

DECLARATION

This thesis is my original work and has not been submitted in any other college or institution of University for academic credit.

"QUALITY DRIVERS, MANAGERIAL FOCUS, CUSTOMER PERCEPTION AND SATISFACTION IN LARGE MAIZE FLOUR MILLS IN NAIROBI, KENYA"

KABARE NDUNGU



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A Thesis Submitted in Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy in Business Administration


School of Business

University of Nairobi

2013

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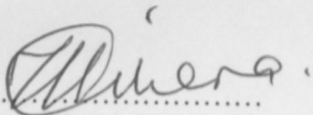
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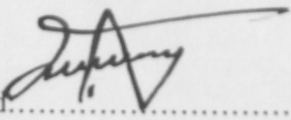
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DEDICATION

This thesis is dedicated to my family, with love and thanks.

I wish to acknowledge the support of the entire PhD teaching and support staff at the University of Nairobi, both at the main campus and Lower Kabete campus. Special thanks go to my advisory supervisors, Prof. Francis Kibera and Dr. Justice Muryoki for their guidance, constructive advice and quick review of the work as the project unfolded. The remarkable service that you all provided during proposal presentations is greatly appreciated. The support from the electronic journals section and other sections of the university library in obtaining copies of the journal literature, is highly appreciated.

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ABSTRACT

This study evaluated the influence of managerial focus and customer perception on the relationship between quality drivers and customer satisfaction within large Maize Flour Mills in Nairobi. Quality drivers included product quality, service quality, complaints handling, ease of doing business and product price. Customer perception constructs were customer's desire for features critical to quality, brand imagery, firm imagery and reference to competitive substitutes. Managerial focus was studied through employee attitude, firm agility and firm innovativeness. The three variables were used to form an integrated model to broaden the scope of customer satisfaction assessment. Primary data were collected in February 2013 from 13 Maize Flour Mills grinding at least 15 MT of maize per day and 81 of their direct Business Customer firms randomly selected. Results showed that the influence of quality drivers on customer satisfaction within large Maize Flour Mills in Nairobi is both direct and partially mediated through customer perception, both influences being positive and statistically significant ($\beta = 0.391$, $p < 0.05$ and $\beta = 0.296$, $p < 0.05$, respectively). Quality of service emerged as a key driver of satisfaction as it had positive and significant correlations with customer satisfaction ($\beta = 0.441$, $p < 0.05$) and with most of the other quality drivers and intention to recommend. On customer perception, brand imagery had positive effect on satisfaction ($\beta = 0.531$, $p < 0.05$) followed by desire for features critical to quality ($\beta = 0.259$, $p < 0.05$). Customer satisfaction emerged as a moderate predictor of intention to recommend a brand or firm ($\beta = 0.481$, $p < 0.05$) suggesting that it is necessary to directly survey for referrals or intention to recommend. Managerial focus had a statistically significant direct effect on customer satisfaction ($p < 0.05$) but its effect on the link between quality drivers and customer satisfaction was not statistically significant. Among the managerial focus constructs, employee attitude had a positive effect on customer satisfaction ($p < 0.05$). The leading perceived barrier to innovation was lack of a vivid or clear need for innovation within the mills. The joint influence of quality drivers, customer perception and managerial focus on customer satisfaction was statistically significant ($p < 0.05$). It is concluded that besides having the primary quality drivers, customer satisfaction metrics and enhancement programs need to incorporate customer perception and managerial focus. The attention of senior management to firm upstream enabler variables such as employee attitude directly influences customer satisfaction and it is necessary to strive to improve customer perceptions related to brand and firm imagery. Improvement in the quality of service plays a major role in the dynamics of customer satisfaction.

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ACRONYMS AND ABBREVIATIONS

ACSI	American Consumer Satisfaction Index
AMA	American Marketing Association
ANOVA	Analysis of Variance
CMT	Common Measurement Tool (Canadian)
CS	Customer Satisfaction
DV	Dependent Variable
EAC	East African Community
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
HACCP	Hazard Analysis and Critical Control Points
ISO	International Organization for Standardization
IV	Independent Variable
KAM	Kenya Association of Manufacturers
KMO	Kaiser-Meyer-Olkin
MV/IVV	Mediating (Intervening) Variable
NCSB	Norwegian Customer Satisfaction Barometer
NPS	Net Promoter Score
SCSB	Swedish Customer Satisfaction Barometer
SPSS	Statistical Program for Social Sciences
VAT	Value Added Tax
VIF	Variance Inflation Factor
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background

As businesses, both locally and globally, face increasing challenges, greater focus is being directed on customer satisfaction so as to improve product and service offerings and maintain customer loyalty in the face of growing intensity of competition (Bruhn and Grund, 2000; Matzler *et al*, 2004; Turkyilmaz and Ozkan, 2007). A key motivation for this focus is that higher customer satisfaction is a strong predictor of customer loyalty and can lead to a stronger competitive position resulting in higher customer retention, market share and profit; and lower price elasticity (Johnson and Fornell, 1991; Fornell *et al.*, 1996; Oloughlin and Coenders, 2004).

Customer satisfaction is influenced by diverse stimuli that shape a consumer's decision making process and purchase decisions. These include marketing stimuli relating to the product, service, and the transaction process, external stimuli, and consumer psychological and demographic characteristics (Krivobokova, 2009). The study of these stimuli and related aspects in marketing falls within the theory of consumer behaviour upon which this study is founded. Constituent theories relate to consumer motivation, perception, attitude, learning and conformity to group patterns (Kotler and Keller, 2006).

Firms enhance customer satisfaction through a careful blend of marketing mix stimuli with marketing efforts aligned with group and consumer characteristics and psychological perspectives. A key consideration is the fact that customers base decisions on how they perceive the quality drivers as opposed to their objective reality (Schiffman and Kanuk, 2007) and that perception shifts over time as marketing conditions and other factors change (French *et al*, 2005). Perception can be enhanced by closely matching the marketing mix stimuli (quality drivers) with customer expectations. In turn the success of the quality drivers is influenced by certain enabler variables that set the foundation upon which attribute performance depends. Enabler variables relate to managerial issues including the style of people and resource management, innovativeness, agility and customer feedback (Nielsen, 2010).

While customer satisfaction has been studied by numerous researchers, many of the studies have been done outside Kenya and have mainly focussed on the role of the immediate quality drivers, with little focus on upstream firm enabler variables that relate to managerial thrust. Formulating value propositions locally based only on research done elsewhere is likely to miss necessary inputs related to regional and industry differences occasioned by variations in customer perception, staff attitude and business dynamics. It is therefore necessary to study the influence of quality drivers, managerial focus and customer perception on customer satisfaction under the Kenyan context so as to formulate effective and competitive local and regional marketing strategies.

1.1.1 Customer Satisfaction

Satisfaction refers to an overall evaluation of how pleasurable one's interaction with an organization is including the buying and use experience, relative to what is anticipated (Anderson *et al*, 1997; Kotler and Keller, 2006; Ronald, 2010). At higher levels satisfaction can lead to loyalty. Loyalty arises from exceptional satisfaction with a firm's services and products. It is a deeply held commitment to repurchase or re-patronize a preferred product/service consistently over time, despite situational influences and marketing efforts that might have the potential to cause switching behaviour (Oliver, 1999).

Customer satisfaction is a moving target that is influenced by many factors and calls for continual adaptation to changing conditions. It shifts as customer perception of quality changes, evolves, and grows to encompass more expectations (French *et al*, 2005). Issues can arise concerning established brands, product features, processes or procedures including complaints. Competitors can offer better alternatives or changes in other fields such as technology or culture can shift customer perception (Armitage and Conner, 2001; Ferrell and Hartline, 2005). Firms should be agile enough to respond timely and accordingly so as to remain marketable (Sull, 2010). In addition firms have to demonstrate that they are available and able to understand and meet changing customer needs. The shifting customer preference for quality represents a rising willingness to pay and this presents opportunities to suppliers to meet the emerging needs. The ability to exploit the opportunities depends on ability to listen to clients and agility in responding to the new needs (Jones and Sasser, 1995).

Customer satisfaction is important to organisations because it is closely linked to future purchase behaviour and willingness to recommend and is thus a strong predictor of loyalty and customer retention (Yang and Peterson, 2004; Ferrell and Hartline, 2005). Loyal customers tend to buy more, are less price sensitive, speak well of the firm and are harder for competitors to win (Smith *et al.*, 1999; O'loughlin and Coenders, 2004; Jaiswal and Niraj, 2007). Winning new customers is often more expensive than keeping existing ones and small reductions in customer defections greatly increase profits (Anderson and Mittal, 2000; Eugene *et al.*, 1997; Krivobokova, 2009). Satisfaction therefore helps to reduce customer turnover and lower transaction costs related to contract negotiations, order processing, and bargaining (Fornell, 1992). Satisfied customers are most likely to share their experiences with about five or six people while a dissatisfied customer is more likely share their unfortunate experience with up to ten people (Ronald, 2010).

Firms with a large number of loyal customers benefit from a stronger competitive position resulting in higher repurchase rates, referrals, lower price elasticity and less switching tendency (Bruhn and Grund, 2000; O'loughlin and Coenders, 2004; Jaiswal and Niraj, 2007). Increases in customer satisfaction are generally believed to shift the demand curve upward and/or make the slope of the curve steeper (i.e. lower price elasticity and higher margins) and reduce marketing costs (Smith *et al.*, 1999). Loyal customers often ensure repeat purchases in a competitive business environment (Fornell, 1992; Hallowell, 1996; Eugene *et al.*, 1997; Anderson and Mittal, 2000; Krivobokova, 2009). Placing a high priority on CS is therefore critical in improving firm performance, including profitability, in a global marketplace (Anderson *et al.*, 1994; Fojtik and Nicks, 2010).

The aim is to have loyal customers who promote a firm's goods and services and thereby retain existing customers and keep attracting new ones (Hill *et al.*, 2007). Profit and growth come from loyal customers and thus forward-looking firms find value in directly measuring and tracking customer satisfaction as an important strategic success indicator. The feedback from customer satisfaction assessment is then used to develop a strong value proposition, one that is persuasive, distinctive, measurable, defensible and sustainable (Deming, 1993; Krivobokova, 2009).

Assessment of customer satisfaction has had considerable progress over the last four decades. In the 1970s, focus was mainly on consumer complaint behaviour (Hirschman, 1970; Andreassen and Best, 1977). This was followed by the emergence of national index models such as the Swedish and the American models (SCSB and ACSI) in the 1980s and 1990s. Derivatives of these two models have been developed across many countries such as in Japan and Taiwan among others (Nagashima, 2010). Progress has included expansion of model scope of drivers of satisfaction. Lately the Net Promoter Score has been developed during the new millennium (Keiningham *et al*, 2007).

In Kenya focus on customer satisfaction and its underlying drivers is gaining increasing attention in both the public and the private sectors. In the public sector assessment of customer satisfaction has been included in performance contracts since 2004 (Kobia and Mohammed, 2006; Obong'o, 2009). The aim has been to improve service delivery and enhance focus on output and consumer satisfaction. The system benchmarks on the Canadian Common Measurement Tool, a public satisfaction survey tool based on a framework of a public sector service value chain. It has five core drivers of satisfaction, accounting for seventy percent of the satisfaction with service delivery by the public sector (Heintzman and Marson, 2003). It assesses employee attitude through a measurement on staff courtesy.

Likewise, many firms in Kenya within the private sector are increasingly focussing on enhancement of customer satisfaction due to increasing competition. An increasing number are registering with industry and global quality standards such as ISO 9001:2008 Quality Management System and, for food related operations, the FAO/WHO Codex Alimentarius HACCP Food Safety System. Assessment of CS is a key feature of these standards (Kimbrell, 2000; Hashim, 2007; Krivobokova, 2009). This way firms hope to compete more effectively locally and against imports as well as in the export markets. Anyango and Wanjau (2011) observed improved company performance in Nairobi with respect to perceived quality, competitive advantage, corporate image and market share associated with adoption of ISO 9001 certification. Furthermore the certification impacted positively on financial resource management ($p=0.001$) and customer satisfaction ($p=0.03$).

1.1.2 Quality Drivers

Satisfaction is often shaped by various attributes upon which customers form perception. These can be attributes related to the product such as quality, value-price relationship, benefits and features, design, reliability and consistency and product/service range. They can be related to service such as delivery, complaint handling and problem resolution. Other attributes are related to the buying process such as convenience, courtesy, communication, staff competence and firm reputation (Dutka, 1993; Crawford, 2007).

Customers develop expectations depending on how they perceive these attributes and base decisions on perceptions rather than on the basis of objective reality (Schiffman and Kanuk 2007). The relative importance played by respective quality drivers and other enabler variables in fostering customer satisfaction varies over time as marketing conditions and other aspects of life change. This dynamism needs to be reflected in satisfaction assessment tools and associated frameworks if they are to remain robust in capturing the voice of the customer. The scope and nature of drivers used in satisfaction models therefore needs to be reviewed from time to time so as to keep abreast of changes in consumer behaviour and related fields (Johnson *et al*, 2001). In this regard, quality drivers are important to organisations because they form the basis of value propositions or lines of competition.

