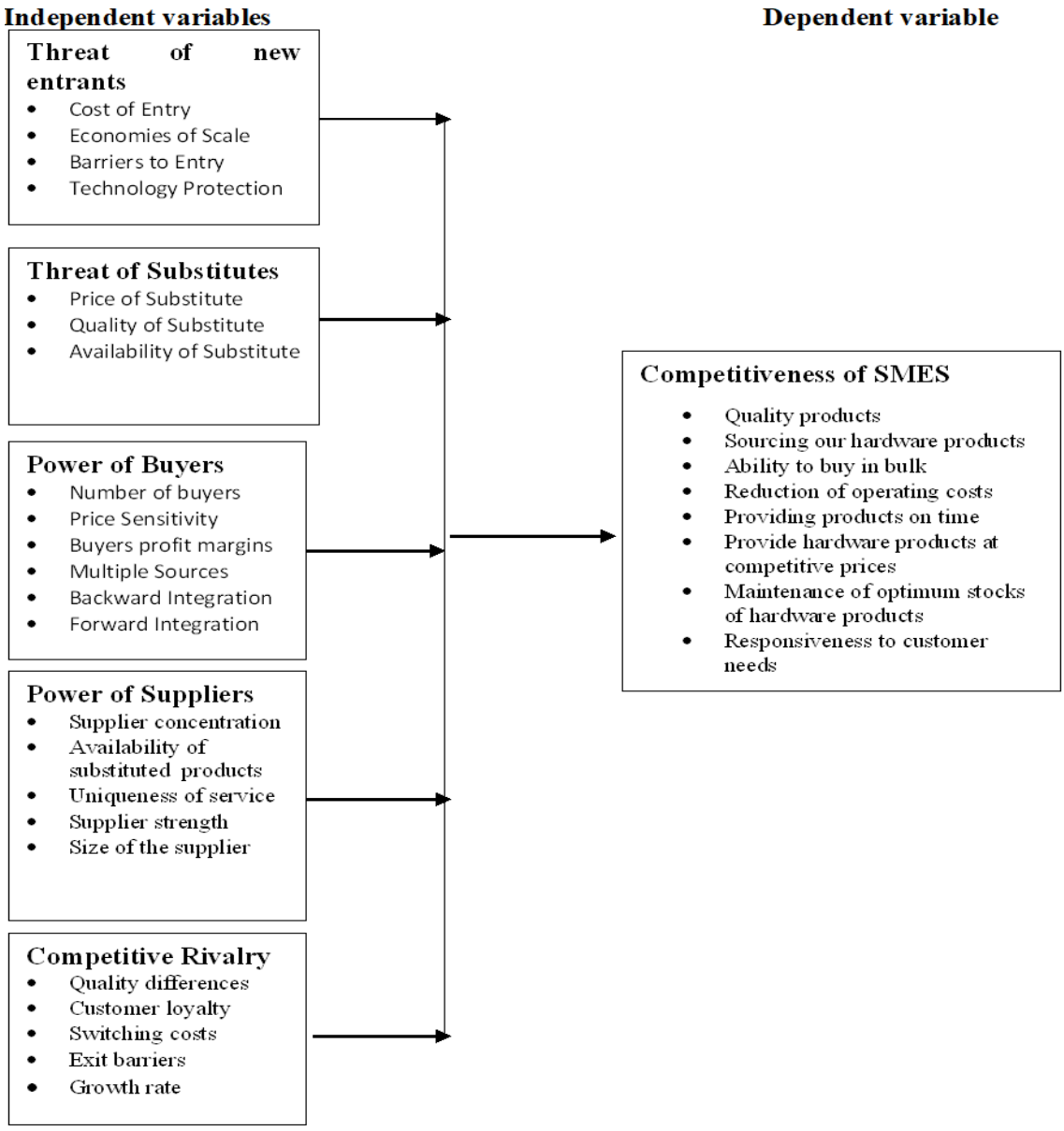

Figure 2.2: **Operationalization framework**

2.9 The Summary of the Chapter

This chapter has reviewed literature that is relevant to the objectives and hypotheses of the study. The chapter started with providing empirical literature which reports research based on actual observations as reported in published and unpublished sources. A summary of the theories that underpin the study followed by a pictorial demonstration of inter-relationship of the independent and dependent variables that were investigated in order to answer the key research questions of this study. Next chapter provides a detailed description of methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Last chapter has provided a review of literature. This chapter describes the research methodology adopted in carrying out this study. Research methodology refers to approaches and procedures for data analysis which entails the computation of certain indices or measures a long with the search for pattern of relationships that exists among the data group. The research methodology adopted should highlight on the approaches, procedures, techniques and strategies that the researcher applied in conducting the study. The methodology covered in this study comprises of the research design, the location of the study, the target population, the sampling technique and sample size, the research instruments, the validity and reliability of the sampling instruments, the data collection procedure and data analysis.

3.2 Location of the Study

The selected area of study was Imenti South which is highly populated sub-county in Meru County, Kenya. It borders Imenti Central on the northern side, Maara sub-County on the southern side, and Mount Kenya forest on western side. The selection of the aforementioned area depended on the number of hardware stores existing and the stiff competition among the new entrant and existing players.

This area of study is also known of rich agricultural activities hence many residents generate income from agricultural produce such as bananas. Many also afford to engage in constructions of good residential as well as commercial houses. This explains the

booming hardware business in this sub-county hence justified to analyze the effects of market forces on competitiveness among small and medium hardware enterprises.

3.3 Research Design

According to Leedy and Ormrod (2014), research design constitutes the blue print for the collection, measurement and analysis of data. They also define research design as the plan and structure of investigation conceived to obtain answers to research questions. The descriptive survey design was used in this study. Emphasizing on surveys to get facts and finding enquiries of different kinds. The design is fit for the study because it is a description of the state of affairs as they exist. It involves collecting primary data from the field through a questionnaire. The rationale for using this design is that it explores the existing status of two or more variables at a given time.

3.4 Target Population

A population is defined as a total collection of elements about which the researcher wishes to make inferences (Cooper & Schindler, 2008). Kumar (2011) define population as a group of individuals used to generalize his/her results. The total number of registered hardware stores in south Imenti sub-county was 83 as at the time this study was conducted. The target population of this study comprised of hardware owners. These individuals were picked because they had vital information about hardware sector and conditions that could have affected competitiveness of the enterprises.

Table 3.1.

Population of Respondent

Town	Participants
Nkubu Town Hardwares	30
Mituungu Market Hardwares	17
Kanyakine Market Hardwares	13
Igoji Market Hardwares	23
Total	**83**

Source: Ministry of Trade imenti South

3.5 Sampling Techniques

Sampling technique refers to the methods the researcher uses to get a research sample from a given population (Creswell, 2014). This study used census approach in which all the registered hardware stores participated. Census method refers to the complete enumeration of a universe (Bryman, 2012). This method was used because it gave opportunity to the investigator to have an intensive study about a problem. The research gathered a lot of knowledge through this method and is very important and suitable to be used for data collection. Data collected from all registered hardware stores can be generalized in other sub-counties in Meru County and beyond.

3.6 Sample Size

A sample size of 83 respondents was used. Kothari (2014) argued that sample size must be carefully selected to be representative of the population. The entire population was used as the sample. The sample size indicated above was used to make a correct decision on influence of porters' five forces on competitiveness of the small and

medium-sized hardware business. This enabled accuracy and fewer errors when making the decision during data analysis.

3.7 Data Collection

Data in this study was collected using a questionnaire. A questionnaire is a set of questions or statements that assesses attitudes, opinions, beliefs, biographical information or other forms of information (Leedy & Ormrod 2014). The questionnaire used Likert type questions on 5 points scale, where strongly agree-5; Agree – 4; Disagree- 2; Strongly Disagree-1. The literature in chapter two and a questionnaire that was previously used by Creswell (2014) were consulted when coming up with the specific questions.

The questionnaire was structured into two broad sections. The first section captured background information about the hardware stores while the second section captured information according to the objectives. The second section was further structured into six sub-sections namely: the bargaining power of suppliers; the threat of new entrants; the threat of substitutes; bargaining power of suppliers; bargaining power of buyers; competitive rivalry and competitiveness of SMEs.

3.7.1 Measurement

The study measured both dependent and independent variables. For the dependent variable competitiveness used the twelve items adopted from Srivastava, Sultan and Chashti (2017) and for independent variables, the Porters five forces was measured using

27 items adopted from Porter (2008), which includes threat of new entrants, threat of substitutes, power of buyers, power of suppliers and competitive rivalry.

3.7.2 Data Collection Procedures

The researcher sought permission from the relevant authority; Kenya Methodist University and National Council of Science Technology and Innovation (NACOSTI) to be allowed to conduct the research study. Once permission and permit were granted the researcher went to the field. The questionnaires were administered by the researcher personally to the respondents with the help of three research assistants by way of drop and pick later method for five days. The target respondents comprised of hardware stores owners hence research assistants were instructed to approach each and requested to participate in the study by filling a questionnaire. Where the owner was very busy or absent, a later appointment was secured.

3.8 Validity of the Research Instruments

According to Leedy and Ormrod (2014); and Orodho (2004), validity is the degree to which the sample of test items represents the content the test is designed to measure. The items used in measuring the variables were adopted from the previous studies with relevant modifications to suit the unique requirement of this study.

The researcher further applied content validity where the instrument was prepared accurately using the stated objectives and research variables. Moreover, a lot of critiquing was done by the research experts who included research supervisors and other competent research professionals to eliminate any irrelevant item in the instrument. This helped to

ensure only relevant information was contained in the questionnaire which further helped to collect valid data that reflected the true picture of the situation under investigation.

Construct validity is defined by Bryman (2012) as the degree to which inferences can legitimately be made from the operationalization of theoretical constructs on which they are based). This study measured construct validity by adopting an earlier tool which helped to ensure key elements regarding a given construct were included in the questionnaire.

3.9 Reliability of the Instruments

According to Bryman (2012) reliability refers to the degree of responsiveness of measurement of research instrument, or data after repeated trails. The study used Cronbach's alpha value of assessing the reliability. Cronbach's alpha value helps to assess the reliability, or internal consistency of a set of scale or test items. In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach's alpha is one way of measuring the strength of that consistency (Saunders, Lewis & Thornhill, (2009). The study followed the criteria for making a decision as to what constitutes acceptable level of reliability of 0.7 or higher as recommended in most social science research situations (Bryman, 2012).

3.10 Pre- testing of Questionnaire

Pretesting is a method of checking that questions work as intended and are understood by those individuals who are likely to respond to them (Leedy & Ormrod, 2014). This study conducted a pretest using five hardware owners in Buuri Sub-county which allowed

checking of the choice of analysis and the standardization of the survey. Responses gotten assisted in refining the wording of questions to make it easier to understand. The pre-testing also helped to correct, delete or rephrase sentences and to iron out vagueness in questions.