1.1.3 Customer Perception

Perception is the process by which people translate sensory impressions into a coherent and unified view of the world around them. Consumers process attribute experiences through psychological processes into summary forms such as attitudes or perceptions that influence satisfaction (Oliver, 1993; Chiou, 1998). An attitude is a mental position relative to a way of thinking or being; a leaning toward that which one believes. Anything that affects one's emotion does have an effect on his or her attitudes towards the object.

The concept of perception is of concern to marketers because, although often based on incomplete and unverified (or unreliable) information, perception is 'the reality' and guides human behaviour in general such that actions depend on what it is consumers believe to be. Customers develop expectations depending on how they perceive attributes and base decisions on the perceptions rather than on the basis of objective

reality (Schiffman and Kanuk, 2007). Perceptions are lasting but changeable and therefore marketers aim to match customer expectations as much as possible so as to enhance satisfaction. However, it is necessary to manage customer expectations by educating them about the firm and the related product. This is because customers can be disappointed if expectations are raised too high or discouraged from buying if expectations are too low (Kotler and Keller, 2006).

This study surveyed customer perceptions through four constructs, namely a customer's desire for features critical to quality, customer imagery of the brand and the firm and reference to competitive offers. These were deemed to influence the outcome of the primary quality drivers and thereby impact on customer satisfaction.

1.1.4 Managerial Focus

To succeed in highly competitive markets, business leaders need to create organization climates where employees continually apply innovative thinking in providing customer solutions and overcoming trading challenges and do so faster than competitors. This necessitates freeing of resources and fostering productive dialogue by embracing diverse viewpoints and synthesis of ideas. It calls for a corporate mindset focussed on key business features that help to cultivate a more responsive business (Desai, 2008, Glenn, 2009; Horth and Buchner, 2009). This attention to key enabler features upon which the success of product offering is rooted forms managerial focus.

In this study, managerial focus refers to senior management's attention to key issues that play a major role in driving efficiencies necessary for the success of the primary quality drivers such as product quality, price and accompanying service. Besides sound investment it is necessary that the style of governance empowers employees and fosters an agile culture that avoids waste and unnecessary costs while encouraging innovation (Sull, 2010). Managerial focus is of concern to organisations because it acts as a catalyst in driving business strategy, synergy and ultimately customer satisfaction. However, many satisfaction index models and questionnaires dwell on the immediate preconditions of customer satisfaction and omit the cascade of managerial issues (quality enablers) that influence the success of quality drivers.

Various research findings indicate that the right managerial focus is necessary for overall efficiency and competitive advantage. Fojtik and Nicks (2010) reported that

lack of senior management commitment to key issues that drive quality can compromise customer satisfaction. Irungu (2007) observed that firm performance was influenced by senior managerial characteristics although the effect was not significant. However, he did not consider the role of the focus of senior management on enabler variables that drive quality. Lean management and cost control are aimed at maximising customer value while minimizing waste thereby creating more value for customers from fewer resources (Oliver, 2002). Empowering employees with the ability to make decisions and the information to base decisions on provides a key catalyst in enhancing success of other firm operations (Walton, 1992; Kirk, 2010). Un-empowered employees can drive customers away or miss chances to build customer loyalty (Simmerman, 1995).

1.1.5 The Maize Flour Sub-Sector in Nairobi

Kenya's overall manufacturing contributes 10% of the country's GDP. Food processing contributes about two thirds of the manufacturing GDP and about a fifth of the country's export earnings (Osano *et al*, 2008). The Strategy for revitalizing agriculture recognises the vital role to be played by food processing in Kenya's economic development to the year 2014 (Ministry of Agriculture, 2004). The sector contributes through value addition, food security; and demand for transportation and distribution services among other ways.

Trade in maize flour plays a key role in this sector, especially because maize meal is the staple food in the country (Wangia *et al*, 2002). Maize flour is comprised of un-sifted (*posho*) meal from small firms targeting low income groups, and the sifted meal from larger firms targeting higher income segments especially in urban areas (Mukumbu and Jayne, 1994). Maize milling is concentrated in large towns especially Nairobi with a few large mills having countrywide sales, and numerous regional players. The maize meal is sold through regional wholesaling networks and to some direct institutional end users.

There is increasing vibrancy in the processed food sector leading to stiff competition among brands (Yabs, 2007). In the flour sector, due to the stiff competition especially in Nairobi, prices are determined by prevailing regional market prices and may not reflect transport costs (Kirimi *et al*, 2011). On average households in Nairobi spend 27% of their food budget on staples with maize meal taking the lead (Kamau *et al*,

2011). However, other carbohydrate sources such as wheat, rice, potatoes, sorghum and cassava are gaining popularity (Muyanga *et al*, 2005; Kamau *et al*, 2011). New challenges have come by way of legislation such as the VAT Act 2013 that has moved maize milling byproducts and several other commodities from zero rating to the standard VAT rating of 16%. This will increase the cost of these supplies and is likely to affect demand thereby increasing competition (Deloitte, 2011; Deloitte, 2013).

With increasing competition among flour mills, threat of blended flours, direct substitutes and potential imports from Tanzania and Uganda as trade restrictions ease with the opening up of EAC, local maize millers need to evolve their value propositions in line with customer expectations. To do this they need to understand the key variables that locally drive flour purchase decisions, their relative importance and the necessary preconditions or enabler variables. Such information is also useful to policy makers in the promotion of agro-processing and enhancement of food security across house hold income spectrums. However, little research has been done locally in this regard (Mukumbu and Jayne, 1994).

1.2 The Research Problem

The theories that seek to explain and predict how individuals make consumption-related decisions indicate that the evaluation process is influenced by both the consumer's internal psychological fields such as attitudes or perceptions and cues from the firm and other external sources. These include the various theories of consumer behavior such as those related to attitude formation, consumer learning and motivation among others (Bagozzi, 1992; Schiffman and Kanuk, 2007). Among the main propositions of these theories is that consumers form pre-consumption expectations and compare this to observed product performance to form satisfaction judgement in an expectancy disconfirmation evaluation (Oliver, 1980; Oliver, 1993). However, consumers are more likely to evaluate their post-purchase satisfaction feelings at an attribute level rather than at the product level. Furthermore evaluation of satisfaction at attribute level gives suppliers greater specificity in analysing drivers of satisfaction and conceptualizing situations in which customers experience mixed feelings towards a product or service ((Mittal *et al*. 1998). This study adopts an attribute level evaluation of customer satisfaction.

As firms in competitive markets place high priority on customer satisfaction (CS) with a view to improving performance, including market share and profitability, their success highly depends on the performance of their product attributes. This is because the level of attribute performance tends to be positively related to CS which in turn has a positive relationship with profitability (Dutka, 1993; Caruana, 2000; Ronald, 2010). This requires paying attention to both the primary quality drivers and enabler variables that support them. Primary drivers include service and product quality, price, ease of doing business and complaints handling. Enabler variables relate to managerial focus and customer perception. Managerial focus refers to the attention of senior management on variables that lay the foundation upon which the success of primary quality drivers depends.

The maize flour subsector is an important component of Kenya's food processing sector and a key step in the maize value chain, the country's staple crop. On average, households in Nairobi spend about a third of their total expenditure on food, and close to a third of this food budget is spent on staples, mainly maize related (Kamau *et al*, 2011). In view of this, research on the dynamics of quality drivers of the maize flour would be useful in policy issues related to the country's strategy of promoting agro-processing and food security. Because sifted maize meal is a standard product, it is felt that results gathered in Nairobi can be used to generalise across the country. Mukumbu and Jayne (1994) studied maize meal consumption in Nairobi and were able to generalise results countrywide.

Local studies relating to the supply and consumption of maize meal indicate rising trading challenges that mills need to address so as to remain competitive. There is increasing competition through new entrants at milling and retail stages, substitutes, and innovations on dietary diversification. A significant decline in maize milling and retailing margins was reported between 1994 and 2008 and was attributed to price competition (Kiriimi *et al*, 2011). In a closely related study Muyanga *et al* (2005) reported a shift in consumer expenditure from maize meal to wheat products between 1995 and 2003. A study by Kamau *et al*, (2011) indicated that between 2003 and 2009 consumption of potatoes and bananas had eroded part of the market share for maize meal and wheat products. They also reported double digit increase in per capita consumption of whole maize meal across all income groups and only single digit

increase for sifted maize meal over the same period. In such a competitive market, suppliers need to strive for high CS because as observed by Jones and Sasser (1995), customer loyalty under conditions of stiff competition requires high levels of satisfaction. This calls for good understanding of the drivers of quality and major enabler variables that influence the success of the immediate quality drivers. Locally, research on the role of enabler variables in CS is limited with many of the studies mainly focussing on the direct drivers of quality, omitting the cascade of managerial issues that influence the success of these drivers. In a study on Kenyan urban consumption of maize meal, Mukumbu and Jayne (1994) found that the key quality drivers on purchase decisions were price and convenience followed by taste and nutritive value and called for research into their relative importance.

The central role played by maize milling in Kenya's food processing sector, the changing dietary patterns and the few local studies on the same call for further research on the dynamics of customer satisfaction in the subsector. Studies done on the relationship between quality drivers and CS indicate that outcomes are often subject to other variables such as customer perception and management attention to other enabler variables such as employee attitude. Matzler *et al* (2004) observed that satisfaction can be associated with a change of attribute importance and failure to recognize this interplay would mean that the impact of the different attributes on overall satisfaction would not be correctly assessed. Chiou (1998) reported that customer attitude towards products was greatly enhanced through perception drivers such product knowledge.

On managerial focus Zingheim and Schuster (2007) observed that high-performing companies included innovation/ creativity and employee empowerment in goal setting. This agrees with the work of Matzler *et al* (2004) who found satisfaction to be associated with a change of attribute importance and Heller (2006) that employee empowerment and governance that promotes innovation lead to higher quality service and firm performance. Glenn (2009) observed that 90% of firms considered organisational agility to be critical for success. Fojtik and Nicks (2010) reported that a key limitation in customer satisfaction assessment and enhancement was lack of senior management commitment.

Many of these studies have been done outside Kenya under different environments and business models and have mostly focussed on primary drivers of quality. Few have looked at these drivers alongside enabler variables yet satisfaction can be associated with perceived attribute importance (perception) and is influenced by managerial attention to variables such as governance and agility (Heskett *et al*, 1997; Matzler *et al* 2004; Sull, 2010). As such, there exists a knowledge gap with respect to the context of study, and nature and extent of variables studied. The current study therefore used an integrated approach that brought together quality drivers, enabler variables (that reflect on managerial attention) and customer perception in the assessment and of customer satisfaction. To evaluate this underlying proposition, this study therefore sought to empirically address the question: 'To what extent do managerial focus and customer perception influence the relationship between quality drivers and customer satisfaction under the Kenyan context?'

1.3 Research Objectives

The overall objective of the study was to establish the influence of managerial focus and customer perception on the relationship between quality drivers and customer satisfaction. The specific objectives of the study were to:

- i. Establish the relationship between quality drivers and customer satisfaction among large maize flour mills in Nairobi.
- ii. Examine the relationship between quality drivers and customer perception
- iii. Establish the relationship between customer perception and customer satisfaction
- iv. Assess the mediating effect of customer perception on the relationship between quality drivers and customer satisfaction.
- v. Assess the relationship between managerial focus and customer satisfaction
- vi. Examine the moderating effect of managerial focus on the relationship between quality drivers and customer satisfaction.
- vii. Establish the joint effect of quality drivers, managerial focus and customer perception on customer satisfaction among large maize flour mills in Nairobi.

1.4 Value of the Study

The results of this study are expected to contribute to theory building, policy issues and managerial practice. To the theory of customer satisfaction the study adds two variables: managerial focus and customer perception as moderator and mediator (intervening) variables respectively that influence the performance of quality drivers. Most existing models of CS focus on primary quality drivers and ignore the cascade of managerial policies and actions that drive those preconditions (Johnson *et al*, 2001). This way the study contributes to the evolution and adaptation of satisfaction models as marketing knowledge changes in line with calls by other researchers such as Heskett *et al*, (1994); Heskett *et al*, (1997); and Capek (2007) who emphasized the great role played by people management in shaping customer satisfaction. In addition, the study drew from best practices in customer satisfaction assessment from all over the world but focused the field research to firms in Kenya. This way, the study sheds light on the dynamics of customer satisfaction within a context not previously studied locally.

The study contributes to managerial practice as senior managers and executives are expected to better understand the role that their policies, actions and activities play in shaping the drivers of quality and hence customer satisfaction. This hopefully helps to minimise incidences of leaving the survey and use of CS feedback to frontline staff. Fojtik and Nicks (2010) found lack of senior management commitment to CS measurement to be a major limitation in the enhancement of customer satisfaction. Furthermore, marketers and entrepreneurs get to better understand the role played by customer perception. This way they are better informed on how to manage customer perception so that the intended impacts of primary quality drivers are realised.

Policy makers get to better understand the various variables that influence purchase decisions of maize flour. Such knowledge highlights some of the drivers of aggregate demand and the likely effects of legislation such as the Price Control (Essential Commodities) 2011 Act and the VAT Act 2013 (KAM, 2011; Deloitte, 2013). Fiscal policies need to be supported by information on the market dynamics so that the sector can accommodate the tax regime without unduly undermining business growth.

Kenya's vision 2030 aspires to promote the preference of the country's processed goods in the Eastern Africa region by promoting efficiencies and competitiveness at

firm level through training and research among other strategies (Ministry of Planning, 2007). Information gathered from this study can be useful in this regard by shedding light on the dynamics of quality features and customer satisfaction in the maize flour sector, an important segment of the country's food processing sector.

1.5 Organization of the Thesis

This report is organised in five chapters. Chapter one has briefly discussed the subject of the study and the associated variables, the research problem, and the study objectives that guided the research hypotheses. Brief related literature was presented along the study variables from closely related studies. The anticipated contribution of the study to theory and practice of marketing was also discussed.

Chapter two presents a critical review of theoretical and empirical literature related to the area of the study. Literature on each of the study variables is discussed along the key constructs of the variables and from these the research gaps that the study addressed were arrived at and presented in a table. The concept of the study was then presented on a conceptual framework in line with the study objectives and from these the research hypotheses were formulated and are presented at the end of the chapter.

The research design is described in chapter three. The philosophy adopted is explained as well as the target population studied and sampling procedure. The data collection instrument (questionnaire) used is described. Likewise the operationalization of the study variables is explained. Lastly the method of data analysis used is explained.

The results of data analysis are presented in chapter four. These include the results of tests for the assumptions of regression, descriptive and inferential statistics including the tests of hypotheses. The statistical output tables are presented with brief explanations. Results of mediation and moderation and other hypotheses testing are also presented in a summary path diagram. Lastly the findings of the tests of hypotheses are summarized in a tabular form. Chapter five presents a summary, discussion and recommendations. Implications for theory and practice are also presented and these reflect on the objectives and value of the study outlined at the end of chapter one. The limitations faced during the conduct of the study are highlighted. Lastly suggestions for further research arising from the study are presented.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to the four groups of the study variables, namely; quality drivers, customer perception, managerial focus and customer satisfaction. The theoretical anchorage of the study and an overview of the evolutionary perspective of customer satisfaction models over the last four decades are also discussed. The identified research gaps are presented followed by the proposed conceptual framework and hypotheses that were used in the current study.

2.2 Theoretical Foundation of the Study

This study is founded in the theory of consumer behaviour and its constituent theories. The theory contends that a consumer's internal influences such as motivation, perception and attitudes interplay with external influences from reference groups, culture, social class and marketing activities and these shape a consumer's needs and desires leading to a consumption decision process (Schiffman and Kanuk, 2007). The theories that seek to explain how consumer perceptions and attitudes are formed include the theory of reasoned action (Fishbein and Ajzein, 1975), the theory of planned behaviour (Chiou, 1998), the theory of trying (Bagozzi, 1992), the tri-component attitude model (Oliver, 1993; Batra *et al.*, 1996; Schiffman and Kanuk, 2007) and the expectancy disconfirmation model (Oliver, 1980, Mittal *et al.*, 1998; Spreng and Page, 2003). The general theme of these theories is that satisfaction is a result of the difference between expected and perceived performance. Customers compare performance expectations with the actual buying and use experience. With this understanding, firms aim to maximise customer satisfaction by managing expectations through an appropriate blend of marketing mix variables.

Consumers' external influences are useful in market segmentation, product positioning, branding and selection of communication approaches aligned to consumer learning dynamics (Batra *et al.*, 1996). Learning is a process and firms keep providing cues and reinforcements. Consumer learning theories include classical conditioning and cognitive learning (Schiffman and Kanuk, 2007). Classical conditioning allows for stimulus generalisation such as in family branding but also

serves to remind firms that close substitutes or imitations can easily pick market share from original brands.

The central focus of this study is guided by the theory of motivation. It helps to explain why consumers are driven by varying needs over time, the psychological forces that shape behaviour and why attention on certain quality drivers yields higher CS than focus on other features. Abraham Maslow's theory of motivation demonstrates the existence of a hierarchy of needs and stresses that needs are never fully satisfied, new higher-order needs emerge as lower-order ones are met (Kotler and Keller, 2006). Likewise, Frederick Herzberg's two factor theory and the Kano model posit that firms should strive to satisfy basic attributes while providing superior satisfier features as the latter are often the source of competitive advantage (Walden, 1993). Marketers respond to this through innovative approaches to evolve product and service offerings in line with changing customer needs. As stated by Sigmund Freud's theory these efforts should go beyond functional attributes to include other cues such as visual imagery (Schiffman and Kanuk, 2007).

2.3 Customer Satisfaction

Satisfaction refers to a customer's overall experience to date with a product or service provider (Johnson and Fornell, 1991; Anderson *et al*, 1997). It reflects on a person's comparative judgement resulting from a product's perceived performance, including the transaction experience, in relation to his or her expectations (Kotler and Keller, 2006). It is an overall customer attitude or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfilment of some need, goal or desire (Anderson *et al*, 1997; Ronald, 2010).

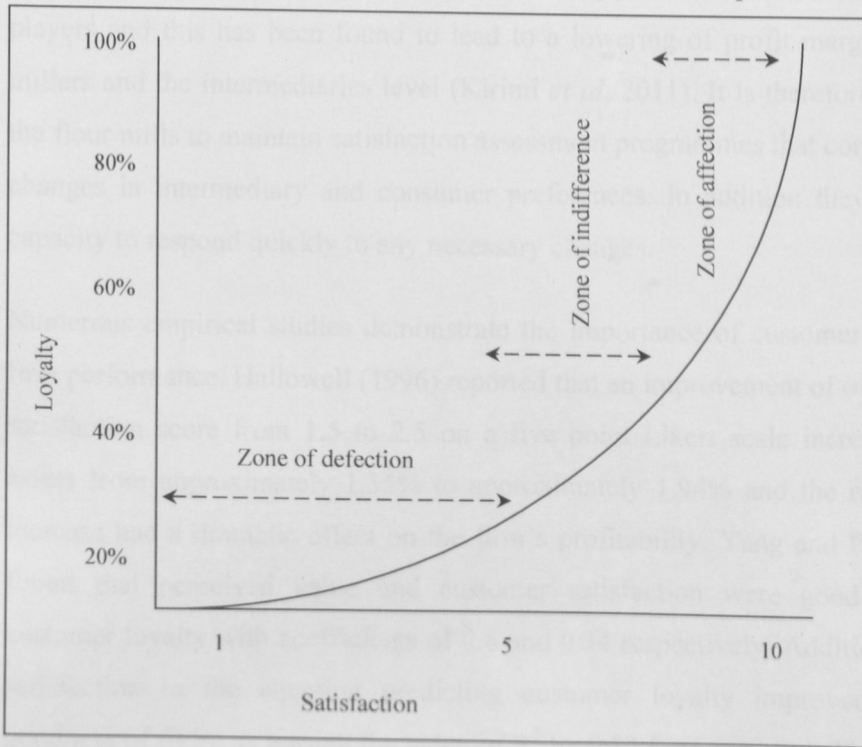
The nature of satisfaction can be transactional or image-based. Image-based satisfaction reflects on a client's overall impression of the firm or product in view of the transaction and use experience as well as other available information. Transactional satisfaction reflects on interactions with the firm including the nature of after sale service (Wiltse, 2007). The satisfaction process therefore involves an expectancy/ disconfirmation paradigm in which the consumer evaluates the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance experience of the acquisition process and/ or consumption or use.

Customer satisfaction therefore represents a consumer's summary response to a firm's offering that is of great importance because it forms a link between the quality features and brand loyalty (Caruana and Malta, 2002; Yang and Peterson, 2004). Cumulative satisfaction therefore views satisfaction as a form of consumption utility and this approach helps to predict subsequent consumer behaviour and firm performance because customers make purchase evaluations and decisions based on their purchase and consumption experience to date (Johnosn *et al*, 2001).

Loyalty arises from exceptional satisfaction with a firm's services and products. It is a favourable attitude toward a brand, resulting in consistent usage of the brand over time. If the consumer expresses such preferential, attitudinal and behavioural response toward the brand out of several choices, then he or she has commitment leading to true brand loyalty. (Keller, 1993; Bloemer and Kasper, 1994). The aim is to avoid or minimize merely satisfied customers and move them to loyalty stage so that they can promote a firm's goods and services. Merely satisfied customers lack commitment to the brand and are easily swayed by competitors (Hill *et al*, 2007). Likewise Deming (1993) observed that merely satisfied customers can easily get tempted to try substitutes and that the loyal customer leads to referrals thereby helping to grow the demand for the product or service. It is therefore necessary to have a system in place that directly measures and tracks customer satisfaction alongside other strategic success indicators (Krivobokova, 2009). The various antecedents of customer satisfaction (quality drivers) are often embedded within a system of cause and effect relationships (satisfaction models) for use as the survey tools (Johnson *et al*, 2001).

Jones and Sasser (1995) in studying why satisfied customers defect, defined a highly competitive market as one in which there are many substitutes, switching costs low and a valid substitute can easily be missed. The satisfaction-loyalty relationship (Figure 2.1) in such a highly competitive market is nonlinear with increasing returns above a threshold (Neuman, 2007). Players in such markets should aim for high customer satisfaction because the coefficient of correlation rises sharply when satisfaction rises above average (Jaiswal and Niraj, 2007; Hill *et al*, 2007).

Figure 2.1: Satisfaction- Loyalty Relationship in a Competitive Market



Source: Hill *et al*, (2007), Customer Satisfaction: The customer experience through the customer's eye. Cogent Publishing Ltd, London. www.books.google.co.uk

Firms in such highly competitive markets need to strive for high customer satisfaction. Furthermore it is necessary to understand what part of satisfaction or loyalty is based on a firm's delivery of superior value (Jones and Sasser, 1995). They further observed that firms in such markets need to have highly responsive recovery processes to help the customer get back to using the product or service when a shortfall in performance is experienced. This calls for a speedy corrective process support by business agility and proactive employee attitude that is ready to innovate on short notice to augment the laid down corrective mechanism.

To successfully maintain a strategy to manage satisfaction requires the ability to listen to the customer, to reflect on how the firm performs on the quality drivers and tap on the customer's shifting focus on quality. This requires the use of several approaches to listen to customers. These include the use of customer satisfaction surveys, feedback such as complaints and comments, intelligence gathering, frontline staff and strategic alliances with customers (Jones and Sasser, 1995). In addition the firm needs to have flexible processes that allow for adequate and timely responsiveness to changes in customer perception (Nielsen, 2010).

Competition in the local sifted maize flour sector is intense due a rising number of players and this has been found to lead to a lowering of profit margins at both the millers and the intermediaries level (Kirimi *et al*, 2011). It is therefore necessary for the flour mills to maintain satisfaction assessment programmes that constantly capture changes in intermediary and consumer preferences. In addition they need to have capacity to respond quickly to any necessary changes.

Numerous empirical studies demonstrate the importance of customer satisfaction in firm performance. Hallowell (1996) reported that an improvement of overall customer satisfaction score from 1.5 to 2.5 on a five point Likert scale increased return on assets from approximately 1.35% to approximately 1.94% and the resultant 0.59% increase had a dramatic effect on the firm's profitability. Yang and Peterson (2004) found that perceived value and customer satisfaction were good predictors of customer loyalty with coefficients of 0.6 and 0.34 respectively. Addition of customer satisfaction to the equation predicting customer loyalty improved the model's goodness of fit by increasing the value of R^2 by 0.32 from 0.43 to 0.75. This indicates that customer satisfaction is a mediating variable in the link between perceived value and customer loyalty (Baron and Kenny, 1986).

2.4 Quality Drivers and Customer Satisfaction

Satisfaction is influenced by many factors such as a product's functional attributes, perceived service quality as well as customer emotions or mood (Armitage and Conner, 2001; Ferrell and Hartline, 2005; French *et al*, 2005). There has been considerable effort to group the immediate drivers of satisfaction into distinct categories that can help to formulate satisfaction research and collect feedback that is focused along specific lines that can aid in improvement programmes. The American Marketing Association Handbook (AMA) for customer satisfaction classifies the key drivers of satisfaction into three main categories namely; product attributes, service attributes and transaction attributes. Product attributes include quality, benefits, features, design, reliability and consistency, value-price relationship, and the range of products offered. Transaction attributes include communication, ease of doing business, company reputation and staff competence. Service attributes include delivery, complaint handling, problem resolution, and warranty or guarantee (Dutka, 1993).

Crawford (2007), in a review of the United Kingdom Consumer Satisfaction index (UKCSI), argues that in general, after the quality of the product or service, customers want professional staff who are competent, friendly, helpful and smart, who treat them as valued customers. This reflects on staff attitude. Customers care about problem solving so that enquiries are handled efficiently and if anything goes wrong, it will be sorted out swiftly and effectively. Lastly, they want timely service supported by ease of doing business.