3.11 Data Analysis

Data analysis refers to examining the data that has been collected and making deductions and inferences (Saunders, Lewis & Thornhill, 2009; Mugenda, 2008). This process involves uncovering underlying structures, extracting important variables, detecting any anomalies, testing any underlying assumptions, scrutinizing the acquired information and making inferences (Leedy & Ormrod, 2014). The study used descriptive statistics such as mean, percentages and standard deviation. Inferential statistical analyses were also employed where correlations and regression analysis were used to test hypothesis and assess the relationship between variables. Information was presented using tables.

3.11.1 Research Model

The five independent variables that is, threat of new entrants, threat of substitutes, power of buyers, power of suppliers and competitive rivalry affect dependent variable, that is, competitiveness will be expressed as $Y = B0 + B1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 +$ e Where: Y = Competitiveness,

B0 = constant value,

B1X1 = Threat of new entrants,

B_2X_2 = Competitive rivalry,

B_3X_3 = bargaining power of buyers,

B_4X_4 =bargaining power of suppliers,

B_5X_5 = Threat of substitute product,

e = standard error.

3:11.2 Tests of Regression Assumptions

Prior to the use of regression analysis, diagnostic tests on underlying assumptions were carried out. The tests include: normality test, linearity test, heteroskedasticity test, auto-correlation test and multicollinearity tests. This study tested normality to ascertain whether distribution of the test data was normally distributed (or bell shaped). To test the assumption of normality the skewness and kurtosis were considered where skewness was within ±2. A kurtosis value was within range of ±7. Data was also tested for linearity. Linearity means that the predictor variables in the regression have a straight line relationship with the outcome variable. Also tested was multicollinearity which determines whether variables are correlated or not. To test the assumption of multicollinearity, Variance Inflation Factor (VIF) and correlation coefficients values indices were used in regression analyses. A value of VIF>10 indicates multicollinearity is present and the assumption is violated and for coefficients with magnitudes of 0.8 or higher (Kumar, 2011).

3.12 Ethical Considerations

Leedy and Ormrod (2014) define ethical considerations as the principles that guide the researcher when carrying out study to ensure application of the expectations and the right responsibilities. Ethical considerations are paramount due to many risks associated with

research. In the process of conducting this research, the researcher sought the research permit from National Council of Science and Technology (NACOSTI) authority for the purpose of collecting data.

In this study, cover letters accompanied questionnaires, giving explanation on the study and sought for voluntary participation of respondents. Respondents were asked not to write their names on the questionnaire. This promoted anonymity. The cover letter further assured respondents of confidentiality since the collected data was used for the purpose of this study only.

The researcher also avoided plagiarism by ensuring that all information materials consulted were fully acknowledged by ensuring proper in-text citation and appropriately acknowledged in the reference list using American Psychological Association (APA) referencing style. The researcher further ensured that there was no manipulation or fabrication of data that was collected but findings were reported as they were found.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The previous chapter provided a detailed account of the methodology that was used in implementing this study. In this chapter, results are presented as guided by the objectives of the study. The findings are interpreted and discussed accordingly with reference to literature that was reviewed in Chapter Two. The purpose of the study was to assess the influence of porter's five forces on the competitiveness of small and medium hardware in South Imenti Sub-county, Meru County.

The chapter starts by providing the reliability of the collected data and the overall response rate. The demographics information of the respondents is next and is followed by a presentation of the findings on the competitiveness of small and medium hardware shops in South Imenti Sub-county, Meru County. The results on each research objective are also presented while hypothesis testing is done towards the end. The chapter closes by assessing the impacts of the entire porter's five forces model on the competitiveness of small and medium hardware in South Imenti Sub-county, Meru County.

4.2 Reliability Statistics

Data was first checked to ascertain its fitness in the analysis. This was done by computing Cronbach's Alpha value using SPSS. The results are presented in Table 4.1. A reliability coefficient indicates the goodness of the items in the data for carrying out statistical analysis.

Table: 4.1

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.733	.767	59

The Cronbach's alpha coefficient was .767. According Bhattacherjee (2012), the correlation coefficient above 0.7 is adequate and indicates good reliability of data in social science research.

4.3 Response Rate

A total of 83 questionnaires were distributed to the owners of hardware shops. Out of the 83 questionnaires, 71 were returned which indicate 85.5% response rate as shown in Table 4.2.

Table 4.2

Overall Response Rate

Key Town Centers	Administered questionnaires	Returned	Response rate (%)
Nkubu Town	32	28	88%
Igoji Market	20	19	95%
Kanyakine Market	17	13	76%
Mituungu Market	14	11	79%
Total	83	71	85.5%

Most of the SMEs hardware shops in South Imenti sub-county are found in Nkubu and Igoji market centers. The results are showing a fair distribution of SMEs hardware shops in the sub-county.

4.4 Background profiles of owners of Hardware in South Imenti sub-county, Meru County

The frequency results on all background profiles related to the owners of hardware shops in South Imenti sub-county, Meru County were summarized and presented in Table 4.3.

Table 4.3

Background Profiles of Owners of Hardware in South Imenti sub-county, Meru County

Category (N = 71)	Frequency	Percent	Cumulative Percent
		Gender	
Male	36	50.7	50.7
Female	35	49.3	100.0
Total	71	100.0	
		Level of Education	
Primary	7	9.9	9.9
Secondary	18	25.4	35.2
College	25	35.2	70.4
University	21	29.6	100.0
Total	71	100.0	
		Duration in business	
Below 5 years	20	28.2	28.2
6-10 years	33	46.5	74.6
11- 15 years	13	18.3	93.0
21- 25years	3	4.2	97.2
Above 26 years	2	2.8	100.0
Total	71	100.0	
		No of staff	
Below 10	67	94.4	94.4
11- 50	4	5.6	100.0
Total	71	100.0	
		Total assets value	
Below kshs10,000,000	62	87.3	87.3
kshs10,0000,001-300,000,000	6	8.5	95.8
kshs300,000,001–1500,000,000	3	4.2	100.0
Total	71	100.0	

According to the results in Table 4.3, the number of male and female who owns hardware shops in South Imenti sub-county, Meru County is almost the same. Moreover, twenty five (35.2.0%) of the hardware owners had a college level of education while twenty one (29.6%) had a University level education, eighteen (25.4%) had secondary level

education, and seven (9.9%) had a primary level education. This implies that most hardware owners have requisite education and are therefore literate. This provides them with basic numeracy skills that are necessary in running a hardware shop.

The results indicated that majority of hardware shops 33(46.5%) had been in operations from 6 to10 years, while, approximately a quarter, 18(25.4%) had been in operation as from 11 years and above. Only 20 (28.2%) had operated 5 years and below. These findings show that the hardware shops in Imenti South Sub-county have been growing and have high survival rates which contradict the report by Kenya National Bureau of Statistics (2018) which showed that majority of small and medium enterprises hardly go for more than five years. The findings may be explained by the fact that hardware shops are fairly capital intensive with good returns and hence many players in this industry may persevere and also may find it difficult to get out of it easily. This observation was made from asset values of most hardware shops in South Imenti sub-county, Meru County where the total assets value for most hardware shops was found to be below kshs10, 000,000; six have between kshs10, 0000, 001 and 300,000,000, while, only 3 (4.2%) had asset value between kshs300, 000,001 and 1500,000,000. Despite fairly large asset value, an overwhelming majority (67, 94.4%) of the hardware shops in Imenti South Sub-county had less than 10 employees. Only 4 (5.6%) hardware shops had employed between 11 and 50 employees. This reinstates the general characteristics of SMEs in employing few employees as noted by Saleemi (2009).

4.5 Descriptive Statistics on Competitiveness of the SMEs Hardware in Imenti South Sub-county

The competitiveness of the SMEs hardware in Imenti South Sub-county was the dependent variable in this study. The opinions gathered from hardware owners helped to gauge the competitiveness in this sector within the area of the study. Respondents were asked to indicate their level of agreement with the various statements in a 5-level Likert rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1). The statements largely focused on: quality issues, ability to buy products at low cost, ability to deliver products to customers at the specified time, competitive prices on products, ability to maintain optimum stocks, flexibility in the operations, and responsiveness to customers' complaints. The descriptive results of specific aspects under investigation are shown in Table 4.4.

Table 4.4

Descriptive Statistics on Competitiveness of the SMEs Hardware in Imenti South Sub-county

Statements (N = 71)	1	2	3	4	5	Mean	Std Dev.
Our level of quality is acceptable to our customers	0(0%)	1(1.4%)	3(4.2%)	17(23.9%)	50(70.4%)	4.63	.638
We respond to complaints from our customers immediately	2(2.8%)	1(1.4%)	2(2.8%)	11(15.5%)	55(77.5%)	4.63	.849
Our level of responsiveness is high	1(1.4%)	2(2.8%)	1(1.4%)	15(21.1%)	52(73.2%)	4.62	.781
We are normally very keen on quality	1(1.4%)	4(5.6%)	2(2.8%)	9(12.7%)	55(77.5%)	4.59	.904
We only store quality products	1(1.4%)	3(4.2%)	3(4.2%)	16(22.5%)	48(37.6%)	4.51	.876
We are reducing wastages in our operations	1(1.4%)	0(0%)	6(8.5%)	20(28.2%)	44(62.0%)	4.49	.772
We are always keen with what is happening in our business environment	1(1.4%)	1(1.4%)	1(1.4%)	37(52.1%)	31(43.7%)	4.35	.719
We are very keen on how we source our products	0(0%)	0(0%)	1(1.4%)	45(63.4%)	25(35.2%)	4.34	.506
We are able to buy our products at low cost	3(4.2%)	3(4.2%)	7(9.9%)	14(19.7%)	44(62.0%)	4.31	1.090
We are able to deliver our products to customers at the specified time	3(4.2%)	1(1.4%)	4(5.6%)	27(38.0%)	36(50.7%)	4.30	.962
We are able of offer our customers products at competitive prices	1(1.4%)	1(1.4%)	4(5.6%)	38(53.5%)	27(38.0%)	4.25	.751
We are flexible in the way we operate	1(1.4%)	2(2.8%)	4(5.6%0	39(54.9%)	25(35.2%)	4.20	.786
Our firm has a proper planning and control system	3(4.2%)	5(7.0%)	1(1.4%)	32(45.1%)	30(42.3%)	4.14	1.046
We always maintain optimum stocks of our products	0(0%)	7(9.9%)	6(8.5%)	33(46.5%)	25(35.2%)	4.07	.915
Aggregate mean						**4.39**	

The results in Table 4.4 indicate that the majority of hardware owners (62, 87.8%), with a mean aggregate score of 4.39, agreed with the various assertions that aimed to determine the competitiveness of the hardware shops in Imenti South Sub-county. This indicates

that the sector (SMEs hardware in Imenti South Sub-county) is highly competitive. Specifically, the respondents agreed with the following top three statements (the ones with highest mean scores) in describing the competitiveness of SMEs hardware: our level of quality is acceptable to our customers (mean = 4.63), we respond to complaints from our customers immediately (mean = 4.63), and, our level of responsiveness is high (mean = 4.62). The statement that had the lowest mean score was; 'we always maintain optimum stocks of our products'. The results are showing that the competitiveness of the SMEs hardware in Imenti South Sub-county is largely characterized by issues related to quality of products, ability to deliver products to customers at the specified time, and responsiveness to customers' complaints among others.