On his part, Ronald (2010) identifies six key determinants of customer satisfaction. These include attributes related to the product, service, and transaction as in the AMA handbook plus three more attributes namely; firm or brand image, value and customer expectations. Value refers to both tangible and intangible benefits and costs and is a combination of quality, service, and price. It increases with quality and service and decreases with price among other factors (Kotler and Keller, 2006). Service reflects on employee attitude and has been found to be a major determinant of customer defections. Expectations can be explicit or implicit. Explicit expectations are known specific product performance standards while implicit ones refer to norms of performance as established by the industry or society (Adams, 2006).

The Kano model classifies satisfaction drivers into basic (must be); performance enhancers; and delighters (Walden, 1993). Basic attributes represent the minimum expected performance level and greatly compromise satisfaction when poorly met. The performance of enhancer attributes tends to be linearly related to satisfaction and thus offers key lines of competition among suppliers. Delighters are the unexpected attributes that a supplier may provide and can therefore be key differentiators (Cronklin *et al*, 2004).

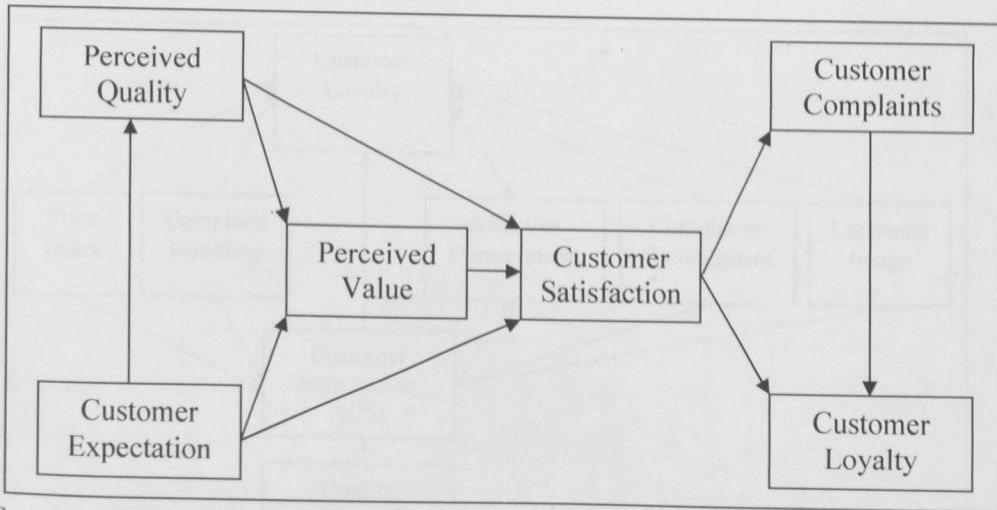
The classifications in the Kano model help to assess how critical to quality, based on customers' perception, an attribute is. It is therefore necessary for businesses to view quality drivers along the specific lines such as attributes related to product, transaction and service then go further to prioritise improvement programmes based on attribute sensitivity to customer needs. This involves conducting a survey on customer feedback on what the customer feels at various levels of the attribute performance. The resulting attribute-importance profile then helps a firm to prioritise improvement programs that have greatest impact on satisfaction.

2.4.1 Historical Perspective

Quality drivers provide the measurable constructs for satisfaction research and have played a key role in the evolution of CS models through progress in model scope and accuracy especially over the last four decades (Johnson *et al.*, 2001). Substantial research on drivers of CS started in the mid 1960s focusing on complaint reporting (Andreasen and Best, 1977; (Butelli, 2007). A dissatisfied customer would leave, complain or persevere in the hope that performance would improve (Hirschman, 1970; Rusbult *et al.*, 1982). Loyalty was thus seen as a passive perseverance of dissatisfaction in anticipation that the situation will improve. Focus on the drivers of quality gained momentum in late 1980s with the introduction of national CS index models starting with the Swedish CS Barometer (SCSB) in 1989 (Fornell, 1992). Then followed the German CS barometer in 1992 (Johnson *et al.*, 2001) and the American CS index (ACSI) in 1994 (Fornell *et al.*, 1996). The SCSB had customer expectations and perceived quality as the drivers, but the ACSI added perceived value but retained the outputs of CS as complaints and loyalty (Figure 2.2). Expectations are seen to positively affect satisfaction because they serve as cognitive anchors in the evaluation process and forecast a firm's ability to provide future performance (Ronald, 2010). Perceived performance captures recent experiences, while expectations capture prior consumption experience and other product information. As perceived value and perceived quality increase, CS and loyalty should increase as complaints decrease (Anderson *et al.*, 1994; Fornell *et al.*, 1996).

In the ACSI model (Figure 2.2), perceived quality is an evaluation, based on use experience, of the appropriateness and reliability of a product or service. Perceived value is a measure of quality relative to price and plays a major role in repeat purchases. Complaints are measured as the percentage of clients who complain about a product over a specified time period (Ronald, 2010). Fifteen survey questions are used to survey the six ACSI model variables (Fornell *et al.*, 1996). In 2006, the Japanese model was introduced and replaces complaints with word of mouth (Nagashima, 2010).

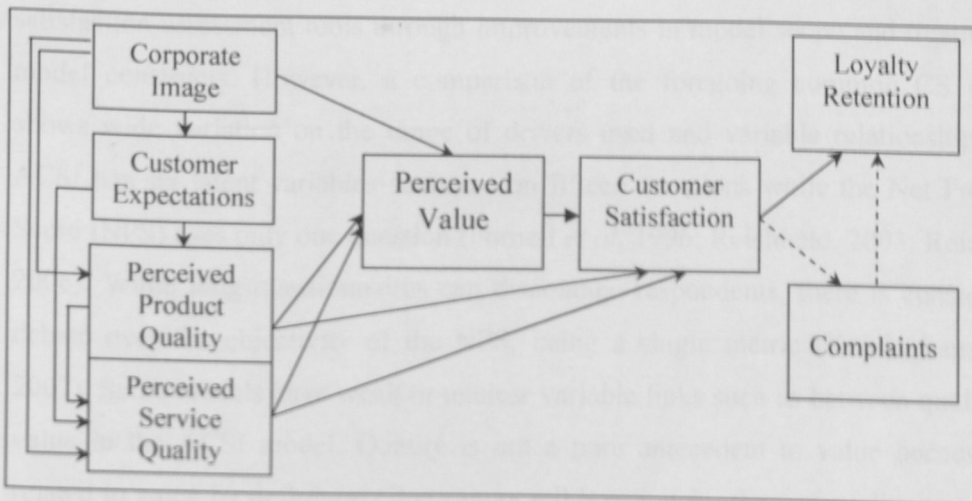
Figure 2.2: The ACSI model



Source: ACSI website, www.theacsi.org

Later, as shown in Figure 2.3, the European Performance Satisfaction Index (EPSI) split perceived quality into product quality and service quality, retained expectations and introduced corporate image (Grigoroudis and Siskos, 2003; Crawford, 2007).

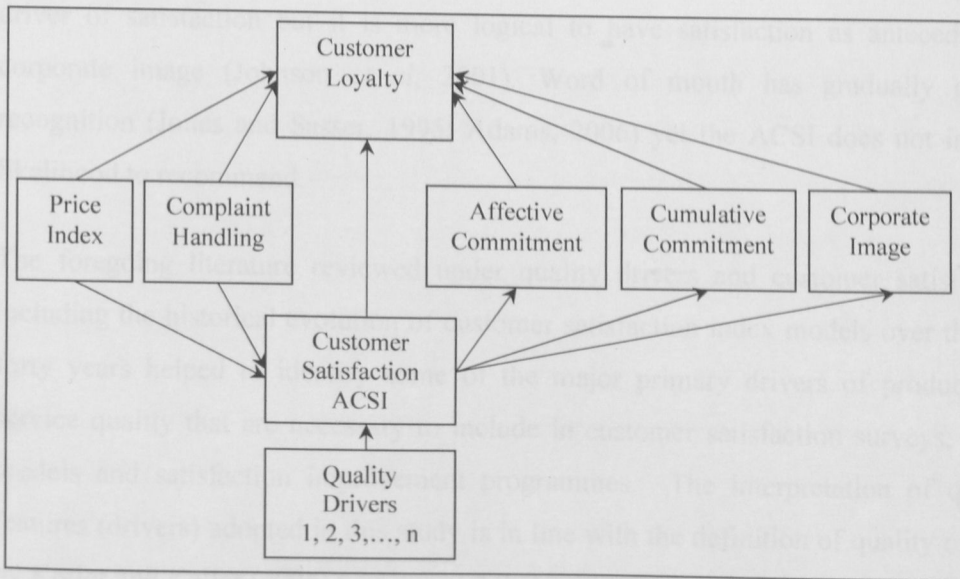
Figure 2.3: The EPSI model



Source: Ronald G. (2010), The American Customer Satisfaction Index (ACSI), The European Performance Satisfaction Index, The NCSB, www.van-haafden.nl

Introduced in 1996, the Norwegian Customer Satisfaction Barometer (NCSB), (Figure 2.4) captures two important drivers of customer satisfaction i.e. price and complaint handling (Johnson *et al*, 2001). It captures a customer's relationship commitment through an affective (emotional e.g. trust) and a calculative (evaluative e.g. switching costs) commitment measure (Johnson *et al*, 2001; Ronald, 2010).

Figure 2.4: The NCSB model



Source: Johnson M.D., Gustafsson A., Andreassen T.W., Lervik L., Cha J. (2001),
 The Evolution and Future of National Customer Satisfaction Index models.
Journal of Economic Psychology, 22, pp 217-245.

In summary quality drivers have played a major role in the improvement of satisfaction assessment tools through improvements in model scope and treatment of model constructs. However, a comparison of the foregoing common CS models shows wide variation on the range of drivers used and variable relationships. The ACSI has six latent variables surveyed on fifteen questions while the Net Promoter Score (NPS) uses only one question (Fornell *et al*, 1996; Reichheld, 2003; Reichheld, 2006). While long questionnaires can discourage respondents, there is considerable debate over the objectivity of the NPS, being a single metric (Keiningham *et al*, 2007). Some models have weak or unclear variable links such as between quality and value in the ACSI model. Quality is not a pure antecedent to value because it is related to value by definition. One cannot tell how much effect of quality on value is due to cause and effect (Johnson *et al*, 2001). The ACSI also has a link from expectations to value yet through cumulative experience expectations become precise leading to confirmation rather than disconfirmation of expectation (Rust *et al*, (1999). Ultimately expectations become passive or cease to exist (Oliver, 1997).

Johnson *et al* (2001) emphasize that complaint handling should be treated as a driver rather than as a consequence of satisfaction because gradually firms have come to focus on complaint resolution and not complaints *per se*, yet the ACSI model has

complaints as a consequence of satisfaction. The EPSI model has corporate image as a driver of satisfaction but it is more logical to have satisfaction as antecedent to corporate image (Johnson *et al*, 2001). Word of mouth has gradually gained recognition (Jones and Sasser, 1995; Adams, 2006) yet the ACSI does not include likelihood to recommend.

The foregoing literature reviewed under quality drivers and customer satisfaction including the historical evolution of customer satisfaction index models over the last forty years helped to identify some of the major primary drivers of product and service quality that are necessary to include in customer satisfaction surveys, index models and satisfaction improvement programmes. The interpretation of quality features (drivers) adopted in this study is in line with the definition of quality offered by Kotler and Keller (2006) who suggest that quality refers to the overall features and characteristics of a product or service that help to meet the stated or implied needs. Subsequently the quality drivers shown in Table 1.1 were identified as important preconditions for customer satisfaction and were included in the current study.

Table 1.1: Summary of Common Quality Drivers

Quality Driver	Base Drivers	Primary Attributes
Service Quality	Professionalism, Timeliness	Staff Competence Courtesy Helpfulness Speed of service
Product Quality	Functionality Reliability Value	Consistency, Benefits, Features, Design, Value-Price relationship
Ease of doing Business	Accessibility Systems & Procedures	Physical & Virtual Efficiency Innovation
Problem Solving	Complaints & Enquiries handling Information offers	Empathy Speed of processing Effectiveness of actions and solutions
Price	Price-value relationship	Competitiveness

Source: Compiled by the current author

2.5 Managerial Focus and Customer Satisfaction

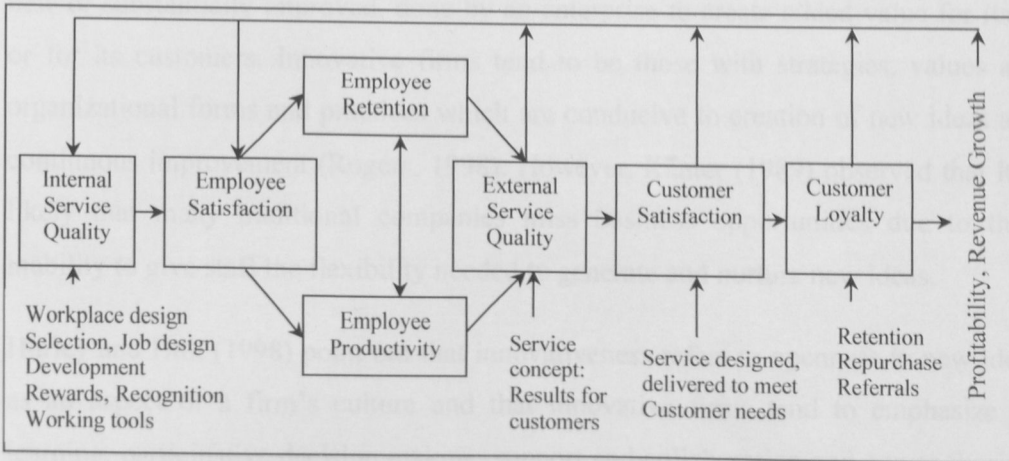
Senior managerial attention on key firm processes and attributes plays a major role in driving efficiencies necessary for overall success including meeting customer promises. This is done through resource management and governance styles that promote employee motivation, efficiencies and a culture of innovation and this constitutes managerial focus as postulated in this study. Innovation improves efficiencies through lean management, prudent financial management and nurturing of visionary products or operations.

Staff attitude reflects on their satisfaction and this is driven by governance and empowerment. Empowering employees with the ability to make decisions and the information to base decisions on to help the firm succeed is a key result of successful employee empowerment programs (Kirk, 2010). It is necessary to push responsibility down the organization and to force good ideas to bubble up within it (Walton, 1992). Un-empowered employees tend to drive customers away or miss chances to build customer loyalty (Simmerman, 1995). Kirk (2010) emphasizes that employees want to be kept informed about the organization's current and potential successes and failures. The level of service reflects on staff attitude and this has been found to be a major determinant of customer defections, at times reaching 68% of overall reasons (Pfeffer, 1998; Adams, 2006).

A number of studies highlight the importance of people management. Pfeffer (1998) stated that better people management is the single greatest source of competitive advantage and that with the right attitude to people a firm can be successfully small, local and low tech. This is supported by the Service Profit Chain (SPC) (Figure 2.5) which highlights that profit and growth arise primarily from CS which is largely influenced by the value of services provided to customers. Value is created by satisfied, loyal, and productive employees. Employee satisfaction, in turn, results primarily from high-quality support services and policies that enable employees to deliver results to customers (Heskett *et al.*, 1997; Saari and Judge, 2004; Capek, 2007; Heskett *et al.*, 2008). Heskett *et al.*, (1994) observed that staff desertion dropped CS from 75% to 55% while Simmerman (1995) observed that 70% of customers left due to poor service compare to 20% combined for price and product quality. Likewise, Adams (2006) reports that employee attitude is usually a leading cause of customer

defections (68%) followed by other dissatisfactions (14%) and defections due to competition at 9%.

Figure 2.5: The Service Profit Chain



Source: Heskett J.L., Jones T.O., Loveman G.W., Sasser E.W., and Schlesinger L.A. (1994). Putting the Service-Profit Chain to Work. *Harvard Business Review* March-April, 164-174.

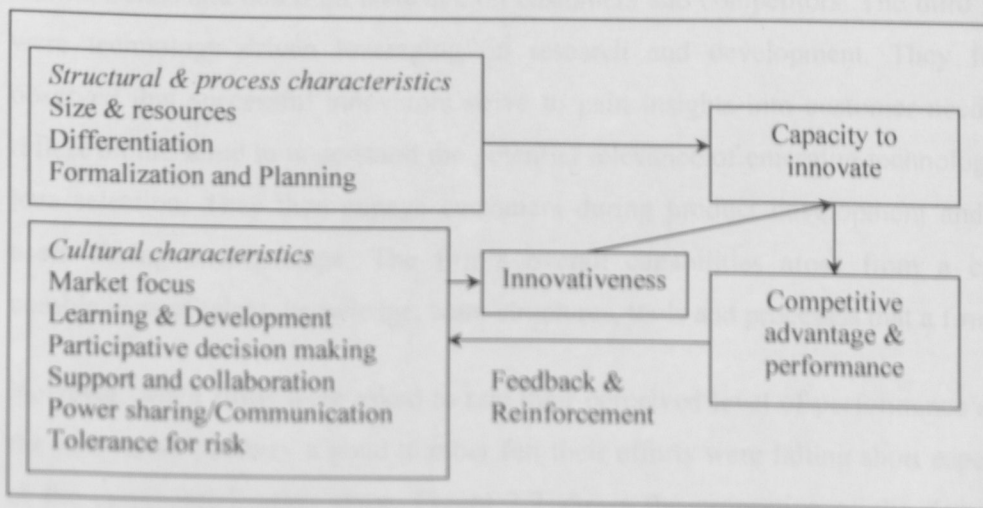
The Employee Customer Profit Chain shows that an employees' understanding of the connection between their work and the firm's key objectives has a positive impact on their attitude and work performance. A positive attitude stays optimistic and focuses on opportunities available even under challenges (Lopper and Galbraith, 2007).

In addition management needs to foster a culture that promotes agility and innovativeness. Agility is the ability to predict, adapt, and be proactive with respect to changes in the trading environment and do so quicker than rivals (Sull, 2010). It calls for efficient firm structures, limited bureaucracy, efficient processes and systems and workforce agility for quick tactical changes as situations demand (Kass *et al*, 2006). Operational agility depends on several factors such as efficient organisational structure, little or no bureaucracy, efficient processes and systems and most important: workforce agility. An agile workforce can change tactics quickly as conditions change and as threats and opportunities evolve (Kass *et al*, 2006). This requires a workforce that is adequately equipped and well informed through training and market feedback. In a study on key drivers of organisational agility, Desai (2008) and Glenn (2009) found rapid decision making and execution to be the main driver followed by a high performance culture, timely access to information, and credibility, flexible management of people, decentralised reporting and lean operations.

Businesses need to balance between benefits from existing mainstream business, and concurrent creation of new innovative activities that can become profitable business lines of the future (Burnes, 2004). In business, innovation refers to something that is new or substantially improved, done by an enterprise to create added value for itself or for its customers. Innovative firms tend to be those with strategies, values and organizational forms and practices which are conducive to creation of new ideas and continuous improvement (Rogers, 1998). However, Kanter (1989) observed that it is likely that many traditional companies miss business opportunities due to their inability to give staff the flexibility needed to generate and nurture new ideas.

Hurley and Hult (1998) point out that innovativeness refers to openness to new ideas as an aspect of a firm's culture and that innovative firms tend to emphasize on learning, participative decision making, support and collaboration and power sharing. They found that participative decision making, learning and development explained 32.4% of variance in group variation suggesting that when staff are encouraged to learn and to develop and are able to influence decisions then the group becomes more innovative. Idea initiation calls for staff openness to innovation and this requires senior management's attention to a culture that allows staff to recognise the need for new ideas and nurture the same to action as summarized in Figure 2.6.

Figure 2.6: Organization and Market Driven Innovation



Source: Hurley R.F. and Hult G.T.M. (1998). Innovation, Market Orientation and Organizational Learning: An Integration and Empirical Examination. *Journal of Marketing*. Vol. 62 page 45.

Figure 2.6 suggests that market orientation needs to be accompanied with a learning orientation so that the firm can respond adequately and quickly to changing customer needs through the introduction of innovative product and service solutions. This in turn gives that firm a competitive advantage over the competition in its speed and effectiveness in responding to threats and opportunities (Hurley and Hult, 1998). The overall result is increased firm agility.

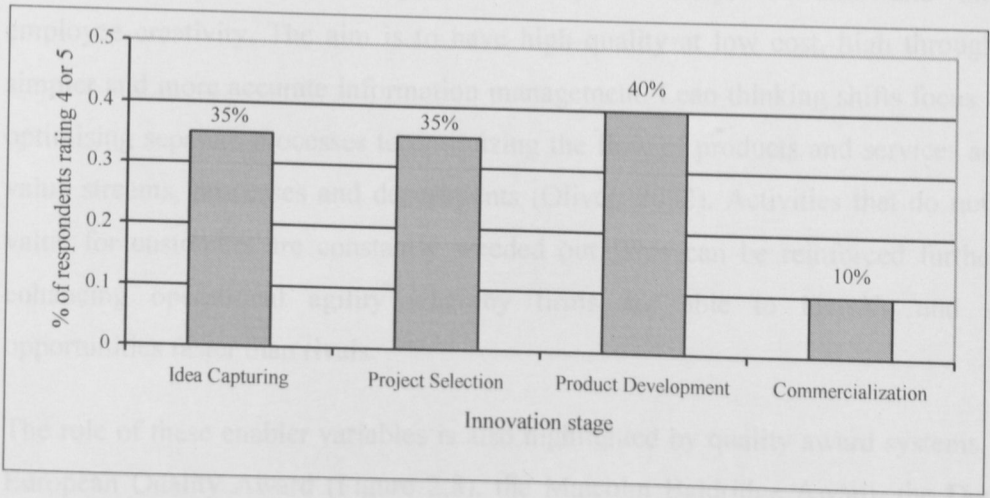
Research in consumer behaviour also shows that consumers are themselves innately innovative and thus suppliers need to continuously offer newer and innovative solutions in order to remain relevant. Consumer innate innovativeness refers to predisposition to buy new and different products, services or brands rather than remain with previous choices and consumption patterns. This can result from novelty seeking, a need to stimulate oneself or a desire for uniqueness (Roehrich, 2004).

Jaruzelski and Dehoff (2010) observed that highly innovative firms tended to follow certain strategies and nurtured a number of capabilities to enhance success in continuous innovation. They observed three strategy options. Need seekers worked closely with their current and potential customers to understand their preferences then worked to be first in the market with the new desired solutions. The second group were cautious market readers who preferred gradual improvements along proven market trends and based on feedback on customers and competitors. The third group were technology driven leveraging on research and development. They further observed that successful innovators strive to gain insights into customer needs and reflect on the same to understand the potential relevance of emerging technologies at idea selection. They then engage customers during product development and pilot users during testing stage. The firm's overall capabilities arose from a careful combination of talent, knowledge, team structures, tools and processes that a firm had.

However, when firms were asked to rate their perceived level of performance across the innovative pathway a good number felt their efforts were falling short especially at the commercialization stage. Figure 2.7 shows the proportion of the firms who scored 4 and 5, on a scale of 1 to 5, least to highest performance. Respondents felt that their firms were performing slightly better at the product development stage than at the ideation and project selections stages and performed even worse at commercialization stage. This implies that firms need to plan well and avail resources

adequately along the innovation pathway and innovate at the right speed so that each stage including the commercialization phase stands higher chances of success.

Figure 2.7: Firm performance along the innovative pathway



Source: Jaruzelski B. and Dehoff K. (2010). How the Top Innovators Keep Winning. Strategy+Business magazine. Issue 6, 2010. Booz & Copany Inc. New York. www.strategy-business.com

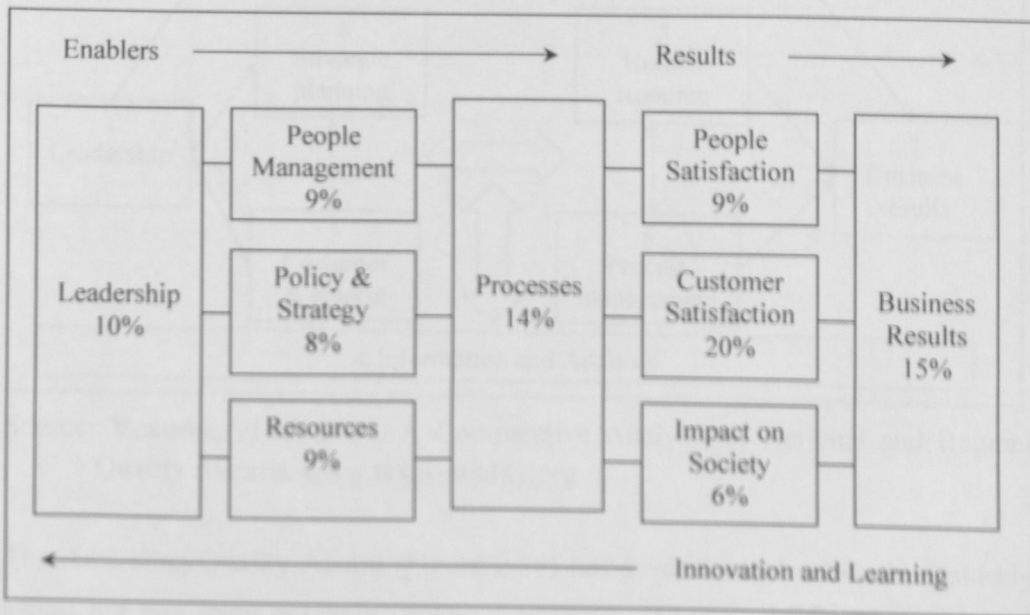
Figure 2.7 shows that a firm's performance across the innovation process can vary across the specific stages and a shortfall in one stage can undermine the process. It is therefore necessary for firms to pay attention to the unique requirements of each stage of innovation.

Tushman *et al.*, (2011) observed that for innovation to succeed it is necessary for senior teams to embrace the need to balance between the demands related to the core business and nurturing of new ideas thereby fostering a state of constant creative conflict at the top. They noted that when senior managers focus on operational problem solving with only occasional reference to future problems, conflicts between issues of core business and innovation end up lower down the management ladder with possible loss of coordination among initiatives and innovation loses out. Martin (2011) highlighted that while the best creative thinking happens on a company's front line, it is the role of the senior management to encourage it and put in place the necessary resources and culture necessary to nurture ideas through the stages of innovation.