The competitiveness of the hardware shops in Imenti South is anchored on the quality of products supplied by manufactures. It seems that, the high the quality, the high the profitability levels to both hardware shops and to the manufactures. The results are contrarily to Indiatsy, Mwangi, Mandere, Bichanga and Gongera (2014); and Vasanji (2015) findings which indicated that sales triggered rivalry in a market. Ahmedova (2015) also noted that competitiveness is determined by its high resource productivity.

4.6 Descriptive Statistics on Threat of New Entrants into SMEs Hardware Sector in Imenti South Sub-county

The first objective of the study was to examine the influence of barriers to entry on the competitiveness of hardware sector in South Imenti sub-county, Meru County. Hardware owners were asked to indicate their level of agreement with the various statements in a 5-level Likert-rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2;

Strongly Disagree – 1). The statements aimed to determine whether there were eminent threats caused by new entrants into this sector within the area of the study. The descriptive results are shown in Table 4.5.

Table 4.5

Descriptive statistics on threat of new entrants

Statements (N = 71)	**1**	**2**	**3**	**4**	**5**	**Mean**	**Std Dev.**
The existing hardware shops have cost advantages	2(2.8%)	3(4.2%)	6(8.5%)	39(54.9%)	21(29.6%)	4.04	.901
There are many new hardware businesses coming up	3(4.2%)	3(4.2%)	3(4.2%)	47(66.2%)	15(21.1%)	3.96	.799
To invest in a hardware business requires huge capital	4(5.6%)	11(15.5%)	5(7.0%)	16(22.5%)	35(49.3%)	3.94	1.308
There are many other people willing and ready to open hardware business	2(2.8%)	1(1.4%)	1014.1%)	45(63.4%)	13(18.3%)	3.93	.478
The existing players have close customer relations	3(4.2%)	7(9.9%)	2(2.8%)	45(63.4%)	14(19.7%)	3.85	.995
There is brand loyalty of customers	1(1.4%)	6(8.5%)	17(23.9%)	31(43.7%)	16(22.5%)	3.77	.944
The distribution channels are controlled by existing players	8(11.3%)	8(11.3%)	4(5.6%)	29(40.8%)	22(31.0%)	3.69	1.327
It is not hard to get customers in this hardware business	4(5.6%)	13(18.3%)	7(9.9%)	29(40.8%)	18(25.4%)	3.62	1.211
The regulations governing hardware businesses are friendly	7((9.9%)	9(12.7%)	6(8.5%)	35(49.3%)	14(19.7%)	3.56	1.227
The raw materials are controlled by existing players	34(47.9%)	9(12.7%)	9(12.7%)	13(18.3%)	6(8.5%)	2.27	1.434
Aggregate mean						**3.67**	

The results in Table 4.5 shows that the majority of respondents, (52, 73.4%), with a mean aggregate score of 3.67, agreed with the various assertions that aimed to assess the influence of barriers to entry on the competitiveness of SMEs hardware in South Imenti sub-county. The respondents agreed with the following top four statements (the ones with highest mean scores): the existing hardware shops have cost advantages (mean= 4.04), there are many new hardware businesses coming up (mean= 3.96), to invest in a hardware business requires huge capital (mean= 3.94), and that there are many other people willing and ready to open hardware business in the area (mean= 3.93). Results further show that majority of the hardware owners disagreed that the raw materials in this sector are controlled by the existing players where, 34(47.9%) strongly disagreed while 9 (12.7%) disagreed. The results indicate that the hardware sector in South Imenti sub-county is still attracting many more start-ups who are likely to face challenges such as high capital investment, building of good customer relations and fostering of loyalty of customers to particular products.

The results show that the threat of new entrants in hardware shops is real in Imenti South; each day a new hardware shop opens its doors. This is demonstrated in the Table 4.5 where a mean of 3.96 confirmed that there are many new hardware shops coming up. This was due to high profitability levels which attracts new players in the market. Hence, the threat of new entrants would not end soon as more houses are being constructed day in, day out, making the sector more competitive. The findings were contrast to association of international certified professional accountants (2018) which indicated that

the existing players had strong and durable barriers to entry. The results further contrast Shariff (2014) who emphasized that barriers threaten entry into the industry.

4.7 Descriptive Statistics on Competitive Rivalry among SMEs Hardware in South Imenti, Meru County

The second objective of the study was to examine the effect of rivalry on the competitiveness of hardware SMEs in South Imenti, Meru County. Hardware shop owners were asked to indicate their level of agreement with the various statements in a 5-level Likert rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1). The statements sought to know whether there are many competitors in the sector, existence of price wars, whether hardware products are highly differentiated, the costs of switching from hardware business to other businesses, exit costs, fixed costs as well as the storage costs. Results are summarized in Table 4.6.

Table 4.6

Descriptive Statistics on Competitive Rivalry among SMEs Hardware in South Imenti, Meru County

Statements (N = 71)	1	2	3	4	5	Mean	Std Dev.
There are many competitors in the business	0(0%)	3(4.2%)	4(5.6%)	30(42.3%)	34(47.9%)	4.34	.774
There is much price wars	2(2.8%)	5(7.0%)	13(18.3%)	26(36.6%)	25(35.2%)	3.94	1.040
Hardware products are highly differentiated	6(8.5%)	2(2.8%)	9(12.7%)	29(40.8%)	25(35.2%)	3.92	1.168
There are many fixed and storage costs in the business	2(2.8%)	5(7.0%)	6(8.5%)	42(59.2%)	16(22.5%)	3.92	.922
There exist barriers when you want to leave hardware business	4(5.6%)	7(9.9%)	8(11.3%)	31(43.7%)	21(29.6%)	3.82	1.138
The costs of switching from hardware business to other businesses are high	10(14.1%)	10(14.1%)	9(12.7%)	11(15.5%)	31(43.7%)	3.61	1.507
Aggregate mean						**3.93**	

The results in Table 4.6 shows that more than three quarter of respondents, (56, 78.6%), with a mean aggregate score of 3.93, agreed with the various assertions that aimed to assess the effect of rivalry on the competitiveness of hardware SMEs in South Imenti sub-county. All the aspects that were investigated had a high mean value which affirmed that there exist competitive rivalries among SMEs hardware in South Imenti, Meru County. The top three features in defining rivalries in this area are; the presence of many competitors in the business (mean= 4.34), price wars (mean= 3.94) and highly differentiated hardware products (mean= 3.92). The aspect of rivalry that had least score was high costs of switching from hardware business to other businesses. The results show that SMEs hardware in South Imenti sub-county are fighting among themselves, as

characterized by prices of products, the coming up of many hardware with highly differentiated products; something that is shaping the nature of competition in this sector.

Competitive rivalry in hardware shops in Imenti South sub-county is very strong from the existing and upcoming shops. This is indicated in Table 4.6 where competitors had a mean of 4.34, leading to price wars among hardware owners which had a mean of 3.94. Therefore, triggering scramble for the market share through expansion. The findings were contrast to Zaridis and Mousiolis (2014) who found that most of the small and medium enterprises maintained their small size in order to be more competitive. Rachapila and Jansirisak (2013) found contrasting scores of competitors which had an effective score of 0.92 and price wars that had an effective score of 0.50. Another study conducted by Thuong (2017) found that industry competitors were weak in construction projects among small and medium sized companies.

4.8 Descriptive Statistics on Bargaining Power of Buyers for Hardware Products in South Imenti sub-county

The third objective of the study examined the influence of bargaining power of buyers on the competitiveness of hardware sector in South Imenti sub-county, Meru County. Hardware shop owners were asked to indicate their level of agreement with the various statements in a 5-level Likert rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1). The aspects under investigation were largely assessing whether customers can simply switch to alternative products, ability of customers to dictate the prices of products, whether customers have a lot of information on hardware business, customers' awareness on the prices offered by different

competitors, and whether customers buy in large volumes. Results are summarized in Table 4.7.

Table 4.7

Descriptive Statistics on Bargaining Power of Buyers

Statements (N = 71)	**1**	**2**	**3**	**4**	**5**	**Mean**	**Std Dev.**
Our customers have information about the prices offered by our competitors	1(1.4%)	3(4.2%)	1(1.4%)	37(52.1%)	29(40.8%)	4.27	.810
Our customers have a lot of information about hardware business	4(5.6%)	4(5.6%)	6(8.5%)	43(60.6%)	14(19.7%)	3.83	1.000
+Our customers have possibility to integrate backwards	3(4.2%)	12(16.9%)	10(14.1%)	33(46.5%)	13(18.3%)	3.58	1.104
Our customers can simple switch to an alternative product	5(7.0%)	9(12.7%)	16(22.5%)	36(50.7%)	5(7.0%)	3.38	1.033
Our customers buy large volumes	4(5.6%)	19(26.8%)	8(11.3%)	30(42.3%)	10(14.1%)	3.32	1.180
Our customers knows about the production cost of the product	35(49.3%)	16(22.5%)	3(4.2%)	12(16.9%)	5(7.0%)	2.10	1.364
Our customers dictates the price at which we sell to them	35(49.3%)	14(19.7%)	9(12.7%)	9(12.7%)	4(5.6%)	2.06	1.286
Our customers can only buy from us	22(31.0%)	37(52.1%)	3(4.2%)	5(7.0%)	4(5.6%)	2.04	1.075
Our customers can decide to make own products instead of buying from us	55(77.5%)	8(11.3%)	6(8.5%)	2(2.8%)	0(0%)	1.37	.760
Aggregate mean						**2.88**	

The results in Table 4.7 shows that 41(57.6%) respondents, with a mean aggregate score of 2.88, agreed with the various assertions that aimed to examine the influence of

bargaining power of buyers on the competitiveness of SMEs hardware in South Imenti sub-county. The first two features of defining the bargaining power of buyers in this area are; that, our customers have information about the prices offered by different hardware (mean=4.27), and our customers have a lot of information about hardware business (mean=3.83). It was noted that four aspects had a mean value that was below medium point which implies that majority of the respondents disagreed with the assertions that, customers knows about the production cost of the product (mean=2.10), customers dictates the price (mean=2.06) customers can only buy from us (mean=2.04), and our customers can decide to make own products instead of buying from us (mean=1.37). This implies that the bargaining power of buyers of hardware products in South Imenti sub-county is fairly weak and may therefore not have very strong influence on the competitiveness in this sector.