Innovativeness can play a key role in designing lean management practices and in prudent cost control to eliminate waste thereby creating value from fewer resources. Waste can result from overproduction, waiting, unnecessary motion and transportation, over processing, unnecessary inventory, re-works and unused employee creativity. The aim is to have high quality at low cost, high throughput, simpler and more accurate information management. Lean thinking shifts focus from optimising separate processes to optimizing the flow of products and services across value streams, processes and departments (Oliver, 2002). Activities that do not add value for customers are constantly weeded out. This can be reinforced further by enhancing operational agility whereby firms are able to identify and seize opportunities faster than rivals.

The role of these enabler variables is also highlighted by quality award systems. The European Quality Award (Figure 2.8), the Malcolm Baldrige Award, the Deming Prize, the Australian Quality Award and the Canadian Common Measurement Tool all stress the roles played by leadership, people management, policy and strategy, resources and processes as well as innovation and information in driving quality (Vokurka, *et al*, 2000; Calingo, 2001; Heintzman and Marson, 2003).

Figure 2.8: The European Quality Award Drivers

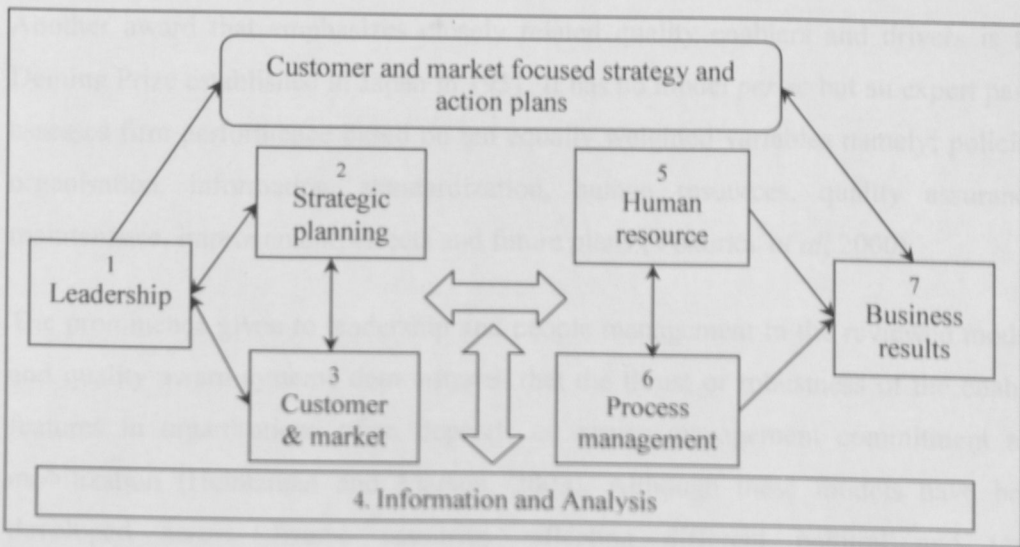


Source: Vokurka R.J., Stading G.L., Brazeal J. (2000). A Comparative Analysis of National and Regional Quality Awards. *Quality Progress*, August 2000, pp 43.

The European Quality Award has five quality enablers, namely; leadership, people management, policy and strategy, resources and processes. Effective implementation of these enablers drives the results in form of people satisfaction, customer satisfaction, impact on society and business results (Vokurka *et al* 2000; Calingo, 2001; Conti, 2007). In this model leadership and people management have a combined rating that is close to 20%, about the same as the rating for customer satisfaction. The model depicts innovation and learning as counter current to business results stressing the need to learn from customer expectations and innovate across the firm thereby forming a loop that connects the firm and the market.

Likewise the Malcolm Baldrige award of the USA recognises the role of enabler drivers in customer satisfaction. Established in 1987, the Baldrige award (Figure 2.9) promotes quality awareness and has seven drivers, namely; leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process management and business results (Vokurka, 2000; Calingo, 2001).

Figure 2.9: The Baldrige Quality Award Drivers

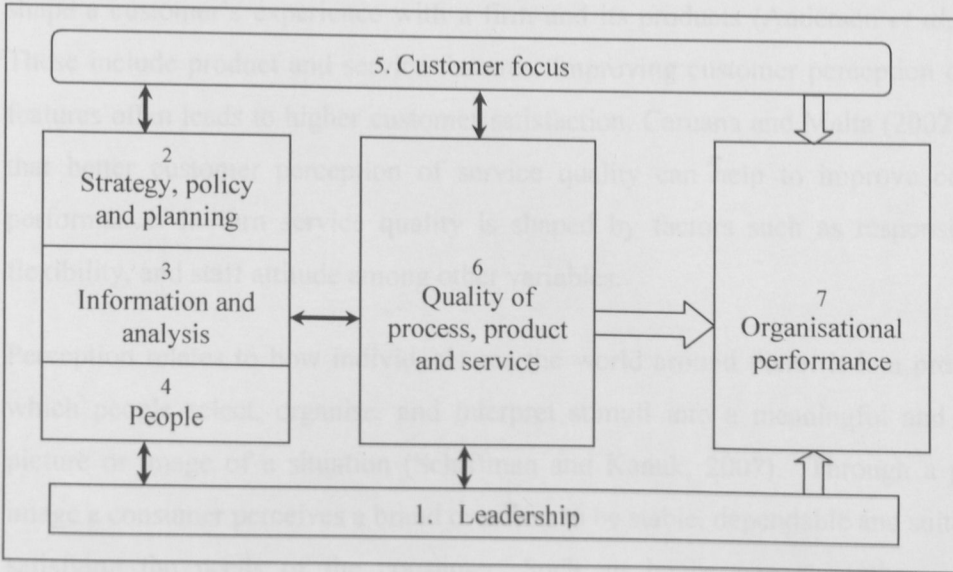


Source: Vokurka, *et al*, 2000. A Comparative Analysis of National and Regional Quality Awards. www.texas-quality.org

The Australian Quality Award (Figure 2.10) has seven variables like the Baldrige award but lays them out on a simpler framework. It has leadership as the baseline enabler that feeds to and from strategy, policy and planning, information and analysis and people that in turn impact on the quality of the process, product and service and

all these feed to and from customer satisfaction. The effectiveness of implementing these variables then determines organisational performance (Vokurka *et al*, 2000).

Figure 2.10: The Australian Quality Award Drivers



Source: Vokurka, *et al*, 2000. A Comparative Analysis of National and Regional Quality Awards. www.texas-quality.org

Another award that emphasizes closely related quality enablers and drivers is the Deming Prize established in Japan in 1951. It has no model *per se* but an expert panel assesses firm performance based on ten equally weighted variables namely; policies, organisation, information, standardization, human resources, quality assurance, maintenance, improvement, effects and future plans (Vokurka, *et al*, 2000).

The prominence given to leadership and people management in the reviewed models and quality award systems demonstrates that the thrust or robustness of the enabler features in organisations often depends on senior management commitment and mobilization (Heintzman and Marson, 2003). Although these models have been developed across diverse countries reflecting different cultural and trade environments, it is felt that they offer a rich pool of variables for model evolution and adaptation. Among the variables given prominence are employee attitude, firm agility, and innovation among others. It is felt that including these variables as a managerial focus dimension in satisfaction models can help to set the right foundation necessary for effective performance of the direct drivers of quality.

2.6 Customer Perception and Customer Satisfaction

Customer satisfaction as an overall evaluation of a firm's product and associated services has its roots on the performance of the various antecedents that cumulatively shape a customer's experience with a firm and its products (Anderson *et al*, 1997). These include product and service features. Improving customer perception of these features often leads to higher customer satisfaction. Caruana and Malta (2002) report that better customer perception of service quality can help to improve company performance. In turn service quality is shaped by factors such as responsiveness, flexibility, and staff attitude among other variables.

Perception relates to how individuals see the world around them. It is a process by which people select, organise, and interpret stimuli into a meaningful and unified picture or image of a situation (Schiffman and Kanuk, 2007). Through a positive image a consumer perceives a brand or a firm to be stable, dependable and suitable for satisfying the needs of the consumer. Such an image can strengthen a firm's credibility, lead to more sales and help to fight competition. Consequently many companies strive to develop, project and maintain positive images of their brands and the firm. Both the brand and corporate image reinforce one another in that if the brand image is positive, it reflects favourably on the corporate image and vice versa (Haedrich, 1993).

Keller (1993) partitions brand knowledge into brand image and brand awareness (recall and recognition). He further classifies brand image into brand attributes, brand benefits and brand attitudes. Attributes can be product related or non-product related such as price, packaging and imagery on use experience. Benefits can be functional, use experience or symbolic. Brand attributes relate to a customer's overall evaluation of a brand. Aaker (1996) extends this typology to include other brand dimensions such as life style, country of origin, and competitors among others.

To benefit more from the concept of customer perception, Hatch and Schultz (2001) advocate for firms to go beyond product and service branding and promote corporate branding. Corporate branding focuses on overall firm image and they stress that the projected image should be anchored on the organizational culture so as to offer a brand promise that agrees with the intentions of the firm members. This is because a firm's culture sets the foundation for shared beliefs, norms and meanings that then

gets expressed in the firm's offerings of goods and services. To complement customers buying and use experience, firms manage corporate image through a variety of promotional tools such as advertising, public relations, customer relationship management and promotional items. Hanzae and Farsani (2011) reported that perceived public relations had a positive influence on customer loyalty and this relationship was enhanced by positive brand image.

Imagery is a process by which sensory stimuli is represented in working memory. Macinnis and Price (1987) reported that imagery processing influences cognitive, physiological, and behavioural responses. They further observed that imagery has a positive influence on incidental learning and given that much of consumer learning is incidental, then it is likely that imagery influences likelihood and timing of purchasing.

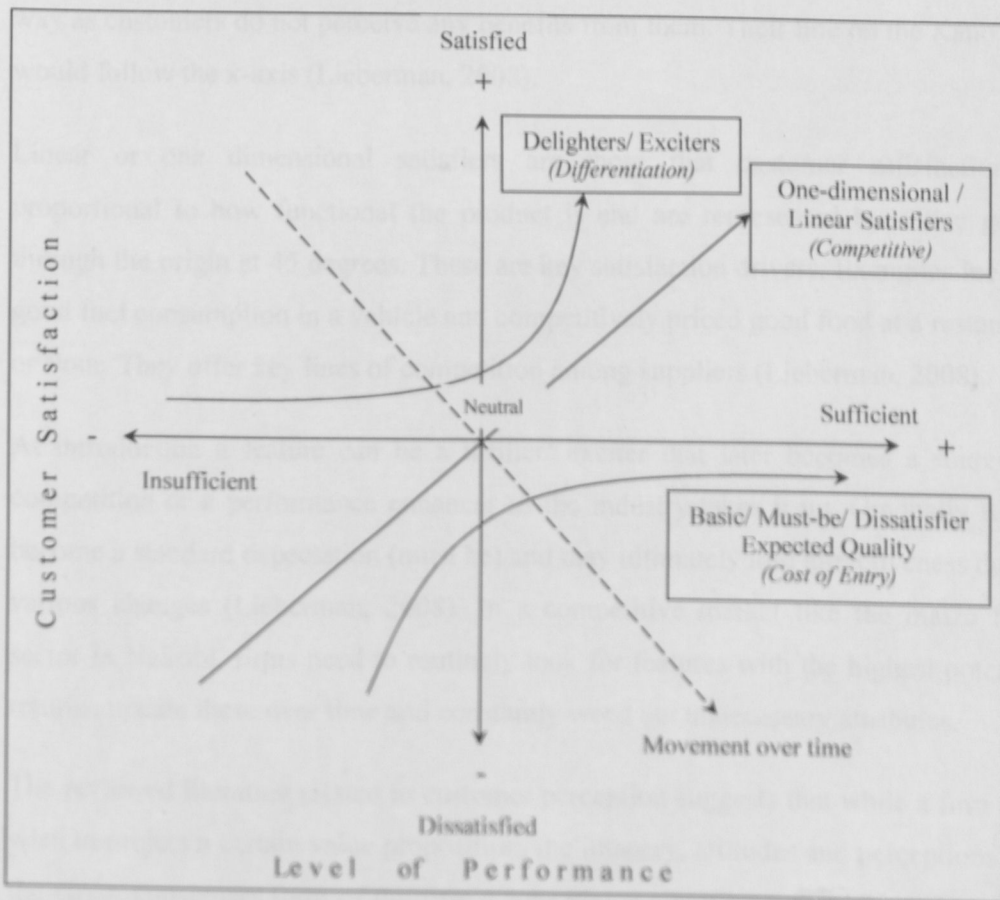
In striving to influence positive customer imagery, businesses need to often consider how attractive or relevant their quality drivers, brands and products are as perceived by their target clients because customers get drawn to certain attributes and can easily defect when competitive offers emerge. Relevance is a moving target because over time customer tastes and preferences evolve due to paradigm shifts, competitive offers and other market dynamics. What is important to consumers today may not be relevant tomorrow. It is the consumers who decide whether a firm's way of being different is important or not. To compete well, a firm needs to be well positioned to anticipate its customer's shifting quality expectations; and get out in front of the target (Nielsen, 2010). Even a relevant and meaningful brand identity/ execution may appear old-fashioned and stodgy with time. Competing brands with more exciting identities or messages can have a competitive advantage (Aaker, 1996).