The results are related to Bel (2010) and Rachapila and Jansirisak (2013) who found that the buyers' pressure forced the market to reduce the price and improvement of the products quality. Shariff (2014) also had similar findings where buyers' information had a mean of 4.76 while backward integration of buyers and their suppliers had a mean of 3.70.

4.9 Descriptive Statistics on Bargaining Power of Suppliers

The fourth objective of the study examined the influence of bargaining power of suppliers on competitiveness of hardware SMEs in South Imenti sub-county, Meru County. Hardware shop owners were asked to indicate their level of agreement with the various statements in a 5-level Likert rating scale (Strongly agree – 5; Agree – 4; Neutral

– 3; Disagree – 2; Strongly Disagree – 1). The aspects that were investigated were largely on finding out whether there are many suppliers of hardware products, whether suppliers of hardware products are normally huge, whether suppliers' products are differentiated, existence of suppliers' retail outlets, and on whether one can always buy from supplier of choice. Results are summarized in Table 4.8.

Table 4.8

Descriptive Statistics on Bargaining Power of Suppliers

Statements (N = 71)	**1**	**2**	**3**	**4**	**5**	**Mean**	**Std Dev.**
I can always buy from a supplier of my choice	0(0%)	2(2.8%)	2(2.8%)	14(19.7%)	53(74.6%)	4.65	.675
There are many suppliers of hardware products	6(8.5%)	1(1.4%)	34(47.9%)	30(42.3%)	0(0%)	4.24	.853
Suppliers of hardware products are normally huge business	3(4.2%)	6(8.5%)	2(2.8%)	37(52.1%)	23(32.4%)	4.00	1.042
Our suppliers have their own retail outlets where they sell their products	11(15.5%)	2(2.8%)	8(11.3%)	33(46.5%)	17(23.9%)	3.61	1.315
Our suppliers sell products that are differentiated from other supplies	7(9.9%)	14(19.7%)	14(19.7%)	22(31.0%)	14(19.7%)	3.31	1.272
Our suppliers can integrate forward	37(52.1%)	6(8.5%)	8(11.3%)	15(21.1%)	5(7.0%)	2.23	1.446
Aggregate mean						**3.67**	

The results in Table 4.8 show that 52 owners of hardware shops (73.4%), with a mean aggregate score of 3.67, agreed with the various assertions that aimed to examine the influence of bargaining power of suppliers on the competitiveness of SMEs hardware in South Imenti sub-county. The results show that the top most four features of defining the bargaining power of suppliers in this area are that; 'I can always buy from a supplier of

my choice (mean=4.65), there are many suppliers of hardware products (mean=4.24), suppliers of hardware products are normally huge business (mean=4.00), and our suppliers have their own retail outlets (mean=3.61).

Most hardware owners however disagreed that suppliers sell products that are differentiated from other supplies (mean=3.31), and that suppliers can integrate forward (mean=2.23). Unlike the buyers, the suppliers of hardware products appear to have high bargaining power. Their investment outlays are usually huge which minimize the possibility of forward integration in this sector. It was also clear that the products handled by suppliers are not largely differentiated. This implies that the bargaining power of suppliers for hardware products in South Imenti sub-county are fairly strong and have capacity to influence the competitiveness in this sector.

The suppliers had fairly high bargaining power hence their customers would buyer from any supplier of their choice, this was orchestrating increase of suppliers in the market; mean was 4.24, and most of hardware suppliers had huge businesses outlay, therefore high bargaining power towards other buyers. The findings also show that the most of the suppliers had their own outlets within the same location hence affecting the bargaining power of buyers. The findings were similar to Rachapila and Jansirisak (2013) who indicated that having few suppliers and many buyers meant that suppliers had power exceeding the buyers in the market. This was contrast to Muchiri (2008) who concluded that when suppliers switching costs are high, suppliers are usually locked in a particular way.

4.10 Descriptive Statistics on Threat of Substitute Product

The fifth objective of the study examined the influence of substitute products on the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. Hardware shop owners were asked to indicate their level of agreement with the various statements in a 5-level Likert rating scale (Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree – 1). The aspects focused on whether customers are sensitive to prices, the existence of substitutes hardware product in the market, whether presence of substitutes products affects sales and prices, whether customers normally threaten to buy alternative products, and whether customers have options for buying substitute products or whether there is zero option. Results are summarized in Table 4.9.

Table 4.9

Descriptive Statistics on Threats of Substitute Goods

Statements (N = 71)	**1**	**2**	**3**	**4**	**5**	**Mean**	**Std Dev.**
Customers are sensitive to prices	0(0%)	0(0%)	0(0%)	14(19.7%)	57(80.3%)	4.80	.401
The present of product substitutes do affect our sales	2(2.8%)	8(11.3%)	8(11.3%)	36(50.7%)	17(23.9%)	3.82	1.019
There are a number of product substitutes at the market	4(5.6%)	4(5.6%)	10(14.1%)	43(60.6%)	10(14.1%)	3.72	.974
There is decline of prices due to emerging product substitutes	2(2.8%)	10(14.1%)	11(15.5%)	39(54.9%)	9(12.7%)	3.61	.978
Our customers normally threaten to buy alternative products	3(4.2%)	15(21.1%)	12(16.9%)	30(42.3%)	11(15.5%)	3.44	1.118
Customers have no option but to buy what we sell to them	24(33.8%)	28(39.4%)	5(7.0%)	6(8.5%)	8(11.35)	2.24	1.314
Aggregate mean						**3.61**	

The results in Table 4.9 show that 51owners of hardware shops (72.2%), with a mean aggregate score of 3.61, agreed with various assertions that aimed to examine the influence of substitute products on the competitiveness of SMEs hardware in South Imenti sub-county. The result shows that the top most four features of defining the influence substitute hardware products in this area are, ‘customers are sensitive to prices

(mean=4.80), the presence of product substitutes do affect our sales (mean=3.82), there are a number of product substitutes at the market (mean=3.72), and there is decline of prices due to emerging substitutes of products (mean=3.61)'.

Most hardware owners disagreed with the assertion that 'customers have no option but to buy what we sell to them'(mean=3.31).The results are showing that substitute hardware products exist in different shops and usually affect the prices of the existing products, which further affect the sales turnover of SMEs hardware in Imenti South sub-county. This ultimately affects the ability of the hardware to compete in this sector.

Threat of substitute products strongly affects the competitiveness of the hardware sector in Imenti South. The customers are sensitive to prices and have a wide range of substitute's products in the market. This was also demonstrated by Rachapila and Jansirisak (2013) who found that when the products were popular to the customers the players employed switching cost to buyers instead of quality improvement.

4.11Inferential Statistics and Testing of Hypothesis

Inferential statistical analyses, in this case, bivariate correlation analysis and linear regression analysis were carried out to test the relationship between independent and dependent variables. Data on the said variables was first subjected to several diagnostic tests that aimed to validate the assumptions of a regression analysis. The diagnostic tests done were normality test, linearity test, heteroskedasticity test, auto-correlation test and multicollinearity tests.

4.11.1 Normality Test

Most statistical analysis usually assumes that the collected data is normally distributed (Bryman, 2012). The testing of normality in this study was done using the Kolmogorov-Smirnov test since the sample size was more than 50 respondents. In this test, the decision rule is that, data is normally distributed if the Asymp. Sig. (2-tailed) is more than the set alpha value, that is, P > 0.05. The result of normality test of this study is shown in Table 4.10.

Table 4.10

Kolmogorov-Smirnov Test on Normality

		X1	X2	X3	X4	X5	Y
N		71	71	71	71	71	71
Normal Parameters[a,b]	Mean	3.6638	3.9638	2.9606	3.6737	3.6033	4.3883
	Std. Deviation	.48297	.49706	.39224	.48830	.54654	.42442
Most Extreme Differences	Absolute	.150	.148	.130	.102	.090	.188
	Positive	.077	.069	.130	.090	.084	.107
	Negative	-.150	-.148	-.103	-.102	-.090	-.188
Kolmogorov-Smirnov Z		1.260	1.245	1.095	.860	.758	1.584
Asymp. Sig. (2-tailed)		**.084**	**.090**	**.182**	**.451**	**.613**	**.013**

a. Test distribution is Normal.

b. Calculated from data.

Based on the output of one sample Kolmogorov-Smirnov test, the Asympotic Significant value of all study variables (X1, *P*=.084; X2, *P*=.090; X3, *P*=.182; X4, P=.451; X5,

P=.613 and Y *P*=.013) are greater than 0.05 which indicate that data was normally distributed.

4.11.2 Linearity Test

The linearity test was done using Pearson's moment correlation coefficient. The results are summarized in Table 4.11.

Table 4.11

Linearity test: ANOVA Results

				Sum of Squares	df	Mean Square	F	Sig.
Y X1 *	Between Groups	(Combined)		4.753	18	.264	1.748	.060
		Linearity		.276	1	.276	1.827	.182
		Deviation from Linearity		4.477	17	.263	1.743	.064
	Within Groups			7.856	52	.151		
	Total			12.610	70			
				Sum of Squares	df	Mean Square	F	Sig.
Y X2 *	Between Groups	(Combined)		3.502	15	.233	1.410	.176
		Linearity		2.138	1	2.138	12.908	.001
		Deviation from Linearity		1.364	14	.097	.588	.863
	Within Groups			9.108	55	.166		
	Total			12.610	70			
				Sum of Squares	df	Mean Square	F	Sig.
Y X3 *	Between Groups	(Combined)		2.208	17	.130	.662	.825
		Linearity		.238	1	.238	1.214	.276

		Deviation from Linearity		1.969	16	.123	.627	.847
	Within Groups			10.402	53	.196		
	Total			12.610	70			
				Sum of Squares	df	Mean Square	F	Sig.
		(Combined)		1.830	13	.141	.744	.713
	Between Groups	Linearity		.113	1	.113	.597	.443
Y * X4		Deviation from Linearity		1.717	12	.143	.756	.691
	Within Groups			10.780	57	.189		
	Total			12.610	70			
				Sum of Squares	df	Mean Square	F	Sig.
		(Combined)		2.749	12	.229	1.347	.218
	Between Groups	Linearity		1.483	1	1.483	8.724	.005
Y * X5		Deviation from Linearity		1.265	11	.115	.677	.755
	Within Groups			9.861	58	.170		
	Total			12.610	70			

Based on the ANOVA Table 4.11, the value Sig. deviation from linearity of: Y * X1 = .064, Y * X2 = .863, Y * X3 = .847, Y * X4 = .691, Y * X5 = .755 are all greater than 0.05, hence it is concluded that there is a linear relationship between the independent variables and the dependent variable.

4.11.2 Test of Heteroskedasticity

The heteroskedasticity test was conducted statistically by computing correlation coefficients values. Results are shown in Table 4.12.

Table 4.12

Test of Heteroskedasticity: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.615	.374		1.646	.105
	X1	-.052	.063	-.106	-.838	.405
	X2	-.036	.065	-.075	-.549	.585
	X3	-.030	.082	-.050	-.371	.712
	X4	.090	.060	.185	1.502	.138
	X5	-.065	.061	-.150	-1.067	.290

a. Dependent Variable: AbsUt

Based on the coefficients shown in Table 4.12, the obtained value of Sig. X1 variable of .405, Sig. X2 variable of .585, Sig. X3 variable of .712, Sig. X4 variable of .138, and the Sig. X5 variable of .290, are all greater than 0.05, hence it is concluded that there is no heterescedasticity problem in the data.

Other tests of regressions analysis such as auto-correlations test using Durbin-Watson, and multicolleration test using Variance Inflation Factor (VIF) were also carried out and the results are presented in Table 4.13 and 4.15 respectively.

4.12 Hypothesis Testing

Data for each independent variable (threat of new entrants, X1; competitive rivalry X2; bargaining power of buyers, X3; bargaining power of suppliers, X4; and threat of substitute, product, X5) were separately regressed on the dependent variable,

competitiveness (Y), and the results of each model were summarized in Table 4.13, 4.14 and 4.15, whose results were used to test all the five hypothesis.

Table 4.13

Model Summary on the Independent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
X1	.148[a]	.022	.008	.42278	1.950
X2	.412[a]	.170	.157	.38957	2.175
X3	.137[a]	.019	.005	.42343	1.896
X4	.095[a]	.009	-.005	.42557	1.900
X5	.343[a]	.118	.105	.40156	1.875

a. Predictors: (Constant), X1, X2, X3, X4, X5
b. Dependent Variable: Y

Table 4.13 shows the five hypothesized predictors of competitiveness in SMEs hardware shops in Imenti South sub-county and further shows the percentage of variation that is accounted by each of them. The results also show the Durbin-Watson value for each independent predictor, which was found to be more than 1 in each case. This indicates that no autocorrelation was found in each case hence each model was relevant in the analysis.

Table 4.14

Influence of Independent variables on Competitiveness: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.276	1	.276	1.544	.218[b]
X1	Residual	12.334	69	.179		
	Total	12.610	70			
	Regression	2.138	1	2.138	14.085	.000[b]
X2	Residual	10.472	69	.152		
	Total	12.610	70			
	Regression	.238	1	.238	1.328	.253[b]
X3	Residual	12.371	69	.179		
	Total	12.610	70			
	Regression	.113	1	.113	.623	.433[b]
X4	Residual	12.497	69	.181		
	Total	12.610	70			
	Regression	1.483	1	1.483	9.198	.003[b]
X5	Residual	11.126	69	.161		
	Total	12.610	70			

a. Dependent Variable: Y

b. Predictors: (Constant), X1, X2, X3, X4, X5

The ANOVA Table 4.14 shows the significance of each model in predicting the variations in dependent variable. The relationship or the effect of predictor variable is regarded significant if $P<0.05$. Results show that only two out of three predictor variables, that is, competitive rivalry (X2) and threat of substitute, product(X5) are statistically significant in accounting for the variations in the dependent variable (Y, competitiveness in the SMEs hardware shops).

Table 4.15

Influence of Independent Variables on Competitiveness: Regression Weights

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.912	.387		10.119	.000		
	X1	.130	.105	.148	1.243	.218	1.000	1.000
2	(Constant)	2.995	.374		8.004	.000		
	X2	.352	.094	.412	3.753	.000	1.000	1.000
3	(Constant)	3.948	.385		10.247	.000		
	X3	.149	.129	.137	1.153	.253	1.000	1.000
4	(Constant)	4.690	.386		12.152	.000		
	X4	-.082	.104	-.095	-.790	.433	1.000	1.000
1	(Constant)	3.429	.320		10.714	.000		
	X5	.266	.088	.343	3.033	.003	1.000	1.000

a. Dependent Variable: Y

Table 4.15 shows a VIF value of 1 for each predictor, which helps to rule out multicorrelations among the study variables hence each model is fit for data analysis and interpretations (Salmerón Gómez, García Pérez, López Martín &García, 2016). The results also show the coefficient values (regression weights) of each predictor and the corresponding level of significance. The unstandardized B-coefficients values rather than the beta coefficients values were used in each case because all the valuables of the five predictors had identical Likert scales, and also considering that the constant value in each model was significant.

4.12.1 Hypothesis testing on Influence of barriers to entry on the competitiveness of hardware sector in South Imenti, Meru County

The first null hypothesis ($H0_1$) predicted that threat of new entrants has no significant influence on the competitiveness of hardware sector in South Imenti, Meru County. According to ANOVA Table 4.14, the computed significance level, P =.218 was higher than the alpha value of 0.05 hence we fail to reject the null hypothesis and conclude that although the threat of new entrants has a positive relationship (r= .148 in Table 4.13) with competitiveness of hardware SMEs in South Imenti, Meru County, its impact is very minimal (R^2=.022). This implies that the threat of new entrants is not significantly influencing the competitiveness of hardware sector in South Imenti sub-county, Meru County.

The findings contrast Njambi, et.al (2015) who found a positive correlation between competition and threat of new entrants. This was similar to Thuong (2017) who found a positive correlation between the two variables.

4.12.2 Hypothesis testing on Effect of Rivalry on the Competitiveness of Hardware Sector in South Imenti, Meru County

The second null hypothesis (H_{02}) predicted that rivalry has no significant effect on the competitiveness of hardware sector in South Imenti, Meru County. The linear regression model shown in ANOVA Table 4.14 was found to be good fit of the data ($F_{(1,69)}$ = 14.085, P= 0.000) at 5% degree of significance which implies that rivalry has a positive and significant relationship (r= .412, Table 4.13) with competitiveness of hardware sector

in South Imenti sub-county, Meru County. The null hypothesis was therefore rejected and concluded that rivalry has significant effect on the competitiveness of hardware sector in South Imenti sub-county, Meru County. The resulting goodness of fit as shown in Table 4.13 was R^2 =.170, indicates that 17.0% of the variability in Y is explained by threat of rivalry. This is also confirmed by the regression weights in Table 4.15 (β2 = .352, *P* = .000). The result implies that threat of rivalry is positively and statistically significant in affecting the competitiveness of hardware sector in South Imenti sub-county, Meru County.

Similarly, Lad (2015) used ANOVA to analysis the effect of strategy implementation on competitive advantage for small and medium enterprise in Nairobi. Lad found a positive significant relationship between the elements of organization structure and competition; therefore and hence rejected the null hypothesis. Also Njambi et al (2015) found a similar finding using chi-square tests where she reported a P-value of 0.359, hence rejecting the null hypothesis.

4.12.3 Influence of bargaining power of buyers on the competitiveness of hardware sector in South Imenti, Meru County

The third null hypothesis ($H0_3$) predicted that the bargaining power of buyers has no significant influence on the competitiveness of hardware sector in South Imenti, Meru County. According to ANOVA Table 4.14, the computed significance level, *P* =.253 was higher than the alpha value of 0.05, hence, the study failed to reject the null hypothesis and concluded that, although the bargaining power of buyers has a positive relationship

(r= .137, Table 4.13) with competitiveness of hardware sector in South Imenti, Meru County, its effects (R^2 =.019) is very minimal. This implies that the bargaining power of buyers does not significantly influence the competitiveness of hardware sector in South Imenti sub-county, Meru County.

The findings were contrast to Thuong (2017) that used chi-square tests to reject the null hypothesis, after finding out that there was no statistically significant association between the two variables. Thuong further measured the correlation between the two variables and found there was positive correlation between them.

4.12.4 Influence of bargaining power of suppliers on the competitiveness of hardware sector in South Imenti, Meru County

The fourth null hypothesis ($H0_4$) predicted that the bargaining power of suppliers has no significant influence on the competitiveness of hardware sector in South Imenti, Meru County. According to ANOVA Table 4.14, the computed significance level, P =.433 was higher than the alpha value of 0.05, hence, the study failed to reject the null hypothesis and concluded that, although the bargaining power of suppliers has a positive relationship (r= .095, Table 4.13) with competitiveness of hardware sector in South Imenti, Meru County, its effect (R^2 =.009) is very minimal. This implies that the bargaining power of suppliers does not significantly influence the competitiveness of hardware sector in South Imenti sub-county, Meru County. The findings were similar to Njambi et al (2015) who used chi-square tests to measure the bargaining power of suppliers against competitive.

Njambi et al found out there was no correlation between the two variables and hence failed rejected the null hypothesis.

4.12.5 Influence of Substitute Products on the Competitiveness of Hardware Sector in South Imenti, Meru County

The fifth null hypothesis (H_{05}) predicted that the threat of substitute products has no significant effect on the competitiveness of hardware sector in South Imenti, Meru County. The linear regression model shown in ANOVA Table 4.14 was found to be good fit of the data ($F_{(1,69)} = 9.198$, $P = 0.003$) at 5% degree of significance which implies that threat of substitute products has a positive and significant relationship (r= .343, Table 4.13) with competitiveness of hardware sector in South Imenti sub-county, Meru County. The null hypothesis was therefore rejected and concluded that threat of substitute products has significant effect on the competitiveness of hardware sector in South Imenti sub-county, Meru County. The resulting goodness of fit as shown in Table 4.13 was R^2 =.118%, indicates that 11.8% of the variability in Y (competitiveness) is explained by threat of rivalry. This is also confirmed by the regression weights in Table 4.15 ($\beta 5$ = .266, P = .003). The result implies that the threat of substitute products positively and significantly affects the competitiveness of hardware sector in South Imenti sub-county, Meru County. The findings concurred with Njambi et al (2015) which indicated a correlation of the two variables had a value of 0.1666 hence were positively correlated.