The preferences sought by customers are influenced by factors that shape their characteristics and psychology and these include culture, social, economic and personal factors. These factors shape peoples' motivation, perception and learning and provide useful insights in improvement programs. For example because of consumer selective perception buyers are more likely to notice stimuli that relate to a current need or stimuli that they anticipate (Kotler and Keller, 2006).

While firms need to remain unique in ways that appeal to customers, frequent changes of a brand and value proposition are expensive. However, firms can remain relevant over time by focusing on benefits and features that are critical to quality and updating these over time without appearing to lose their integrity (Sheppard *et al*, 1988; Nielsen, 2010). The Kano model is a good tool for evaluating such features and helps to assess the role of new product features and to predict how they will shift over time across their life cycle. Attention can then focus on features with the highest potential returns and to weed out unnecessary attributes (Hand, 2004; Lieberman, 2008).

The Kano model (Figure 2.11), postulates that performance on certain categories of attributes produces higher levels of satisfaction than others. It identifies four categories of quality attributes namely: basic or must-be, one-dimensional or linear satisfiers, attractive or delighters and indifference features (Walden, 1993).

Figure 2.11: The Kano model



Source: Walden, D. (1993), Kano's Method for Understanding customer-defined Quality. *Centre for Quality of Management Journal*. Vol. 2, No. 4, page 9.

The must-be are basic features that must be present, such as good brakes in a car or intact flour packaging. They reflect on the basic costs of entry into a market segment. They can cause dissatisfaction if absent but do not necessarily raise satisfaction if met i.e. they have a dramatic negative impact on satisfaction when not delivered but have little positive impact when minimally delivered (Matzler *et al.*, 2004). These are key dissatisfiers and their relationship with overall satisfaction is multiplicative because failure on some of them causes a decline in overall satisfaction (Conklin *et al.*, 2004).

Delighter or exciter attributes lead to satisfaction when present but do not cause dissatisfaction if absent; e.g. an automatically retracting radio antenna in a vehicle. They need to be unique and can help to differentiate products (Cronklin *et al.*, 2004; Hand, 2004). Delighter attributes correspond to motivator (satisfier) factors while the basic attributes correspond to hygiene factors in Herzberg's Motivation- Hygiene theory (Walden, 1993). Indifference features have no impact on satisfaction either way as customers do not perceive any benefits from them. Their line on the Kano plot would follow the x-axis (Lieberman, 2008).

Linear or one dimensional satisfiers are those that customer satisfaction is proportional to how functional the product is and are represented by a line going through the origin at 45 degrees. These are key satisfaction drivers. Examples include good fuel consumption in a vehicle and competitively priced good food at a restaurant or flour. They offer key lines of competition among suppliers (Lieberman, 2008).

At introduction a feature can be a thriller/ exciter that later becomes a source of competition or a performance enhancer as the industry takes it up. Gradually it can become a standard expectation (must be) and may ultimately lose attractiveness due to various changes (Lieberman, 2008). In a competitive market like the maize flour sector in Nairobi, firms need to routinely look for features with the highest potential returns, update these over time and constantly weed out unnecessary attributes.

The reviewed literature related to customer perception suggests that while a firm may wish to project a certain value proposition, the imagery, attitudes and perceptions that the target consumers form of the firm's cues play a significant part in translating the stimuli into purchase intentions and actions. It is therefore necessary for firms to constantly survey how their brands and or corporate image are viewed by their target

consumers. The literature was therefore useful in identifying the appropriate customer perception constructs to include in the current study. This included brand and firm imagery, reference to features critical to quality and reference to competitive offers.

The reviewed literature demonstrates that most of the existing research on customer satisfaction assessment has been done under business contexts likely to be different from that existing in Kenya or East Africa. The various customer satisfaction index models mainly focus on the immediate drivers of quality yet the literature shows that these preconditions can be influenced by upstream firm issues that may require adequate attention from senior management for effective performance. The preconditions are also subject to customer attitudes and perceptions. It appears there is no framework of customer satisfaction assessment that unifies these dimensions. To bridge this knowledge gap, this study sought to integrate the dimensions of quality drivers, managerial focus and customer perception into one framework of customer satisfaction assessment. Table 2.2 shows the identified research gaps and how the current study proposes to bridge them. This is followed by the proposed conceptual framework and the various hypotheses used in the study.

Table 2.2: Summary of knowledge gaps

Author(s)	Study focus	Key findings	Knowledge gaps identified	Focus of the current study
Walden (1993), Crawford (2007), Glenn (2009), Ronald (2010)	Role of quality drivers in purchase decisions	CS drivers included service quality, product quality, ease of business, complaints handling & efficiency	<ul style="list-style-type: none"> ▪ Lack of a framework showing how quality drivers are influenced by managerial focus and customer perception 	<ul style="list-style-type: none"> • Integrated framework shows links between quality drivers, MF, CP and customer satisfaction
Reichheld (2003), Reichheld (2006), Keiningham <i>et al</i> (2007)	Word of mouth as a measure of customer satisfaction	Recommend intention was highly correlated to profitable firm growth	<ul style="list-style-type: none"> ▪ Uses a single metric: Intention to recommend but reliability of a single metric can be affected by measurement error 	<ul style="list-style-type: none"> • Surveyed for quality drivers, customer perception, MF, overall satisfaction and intention to recommend
Heskett <i>et al</i> (1997), Pfeffer (1998), Hurlley and Hult (1998), Vokurka <i>et al</i> (2000) Adams (2006)	-Influence of internal service quality, staff attitude on CS. -Firm agility, innovativeness	CS & profitability ride on employee attitude that rides on mgt support & policies. 70% of customer defections were due to poor service. Agility in 61% of firms needed rapid decision making & execution	<ul style="list-style-type: none"> ▪ What is the influence of managerial focus (MF) on CS under the Kenyan context? ▪ To what extent do Kenyan firms recognise the value of MF on employee attitude & other enabler variables? 	<ul style="list-style-type: none"> • Conceptual framework shows how managerial focus moderates the effect of quality drivers • Direct effect of managerial focus on CS studied
Anderson <i>et al</i> (1994), Fornell <i>et al</i> (1996) Oliver (1997), Rust <i>et al</i> (1999), Johnson <i>et al</i> (2001)	Direct drivers of customer satisfaction used in national satisfaction index models	Perceived quality and expectations drive perceived value and satisfaction. The ACSI models based on these variables had an average R ² of 0.75 on customer satisfaction across sectors	<ul style="list-style-type: none"> ▪ Lacks a framework to show role of enabler variables ▪ Word of mouth not surveyed ▪ Complaints treated as dependent instead of predictor variable 	<ul style="list-style-type: none"> • Managerial focus and customer perception as moderating and mediating variables respectively • Recommend intention applied • Complaints handling treated as an independent variable.
Keller (1993), Macinnis and Price (1987), Heskett <i>et al</i> (1994)	Customer perception of value	Firms where customer perception views were shared among teams had fewer complaints and higher profits	<ul style="list-style-type: none"> ▪ What is the influence of customer perception on CS under the Kenyan context? 	<ul style="list-style-type: none"> • Conceptual framework shows how customer perception mediates the role of quality drivers

CS = Customer Satisfaction, CP = Customer Perception, MF = Managerial Focus, mgt = management

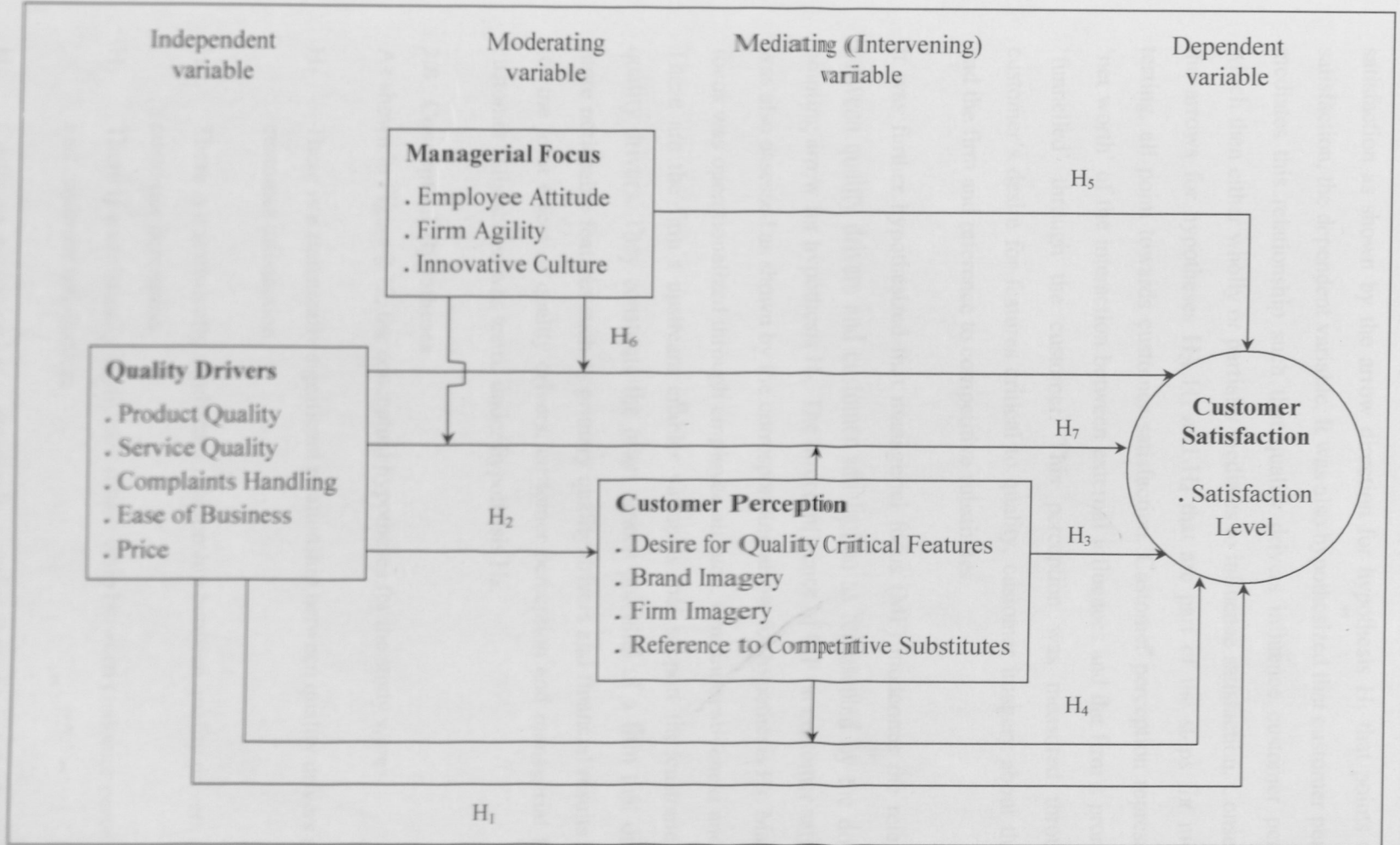
2.7 Conceptual Framework

The local maize flour sector is a key segment of Kenya's fast growing food processing sector with rapidly rising competition. This calls for satisfaction enhancement programmes based on feedback that surveys factors that influence purchase decision. However, the reviewed literature has shown that most of the existing findings on customer satisfaction and the assessment models dwell mainly on the immediate preconditions of satisfaction with little attention to upstream firm enabler variables and customer perception. Many have been developed outside Kenya or East Africa under contexts different from that prevailing locally with respect to business environment and consumer behaviour variables that influence purchase decisions.

This study therefore sought to introduce managerial focus and customer perception as moderator and mediator variables respectively to the general framework of common customer satisfaction models in which primary quality drivers and CS are the independent and dependent variables respectively. From the study results, players in the local maize flour sector will learn about the influence of primary quality drivers on satisfaction and how management's attention to key enabler variables and the customers' perception impact on that relationship.

The model represents a hybrid between national CS index models such as the ACSI that focus on primary drivers of quality and national quality awards such as the European Quality Award that focus more on managerial and governance issues as drivers of customer satisfaction. It is felt that such a composite model (Figure 2.12) is particularly useful in promoting a holistic approach to consumer welfare in developing economies such as Kenya.

Figure 2.12: Conceptual Framework



As shown in Figure 2.12 quality drivers were hypothesized as the primary drivers of satisfaction as shown by the arrow direction for hypothesis H₁ that points towards satisfaction, the dependent variable. It was also hypothesized that customer perception mediates this relationship such that quality drivers influence customer perception which then either wholly or partially mediates to influence satisfaction. Consequently the arrows for hypotheses H₂, H₃ and H₄ that are part of the steps for mediation testing, all point towards customer satisfaction. Customer perception represents the 'net worth' of the interaction between external influences and the firm's promises as 'funnelled' through the customer. This perception was measured through the customer's desire for features critical to quality, customer imagery about the brand and the firm and reference to competitive substitutes.