4.13 Test of the Influence of Porter's Five Forces Model on Competitiveness of SMEs Hardware in South ImentiSub-County, Meru County

This study aimed to assess the influence of Porter's five forces model on the competitiveness of small and medium hardware shops in South Imenti sub-county, Meru County. Having examined the relationship of each of the five independent predictors (threat of new entrants, X1; competitive rivalry X2; bargaining power of buyers, X3; bargaining power of suppliers, X4; and threat of substitute product, X5) with the dependent variable, competitiveness (Y), it was necessary to find out how the five independent predictors jointly influence the competitiveness of small and medium hardware shops in South Imenti sub-county, Meru County. A bivariate correlation and multiple linear regression analysis were both carried out to test the hypothesized model.

In determining the aforementioned relationship, a bivariate linear correlation analysis was carried out to find out the relationship of each of the five predictors with the dependent variable. Results are presented in Table 4.16.

Table 4.16

Influence of porter's five forces model on competitiveness of SMEs hardware: Correlations

		Y	X1	X2	X3	X4	X5
Y	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	71					
X1	Pearson Correlation	.148	1				
	Sig. (2-tailed)	.218					
	N	71	71				
X2	Pearson Correlation	.412**	.246*	1			
	Sig. (2-tailed)	.000	.038				
	N	71	71	71			
X3	Pearson Correlation	.137	.295*	.222	1		
	Sig. (2-tailed)	.253	.012	.063			
	N	71	71	71	71		
X4	Pearson Correlation	-.095	.064	-.142	.148	1	
	Sig. (2-tailed)	.433	.594	.238	.218		
	N	71	71	71	71	71	
X5	Pearson Correlation	.343**	.102	.402**	.402**	.137	1
	Sig. (2-tailed)	.003	.398	.001	.001	.255	
	N	71	71	71	71	71	71

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

According to the findings in Table 4.16, only two out of five predictors, that is, competitive rivalry, X2 (r =.412**, P = .000), and threat of substitute product, X5(r =.343**, P = .003), are all positively and significantly correlated to the competitiveness of small and medium hardware shops in South Imenti sub-county, Meru County. All the other independent variables (threat of new entrants, X1(r =.148, P = .218); bargaining power of buyers, X3(r =.137, P = .253); bargaining power of suppliers, X4(r =.-095, P =

.433) had no statistically significant relationship with the dependent variable Y, (competitiveness of SMEs hardware in South Imenti sub-county, Meru County).

A multiple regression analysis was also conducted on the five predictors (threat of new entrants, X1; competitive rivalry X2; bargaining power of buyers, X3; bargaining power of suppliers, X4; and threat of substitute product, X5) with the dependent variable, competitiveness (Y), of hardware SMEs in South Imenti sub-county, Meru County in order to further investigate the effects of combined predictors on the dependent variable. Results are shown in Tables 4.17, 4.18 and 4.19.

Table 4.17

Influence of porter's five forces on competitiveness of SMEs hardware: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.466[a]	.217	.157	.38964	2.105

a. Predictors: (Constant), X5, X1, X4, X3, X2
b. Dependent Variable: Y

Results in Table 4.17 indicate that all the five drivers of the Porter's forces model on the competitiveness of SMEs hardware in South Imenti sub-county, Meru County jointly explains 21.7% (R^2= .217) of the total variations in the competitiveness of SMEs hardware in South Imenti sub-county. Unlike the correlations output in Table 4.16, the results shows that all the predictor variables jointly constitute a model that is significant in influencing the competitiveness of small and medium hardware in South Imenti sub-county, Meru County.

Table 4.18

Influence of porter's five forces on competitiveness of SMEs hardware: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.741	5	.548	3.611	.006[b]
	Residual	9.868	65	.152		
	Total	12.610	70			

a. Dependent Variable: Y

b. Predictors: (Constant), X5, X1, X4, X3, X2

The regression ANOVA in Table 4.18 containing all the independent variables (predictor variables) in a single model which was found to be valid (a good fit of the data), ($F_{(5,65)} = 3.611$, $P < 0.05$), meaning the all the five predictors, when combined, form a model that is statistically significant in explaining the variations in the competitiveness of SMEs hardware shops in South Imenti sub-county, Meru County. The Durbin-Watson value of 2.105 in Table 4.17 is higher than 1 which confirms that no autocorrelation was detected hence the model is reliable. Moreover, Table 4.19 further shows absence of multicollinearity among the study variables where VIF is less than 10 in each case. The overall results confirms the hypothesized model that the fives forces model influence the competitiveness of hardware shops in South Iment sub-county, Meru County in Kenya.

Table 4.19

Influence of porter's five forces on competitiveness of SMEs hardware: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.882	.619		4.653	.000		
	X1	.058	.104	.066	.561	.577	.865	1.155
	X2	.250	.108	.293	2.310	.024	.751	1.332
	X3	-.035	.136	-.032	-.256	.798	.765	1.307
	X4	-.075	.100	-.086	-.750	.456	.916	1.092
	X5	.189	.101	.243	1.866	.067	.708	1.413

a. Dependent Variable: Y

Since all predictors of competitiveness of SMEs hardware (threat of new entrants, X1; competitive rivalry X2; bargaining power of buyers, X3; bargaining power of suppliers, X4; and threat of substitute product, X5) had identical Likert scales, and considering that the constant value is significant in this model as shown in Table 4.19, the study therefore used the B-coefficients rather than the beta coefficients in interpreting the regression weights. Consequently, the value of regression weights shown in Table 4.19 indicate that the competitiveness of SMEs hardware in South Imenti sub-county will always exist at a certain significant minimum ($\beta 0=2.882$, $P < .000$).

The hypothesized model (Y = B0 + B1X1 + B2X2 + B3X3 + B4X4 + B5X5 + e) now quantifies the strength of the relationships presumed in this study. Precisely, the model shows that the competitiveness in the SMEs hardware in Imenti South sub-sounty is (0.058 x threat of new entrants) + (0.250 x competitive rivalry) + (-0.035x bargaining power of buyers) + (-0.075 x bargaining power of suppliers) + (0.189 x threat of substitute product) + 2.882)). In this model, 2.882 is a baseline score that is unrelated to any other variables which means that it is the same 2.882 points for each variable; for example, on average, 1 point higher on threat of new entrants score 0.058 points higher on competitiveness. The resulting model in this study is:

Y = B0 + B1X1 + B2X2 + B3X3 + B4X4 + B5X5 + e

Y = 2.882 + 0.058X1 + 0.250 X2 - 0.035 X3 - 0.075 X4 + 0.189 X5 + e

Where:
B0 = constant value,

X1 = Threat of new entrants,

X2 = Competitive rivalry,

X3 = bargaining power of buyers,

X4 =bargaining power of suppliers,

X5 = Threat of substitute product,

e = standard error.

However, the multiple regressions results of coefficient in Table 4.19 indicate that only competitive rivalry (X2), ($\beta 2 = 0.250$, $P = .024$) that is statistically significant and positively related to the competitiveness of small and medium hardware in South Imenti sub-county, Meru County. This implies that, although all the five predictors are relevant in influencing the competitiveness of SMEs hardware, it is the competitive rivalry among the players that largely shapes and characterizes the competitiveness in this sub-county. This indicates that there is fierce competitive rivalry among the small and medium hardware in South Imenti sub-county, Meru County. According to results in Table 6, the rivalry is largely precipitated by the presence of many competitors in the business, lot of price wars, high differentiation of hardware products, high fixed and storage costs, and the inhibitive exit barriers.

4.14 Summary of the Chapter

This study was set out to assess the influence of Porter five forces model on competitiveness of small and medium hardware enterprises in South Imenti Sub-county, Meru County. A number of tests were carried out, both descriptive statistics and inferential statistics in analyzing data in this study. The overall results indicated that all the five forces, that is, threat of new entrants, competitive rivalry, bargaining power of buyers, bargaining power of suppliers and threat of substitute product were jointly statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti Sub-county, Meru County, Kenya. The five predictors jointly accounted for 21.7 percent of variations in the competitiveness. However, when examining these forces together, only one force of porter's five forces was found having greatest effects; that is competitive rivalry. The finding indicates that the competitiveness of small and medium hardware enterprises in South Imenti Sub-county, Meru County is largely influenced by competitive rivalry.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECCOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings, conclusions and recommendations of the study. It concludes by making suggestions for further research. The presentation in this chapter starts by providing synopsis of the study followed by a summary of the key findings. The conclusions and recommendations herein are based on the findings of the study.

The purpose of the study was to assess the influence of Porters Five Forces on competitive of the small and medium-sized hardware enterprises in Imenti South sub-county, Meru County, Kenya. This was realized by pursuing five research objectives which led to the examination of the influence of barriers to entry, the effect of rivalry, bargaining power of suppliers, bargaining power of buyers, and substitute of products on competitiveness of small and medium-sized hardware enterprises in Imenti South sub-county, Meru County, Kenya. A review of empirical literature was done based on research objectives; relating the past studies to this study and with reference to the arguments that are propagated by Porters five forces model. The reviewed studies indicated that there existed knowledge gaps on methodology used by different authors, while context and conceptualization of the five constructs that were under investigation in this study was lacking.

Descriptive survey design was adopted in guiding the investigation process. Data was collected from the registered hardware shops in South Imenti sub-county, Meru County using a structured questionnaire. Census sampling technique was used since the population was small. Content and construct validity helped to ensure data quality, while cronbach's alpha value was used to test the reliability of the research instruments. Mean, standard deviation, and linear regression analysis were used in analyzing research data.

5.2 Summary of the Major Findings

Major findings of this study were identified and summarized under each thematic area of each research objectives. The findings in Table 4.4 are showing that the competitiveness of the hardware SMEs in Imenti South Sub-county is real and is largely characterized by quality of products, substitute products, ability to deliver products to customers at the specified time, and responsiveness to customers' complaints among others. Other major findings with reference to each objective are highlighted below.

5.2.1 Threat of New Entrants and Competitiveness of SMEs in Imenti South Sub-county

In objective one, the study examined the influence of barriers to entry on the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. From analyzed information in chapter four, it was very clear that the majority of respondents, (aggregate mean score of 3.67), agreed with the various assertions that aimed to assess the influence of barriers to entry on the competitiveness of hardware shops in South Imenti sub-county. The results indicate that the hardware sector in South Imenti sub-county is still attracting many more start-ups who are likely to face challenges such as

high capital investment, building of good customer relations and challenge of encouraging customers' loyalty to particular products.

The testing of hypothesis shows *P* =.218 which is higher than the alpha value of 0.05 hence the study failed to reject the null hypothesis and concluded that although the threat of new entrants has a positive relationship (r= .148, Table 4.13) with competitiveness of hardware SMEs in South Imenti, Meru County, its impact is very minimal (R^2=.022). Results indicated that the threat of new entrants is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County.

5.2.2 Competitive Rivalry among Hardware SMEs in Imenti South Sub-county

For objective number two which examined the effect of rivalry on the competitiveness of hardware SMEs in South Imenti, Meru County, the study found that more than three quarter of respondents, (56, 78.6%), with a mean aggregate score of 3.93, agreed with the various assertions that aimed to assess the effect of rivalry on the competitiveness of hardware SMEs in South Imenti sub-county. All the aspects that were investigated had a high mean value which affirmed that there exist competitive rivalries among hardware SMEs in South Imenti sub-county, Meru County.

The results show that competitive rivalry among hardware shops in Imenti South sub-county is very strong. The rivalry is observed from the existing and upcoming shops. This is indicated in Table 4.6 where competitors had a mean of 4.34, which appear to be paving way for price wars among the hardware owners as attested by a mean of 3.94.

The results in ANOVA Table 4.14 show that competitive rivalry is statistically significant in accounting for the variations in competitiveness of the hardware SMEs in Imenti South sub-county. The results further show that rivalry has a positive and significant relationship (r= .412, Table 4.13) with competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The null hypothesis was therefore rejected and concluded that rivalry has significant effect on competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The findings in Table 4.13 shows R^2 =.170, indicating that 17% of the variability in competitiveness is explained by threat of rivalry. The result implies that competitive rivalry, positively and significantly affects the competitiveness of hardware SMEs in South Imenti sub-county, Meru County.

5.2.3 Bargaining Power of Buyers and Competitiveness of Hardware SMEs in Imenti South Sub-county

The third objective of the study assessed the influence of bargaining power of buyers on the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The results in Table 4.7 shows that 41(57.6%) respondents, with a mean aggregate score of 2.88, agreed with the various assertions that aimed to examine the influence of bargaining power of buyers on the competitiveness of hardware SMEs in South Imenti sub-county. This implies that the bargaining power of buyers of hardware products in South Imenti sub-county is fairly weak and may therefore not have very strong influence on the competitiveness in this sector.

The computed significance level according to ANOVA Table 4.14 is, *P* =.253 which is higher than the alpha value of 0.05, hence, the study failed to reject the null hypothesis

and concluded that, although the bargaining power of buyers has a positive relationship (r= .137, Table 4.13) with competitiveness of hardware SMEs in South Imenti sub-county, Meru County, its effect (R^2 =.019) is very minimal. Results indicated that bargaining power of buyers is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County.

5.2.4 Bargaining Power of Suppliers and Competitiveness of Hardware SMEs in Imenti South Sub-county

The results for objective four, which examined the influence of bargaining power of suppliers on competitiveness of hardware SMEs in South Imenti sub-county, Meru County, indicated that 52 owners of hardware shops (73.4%), with a mean aggregate score of 3.67, agreed with the various assertions that aimed to examine the influence of bargaining power of suppliers on the competitiveness of hardware SMEs in South Imenti sub-county. It was clear in this study that unlike the buyers, the suppliers of hardware products appear to have a slightly high bargaining power. It was also clear that the products handled by suppliers are not largely differentiated. This implies that the bargaining power of suppliers for hardware products in South Imenti sub-county is fair. That notwithstanding, the findings show that most of the suppliers had their own outlets within the same location which could negatively affect their bargaining power.

The computed significance level according to ANOVA Table 4.14 is, *P* =.433 was higher than the alpha value of 0.05, hence, the study failed to reject the null hypothesis and concluded that, although the bargaining power of suppliers has a positive relationship (r= .095, Table 4.13) with competitiveness of hardware SMEs in South Imenti, Meru County,

its effect (R^2 =.009) is very minimal. Results show that bargaining power of suppliers is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County.

5.2.5 Threat of Substitute Products and Competitiveness of Hardware SMEs in Imenti South Sub-county

The last objective of the study examined the influence of substitute products on the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The results show that 51 owners of hardware shops (72.2%), with a mean aggregate score of 3.61, agreed with various assertions that aimed to examine the influence of substitute products on the competitiveness of hardware SMEs in South Imenti sub-county. Further, the findings show that substitute hardware products exist in different shops, and usually affect the prices of the existing products; which further affect the sales turnover of hardware SMEs in Imenti South sub-county. The results in ANOVA Table 4.14 show that threat of substitute products is statistically significant ($F_{(1,69)} = 9.198$, $P= 0.003$) at 5% degree of significance) in accounting for the variations in competitiveness of the hardware SMEs in Imenti South sub-county. The null hypothesis was therefore rejected and concluded that threat of substitute products has significant effect on the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The resulting goodness of fit as shown in Table 4.13 was R^2 =.118, indicating that 11.8% of the variability in Y (competitiveness) is explained by threat substitute product. The result implies that threat of substitute products positively and significantly affects the competitiveness of hardware SMEs in South Imenti sub-county, Meru County.

5.3 Conclusions

The study observed that competitiveness of the hardware SMEs in Imenti South Sub-county is real and is largely characterized by quality of products, substitute products, ability to deliver products to customers at specified time, and responsiveness to customers' complaints among others. Other conclusions here below are derived from the findings related to each of the research objectives.

5.3.1 Threat of New Entrants and Competitiveness of SMEs in Imenti South Sub-county

Based on the findings for objective one, the study concluded that separately, threat of new entrants is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County. This was due to high profitability levels which attracts new players in the market. Hence, the threat of new entrants cannot end soon as more houses are being constructed incrementally. It was clear that in the hardware sector, the higher the quality, the high the profitability levels to both hardware shops and the suppliers. However, the hardware products are not highly differentiated and many times, new players deal with the same products which are also not very different in terms of quality. It was also very clear that, some players are willing to enter into the market but are put off by high capital requirements.

5.3.2 Competitive Rivalry among Hardware SMEs in Imenti South Sub-county

According to the findings of objective two, this study concluded that separately and even when combined with other predictors, competitive rivalry positively and significantly affects the competitiveness of hardware SMEs in South Imenti sub-county, Meru County.

It is clear that hardware SMEs in South Imenti sub-county are fighting amongst themselves as characterized by prices of products, the coming up of many hardware shops; something that is shaping the nature of competition in this sector.

The competitive rivalry taking place in the hardware sector in South Imenti sub-county, Meru County is good but very intensive hence forcing a number of hardware shops to lower their prices for survival. Although the products are not highly differentiated, the buyer switching costs were noted to be relatively low in this sector; hence the unprecedented rivalry among dealers. The culture has affected the sector in terms of unsystematic growth and low employability in this key sector of the economy.

5.3.3 Bargaining Power of Buyers and Competitiveness of Hardware SMEs in Imenti South Sub-county

The findings of objective three indicated that separately, bargaining power of buyers is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County. This has adverse implications on customers who appear helpless in determining the prices of hardware products. The mild influence of customers on prices is only pegged on existence of competing products which according to this study has minimal influence on competitiveness of hardware SMEs in South Imenti sub-county, Meru County. This could be largely because hardware products are not highly differentiated.

5.3.4 Bargaining Power of Suppliers and Competitiveness of hardware SMEs in Imenti South sub-county

According to the findings of objective four, the study concluded that separately, bargaining power of suppliers is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County. In this study, the bargaining power of suppliers was characterized by the number of suppliers in the market, buyer's choice towards a supplier, supplier outlets, products differentiation and forward integration. It stood out that buyer's choice towards a supplier increased the bargaining power of suppliers in the market hence influencing competitiveness of the hardware SMEs to a small extent. The investment outlays of hardware suppliers are usually huge which minimize the possibility of forward integration in this sector.

5.3.5 Threat of Substitute Products and Competitiveness of Hardware SMEs in Imenti South Sub-county

On objective number five, the study concluded that alone, threat of substitute products influence competitiveness but when combined with other predictors it does not positively and significantly affects the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The study hardware noted that customers are sensitive to prices and hence, gainfully utilize a wide range of substitute products that are available in the market. The main factor which determines threat of substitute products in this area of study is price sensitivity. This is because, a small change in price triggers the customers shift to other products that are stocked by other sellers in the market.

5.4 Recommendations for Research Findings

In view of the above conclusions, the study made several recommendations which are presented as per each research objectives.

5.4.1 Recommendations on Threat of New Entrants of Hardware SMEs in Imenti South Sub-county

Findings from this study indicate that construction of houses together with high profitability levels that are associated with hardware shops is jointly encouraging new entrants in South Imenti sub-county, Meru County. The threat of new entrants is however not intense. In order to cope with competition among hardware SMEs, the study recommends need for products that are highly differentiated. New products with better quality would be attractive in this sector hence manufacturers of hardware products should invest in value adding features in their products in order to attract high profit to all players that are involved.

5.4.2 Recommendations on Competitive Rivalry among Hardware SMEs in Imenti South Sub-county

This study noted an imperious influence of competitive rivalry on competitiveness of hardware SMEs in South Imenti sub-county, Meru County. The hardware owners should form an association to promote growth and solidarity of hardware players. This approach will foster collaborations among hardware business associates and is significant in scaling down business rivalry among hardware SMEs. The study further recommends introduction of innovative products that are highly differentiated in order to minimize

unwanted competitive rivalry in this sector. The hardware SMEs should also utilize their economies of scale in order to lower operating costs and build competitive competencies.

5.4.3 Recommendations on Bargaining Power of Buyers of Hardware products in Imenti South Sub-county

Results indicate that bargaining power of buyers as a separate construct is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County. Based on this finding, the study recommends need for consumer awareness and education which will help hardware customers to become educated buyers who can objectively choose a product from varieties. Consumer knowledge will also help them push for better quality products. The study further recommends intensive promotion and advertising of various hardware products in order to increase awareness and also interest buyers to different offerings in the market. Customers are also encouraged to consider bulk buying either in association with other customers or alone. This would largely help them to negotiate for low prices. Production of alternative products by buyers is also encouraged which will foster backward integration and ultimately result to low prices on hardware products.

5.4.4 Recommendations on Bargaining Power of Suppliers for Hardware products in Imenti South Sub-county

Results indicate that bargaining power of suppliers as a separate construct is not statistically significant in influencing competitiveness of small and medium hardware enterprises in South Imenti sub-county, Meru County. Strong suppliers can pressure buyers by raising prices, lowering product quality, and reducing product availability.

Consequently, the study recommends need for manufacturers to come up with diverse innovative products which will go a long way in reducing monopoly of given products in the hardware sector. Hardware dealers should continue to make available the various substitutes products that one can use in substitute of the regular ones. The same should be followed by buyers' market education in order to familiarize with the market changes and recent trends.

5.4.5 Recommendations on Substitute of Hardware Products in Imenti South Sub-county

Threat of substitute products was empirically proved to have significant impacts when examined separately on the competitiveness of hardware SMEs in South Imenti sub-county, Meru County. This emphasizes the essence of low buyers' switching costs. The study recommends the stocking of diverse quality hardware products by dealers. Availability of diverse substitute products in the market increases customers bargaining powers hence national development. The manufactures should also control the quality of products in the market so that customers can get value for their money. Sub-standard quality supplied in the market should be eliminated completely. The government should support the hardware sector by providing tax incentives which encourage local production/manufacture of quality hardware products.

5.5 Recommendations for Further Research

This study focused on the influence of Porters' five forces on the competitiveness of hardware business. Future studies may consider investigating the influence of Porters' five forces on the competitiveness of other sectors such as hotels & restaurant sector,

telecommunication sector and higher education sector among others. This is because; these sectors are witnessing increasing competition. Additionally, the same study may be replicated in other sub-regions in the country to establish whether different sub-regions will register consistent results.

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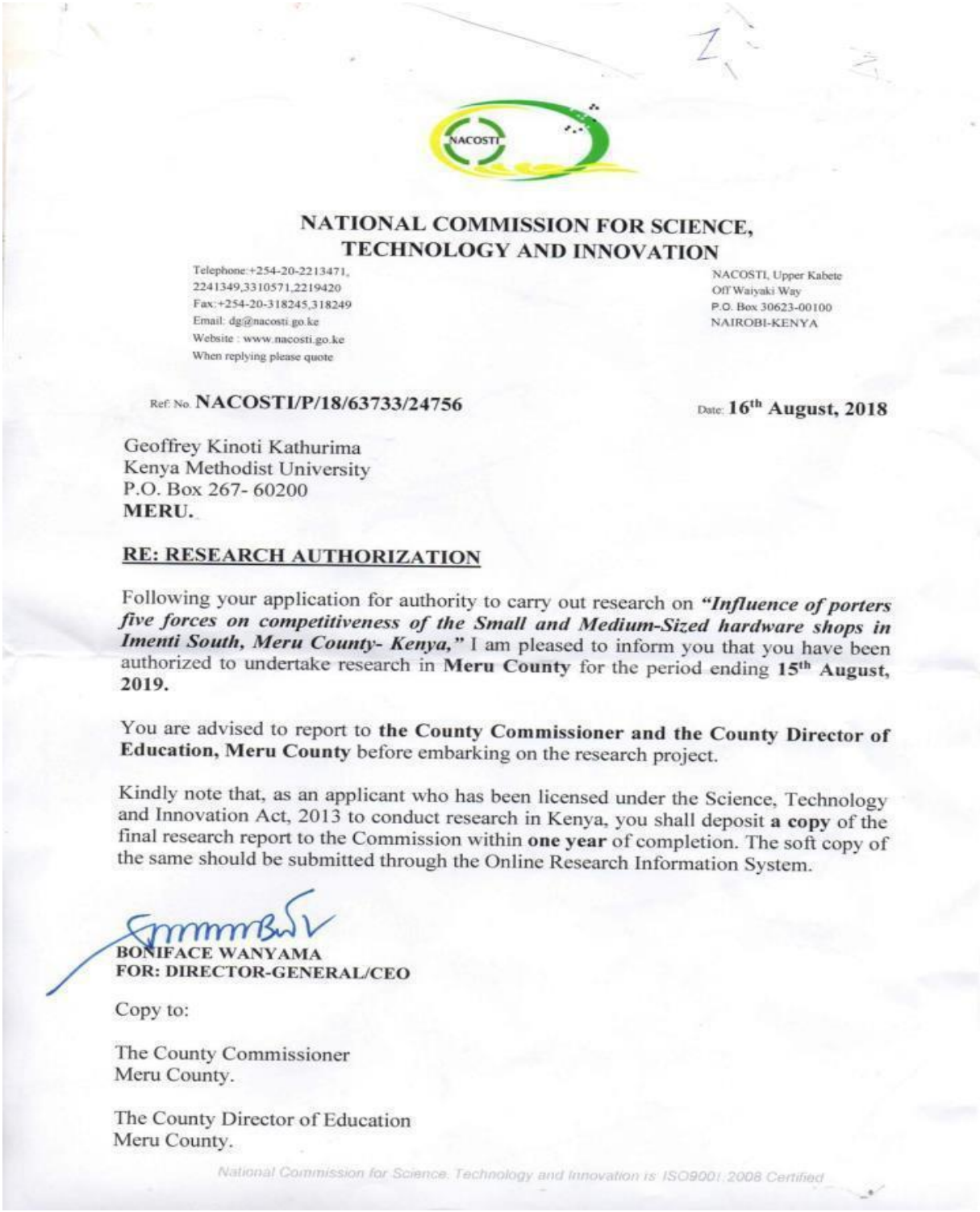
APPENDICES

Appendix I: Research Permit



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

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Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/18/63733/24756**

Date: **16th August, 2018**

Geoffrey Kinoti Kathurima
Kenya Methodist University
P.O. Box 267- 60200
MERU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of porters five forces on competitiveness of the Small and Medium-Sized hardware shops in Imenti South, Meru County- Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Meru County** for the period ending **15th August, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Meru County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Meru County.

The County Director of Education
Meru County.

National Commission for Science, Technology and Innovation is ISO9001:2008 Certified

Permit Number

Permit No : NACOSTI/P/18/63733/24756
Date Of Issue : 16th August,2018
Fee Recieved :Ksh 1000

THIS IS TO CERTIFY THAT:
MR. GEOFFREY KINOTI KATHURIMA
of KENYA METHODIST UNIVERSITY,
291-60202 Nkubu,has been permitted to
conduct research in *Meru County*

on the topic: *INFLUENCE OF PORTERS FIVE FORCES ON COMPETITIVENESS OF THE SMALL AND MEDIUM-SIZED HARDWARE SHOPS IN IMENTI SOUTH, MERU COUNTY- KENYA.*

for the period ending:
15th August,2019

.....
Applicant's
Signature

.....
Director General
National Commission for Science,
Technology & Innovation

Research Clearance Permit

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 20043

CONDITIONS: see back page

CONDITIONS

1. The License is valid for the proposed research, research site specified period.
2. Both the Licence and any rights thereunder are non-transferable.
3. Upon request of the Commission, the Licensee shall submit a progress report.
4. The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.
5. Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.
6. This Licence does not give authority to transfer research materials.
7. The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.
8. The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.

Appendix 2: Cover letter

Dear respondent,

I am student of MBA at Kenya Methodist University. I am conducting a research on influence of porters five forces on the competitiveness of small and medium-sized hardware business in Imenti South sub-county, Meru county, Kenya. I have identified you as a resourceful person in this study. Kindly fill up the attached questionnaire and return to me. Any information obtained for this purpose will be kept strictly confidential and will only be used for academic purpose. Your cooperation will be highly appreciated in this regard.

Thank You!

Yours truly
Geoffrey Kinoti

Appendix 3: Questionnaire

The Questionnaire is titled: Influence of porters five forces model on competitiveness of the small and medium- sized hardware stores in Meru County, Kenya. Instruction: Please, carefully read thoroughly and fill or tick ( ) as appropriate.

Section A: Personal Data

1. Gender: Male ☐ Female ☐
2. Level of Education ☐ primary ☐ Secondary ☐ College ☐ University
3. Business location……..
4. Duration in business

☐ Below 5 years ☐ 6-10 years ☐ 11- 15 years
☐ 16- 20 years ☐ 21- 25years ☐ Above 26 years

5. No of staff

☐ Below 10 ☐ 11- 50 ☐ Above 51

6. Total assets value

☐ Below kshs10,000,000 ☐ kshs10,0000,001- 300,000,000 ☐ kshs300,000,001–1500,000,000

SECTION B

Threat of new Entrants

Please tick the box corresponding to your personal opinion for each statement. Use the following guide to respond to the questions below:

Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree - 1

Statement	1	2	3	4	5
There are many other people willing and ready to open hardware business					
There are many new hardware businesses coming up					
To invest in a hardware business requires huge capital					
The regulations governing hardware businesses are friendly					
It is not hard to get customers in this hardware business					
There is brand loyalty of customers					
The raw materials are controlled by existing players					
The existing players have close customer relations					
The distribution channels are controlled by existing players					
The existing hardware stores have cost advantages					

Competitive Rivalry

Please tick the box corresponding to your personal opinion for each statement. Use the following guide to respond to the questions below:

Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree - 1

Statement	1	2	3	4	5
There are many competitors in the business					
Hardware sector is growing in Imenti South					
There are many fixed and storage costs in the business					
Hardware products are highly differentiated					
The costs of switching from hardware business to other businesses are					
High					
There exist barriers when you want to leave hardware business					
There is much price wars of products					

Bargaining Power of Buyers

Please tick the box corresponding to your personal opinion for each statement. Use the following guide to respond to the questions below:

Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree - 1

Statement	1	2	3	4	5
Our customers buy large volumes					
Our customers have a lot of information about hardware business					
Our customers can decide to make own products instead of buying from us					
Our customers can only buy from us					
Our customers dictates the price at which we sell to them					
Our customers have information about the prices offered by our competitors					
Our customers are very powerful in bargaining power					
Our customers can simply switch to an alternative product					
Our customers are aware of the production cost of the product					
Our customers have possibility to integrate backwards					

Bargaining Power of Suppliers

Please tick the box corresponding to your personal opinion for each statement. Use the following guide to respond to the questions below:

Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree - 1

Statement	1	2	3	4	5
There are many suppliers of hardware products in the same market					
Suppliers of hardware products are normally huge business					
Our suppliers sell products that are differentiated from other supplies					
Our suppliers have their own retail outlets where they sell their products					
I can always buy from a supplier of my choice					
Our suppliers can integrate forwards					

Threat of Substitute Product

Please tick the box corresponding to your personal opinion for each statement. Use the following guide to respond to the questions below:

Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree - 1

Statement	1	2	3	4	5
Customers are sensitive to prices					
There are a number of product substitutes at the market					
The present of product substitutes do affect our sales					
There is decline of prices due to emerging product substitutes					
Our customers normally threaten to buy alternative products					
Customers have no option but to buy what we sell to them					

Competitiveness

Please tick the box corresponding to your personal opinion for each statement. Use the following guide to respond to the questions below:

Strongly agree – 5; Agree – 4; Neutral – 3; Disagree – 2; Strongly Disagree - 1

Statement	1	2	3	4	5
We are normally very keen on quality					
We only store quality products					
Our level of quality is acceptable to our customers					
We are very keen on how we source our products					
We are able to buy our products at low cost					
We are reducing wastages in our operations					
We are able to deliver our products to customers at the specified time					
We are able of offer our customers products at competitive prices					
We always maintain optimum stocks of our products					
Our firm has a proper planning and control system					
We are flexible in the way we operate					
We are always keen with what is happening in our business environment					
Our level of responsiveness is high					
We respond to complaints from our customers immediately					