It was further hypothesized that managerial focus (MF) moderates the relationship between quality drivers and customer satisfaction as represented by the downward pointing arrow for hypothesis H₆. The direct influence of MF on customer satisfaction was also assessed as shown by the corresponding arrow for hypothesis H₅. Managerial focus was operationalized through employee attitude, firm innovativeness and agility. These are the firm's upstream enabler variables that support the customer facing quality drivers. They constitute the often unseen potential of a firm that drives the more noticeable features such as primary quality drivers and financial results. Testing for the joint effect of quality drivers, customer perception and managerial focus on customer satisfaction was tested under hypothesis H₇.

2.8 Conceptual Hypotheses

As shown in Figure 2.12, the conceptual hypotheses for the study were:

- H₁: There is a statistically significant relationship between quality drivers and customer satisfaction.
- H₂: There is a statistically significant relationship between quality drivers and customer perception.
- H₃: There is a statistically significant relationship between customer perception and customer satisfaction.
- H₄: Customer perception has a statistically significant mediating (intervening) effect on the relationship between quality drivers and customer satisfaction.

H₅: There is a statistically significant relationship between managerial focus and customer satisfaction.

H₆: Managerial focus has a statistically significant moderating effect on the relationship between quality drivers and customer satisfaction.

H₇: Quality drivers, customer perception and managerial focus collectively influence customer satisfaction.

The simple hypotheses relating to the respective constructs for each variable are listed in Appendix 4.

2.9 Summary of the Chapter

Chapter two has presented the review of pertinent issues on quality drivers, customer perception, managerial focus and customer satisfaction. This included a brief historical perspective of the evolution of the treatment and scope of quality drivers in satisfaction research followed by recent research findings on the drivers and the other research variables. It is evident from the cited theoretical and empirical literature that customer satisfaction is influenced by quality drivers as well as factors related to customer perception and managerial focus, yet most existing satisfaction assessment models focus only on quality drivers. The current study empirically investigated the relationships shown in the conceptual framework and presented in the nine study hypotheses with a view to expanding the scope of customer satisfaction index models.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the research philosophy adopted, research design, target population, and sampling method. It defines the variables, data collection and analysis methods applied in the evaluation of the relationship between quality drivers and customer satisfaction as moderated by managerial focus and mediated by customer perception.

3.2 Research Philosophy

Research philosophy is the anchorage upon which underlying assumptions or predispositions of research are based and is critical to the choice of research methodology (Krauss, 2005). It guides how the research should be done and includes positivism, realism and phenomenology. Positivism assumes the existence of an objective reality external to the researcher and involves precise empirical observations of individual behaviour in order to understand and explain phenomena in ways that can be used to predict general patterns of human activity. Such knowledge is useful in forecasting demand, market and other trends (Anderson, 1983; Kotler and Keller, 2006). Phenomenological research is more subjective, assumes the existence of multiple realities that can only be studied holistically and the researcher is a participant observer. It focuses on the meaning of social phenomenon rather than its measurement and seeks to understand and explain the study issue within its context. As such the researcher gathers information and perceptions through inductive, qualitative methods. Positivism and phenomenology can be viewed as a continuum's polar opposites with varying philosophies in between including realism (Holden and Lynch, 2004; Nwokah *et al*, 2009).

The current study was guided by a positivistic approach. It focused on cause and effect, and sought to empirically analyze the relationship between quality drivers and customer satisfaction as moderated by managerial focus and mediated by customer perception. Furthermore customer satisfaction is founded on fundamental consumer behaviour laws and the tendency of consumers to conform to group behaviour which often is consistent enough to allow for the collection of empirical data and generalization of results (Bartels, 1951; Bagozzi, 1992). The variables in the

conceptual framework were operationalized to allow for collection of empirical data and testing of hypotheses.

3.3 Research Design

To accomplish the study objectives required an establishment of the associations among the different decision variables associated with the maize flour mills and their business customers in Nairobi. This required gathering pertinent feedback that would help to describe the purchase decision characteristics of the study populations at some point in time. A descriptive cross-sectional design was therefore adopted. A cross-sectional study is conducted once to pick out the parameters of a phenomenon at a specific point in time. The aim is to get an accurate means of capturing a population's characteristics at a single point in time relating to what, where, how, who and when of a research topic (Cooper and Schindler, 2005).

A descriptive cross-sectional research design also facilitates checking for significant associations between variables and make generalisations concerning the target population (Aaker *et al*, 2004; Kotler and Keller, 2006). The research design therefore offers an opportunity to establish the relationships between quality drivers and customer satisfaction and to determine the influence of managerial focus and customer perception on this relationship. This type of design has previously been successfully used in marketing research by many researchers including Irungu (2007), Munyoki (2007), Kuria (2011), and Kinoti (2012).

3.4 Population of the Study

The current study focused on two populations within the Maize Flour subsector in Nairobi. Group one was composed of the direct Business Customers in the subsector composed of organizational buyers of maize flour trading directly with the flour manufacturers. These comprised of distributors, wholesalers, supermarket, and other direct buyer institutions. Distributors are granted exclusive regions and this model is practised by Unga Group Ltd. Other flour mills use wholesalers who have no exclusivity over regions and compete amongst themselves. The business customers provided the main study data used for inferential statistics related to all study variables such as tests of hypotheses. The data were also used to compute descriptive statistics related to the business customers population.

Group two comprised of the Maize Flour Mills (manufacturers) grinding at least 15 MT of maize grain per day. Exploratory discussions with the Maize Flour Mill managers had indicated that mills grinding below 15 MT of maize grain per day were less formal and that fourteen mills that met the milling threshold controlled over two thirds of the market share of sifted maize flour in Nairobi. Business reports also indicated that a few of the large mills had a combined market share of sifted maize flour close to 70% (Juma and Wafula, 2011). The list of the mills is shown in Appendix 2 and was drawn from both the Kenya Association of Manufacturers 2012 directory and the 2012 Nairobi Edition of the Kenya Telephone Directory list of mills in the yellow pages. The geographic reach was Nairobi City's administrative boundaries as shown on the map in Appendix 6. The flour mills provided the links to their direct business customers from their customer data bases and also gave feedback necessary for comparing perceptions between suppliers and customers on attribute importance and performance and for other statistics.

3.5 Sampling Procedure

Fourteen Maize Flour Mills within Nairobi City's administrative boundaries met the criteria of a minimum of fifteen metric tonnes of maize grind per day. Exploratory discussions with mill managers had indicated that flour mills operating at capacities lower than fifteen metric tonnes per day were less formal and therefore unlikely to have well established managerial structures and systems necessary for collecting the desired survey data. All the fourteen maize flour mills were censured.

The fourteen Maize Flour Mills served a total of 225 active direct Business Customers within the study area as shown in Appendix 2. The table by Bartlett, Kotrlik, and Higgins (2001) for determining sample size was used (Appendix 7) to estimate a sample size of 140 Business Customers. Discussions with the mill managers indicated that although the number of active customers differed across mills, the population of these customers was quite homogeneous, the customers often switched flour suppliers and a number of the flour mills had only 10 active business customers each. In view of this, with the help of the Maize Flour Mills marketing and sales managers, a random sample of 10 direct Business Customers was selected from each maize mill's customer data base using a random number table. This gave a total of 140 target direct Business Customer firms.

3.6 Data Collection

Primary data were collected in February 2013 by use of two semi-structured questionnaires: one for the Mills and another for their direct business customers. Respondents from the Flour Mills were the marketing and sales managers because they interact with customers and are responsible for managing customer satisfaction feedback. Respondents from the business customers were purchasing managers because they interact with the mills and are responsible for the flour sourcing function. The questionnaires are shown in Appendix 1 and the letter of introduction to respondents is shown in Appendix 3.

The questionnaire for the business customers had five sections. Section A gathered general information useful in summarizing the characteristics of the studied firms while section B gathered feedback on importance attached to and the level of performance of quality drivers. Section C collected feedback on the influence of enabler features (managerial features) and customer perception on purchase decisions. Feedback on customer perception was on four constructs related to the customer that can influence the choice of a supplier. These were; reference to features critical to quality, brand and firm imagery and reference to competitive substitutes. Feedback on managerial focus related to three enabler variables namely; employee attitude, business agility and innovativeness.

Section D of the customers' questionnaire assessed the customer's perception of how responsive various departments at the flour supplier were. It also had an open ended question on issues related to quality drivers and enabler features that respondents wished the flour supplier would improve. Section E collected feedback on overall satisfaction and intention to recommend a brand or firm to a friend or colleague.

The questionnaire for the Flour Mills had four sections. Section A gathered background data for descriptive purposes. In section B Flour Mill respondents rated the relative importance of quality drivers in influencing a business customer's choice of a maize flour supplier. Section C collected data on drivers of mill agility and perceived barriers to innovation. Section D collected data on how mills strive to enhance customer perception and the common tools mills used to collect feedback from customers.

Rating was done on a ten point scale (ranging from 1 to 10) to increase the level of scale details. Pearse (2011) and Preston and Colman (2000) report that rating scales with less than seven points tend to have inadequate granularity. They obtained the most reliable scores from scales with seven to ten response categories. Likewise Reichheld (2003) observes that scales with more points offer wider options especially because customers tend to refrain from top scores. The questionnaires were administered through the drop and pick later method. Follow up was done through visits and telephone calls to increase the response rate.

3.7 Reliability and Validity Tests

Reliability of a research instrument is the degree to which it yields consistent results on repeated trials and thus measures the extent to which test scores are free from measurement errors. Validity indicates how closely a measure correctly represents the concept of the study. For instance, an attitude measure has validity if it correctly measures what it is supposed to measure (Aaker *et al*, 2004; Cooper and Schindler, 2005).

To check for reliability, Cronbach's Alpha (Bagozzi and Yi, 1988), test of internal consistency was used to pre-test the questionnaire and to test the findings from the gathered data. The test shows the degree to which instrument items are homogeneous and measure the same underlying construct (Cooper and Schindler, 2005). The Cronbach's alpha reliability coefficient ranges from 0 to 1 and the closer it is to 1, the greater the internal consistency of the items in the scale. Cortina (1993) and Gliem and Gliem (2003) indicate that a Cronbach's alpha value of ≥ 0.7 is generally taken to mean that the instrument is reliable and indicate that a value of 0.60 can be seen as the lower limit.

To check and improve the content and face validity of the survey instrument it is necessary to pretest a questionnaire to ensure that it meets the researcher's expectations with respect to the information that will be collected. This is a pilot run in which the questionnaire is administered to a few respondents who reasonably represent the sample population. The aim is to get their feedback on the clarity and adequacy of the questions in collecting the target information (Aaker *et al*, 2004). In the current study pilot questionnaires were administered through personal interviews to five mills and fifteen business customers not included in the target sample. Their

feedback was used to improve the questionnaires and compute the reliability coefficient.

Factor analysis was applied on the various constructs used to measure the variables to check on the key issues driving the variables thereby helping to test construct validity. An instrument has construct validity if it demonstrates an association between the test scores and the prediction of a theoretical trait. The constructs within the variables in the current study were subjected to Kaiser Meyer-Olkin (KMO) and Bartlett's test. Extraction was by principal component analysis with varimax rotation and Kaiser normalization. The KMO's measure of sampling adequacy should be greater than 0.5 for satisfactory factor analysis to proceed. The Bartlett's test of sphericity suggests that the population correlation matrix is not an identity if the Chi-square statistic for a variable is statistically significant at 0.05. In the current study the KMO scores exceeded 0.5 and the Bartlett's test of sphericity scores for all the variables were statistically significant at 0.05 (Table 5.6 in Appendix 5) confirming construct validity.

3.8 Operationalization of Variables

This section describes the reduction of the four categories of the research variables into observable and measurable traits. For quality drivers, data were collected on the quality of the product and service, complaints handling, ease of doing business, and product price. These primary traits adequately cover dimensions of customer satisfaction relating to product, service and the transaction process (Dutka, 1993; Crawford, 2007).

Feedback on managerial focus was on employee attitude (which reflects on governance), agility and innovativeness. Agility refers to a firm's flexibility in responding to changes in the trading environment. Feedback on customer perception was on the role of features critical to quality, customer imagery of the brand and the firm and reference to competitive substitutes in influencing the choice of a maize flour supplier. Customer satisfaction was operationalized through overall customer satisfaction and the likelihood to recommend a firm. Table 3.1 shows a summary of the operationalization of the study variables. It shows the variable and its nature as to whether it is an independent, mediator, moderator or dependent variable. The operational indicator is shown such as the various quality drivers. In addition the

specific measures used to collect feedback are indicated. The respective question numbers in the questionnaire are also shown. In selecting the quality drivers of customer satisfaction for this study, the American Society for Quality Control definition of quality was applied. It states that 'quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs' (Kotler and Keller, 2006).

Table 3.1: Summary of operationalization of study variables

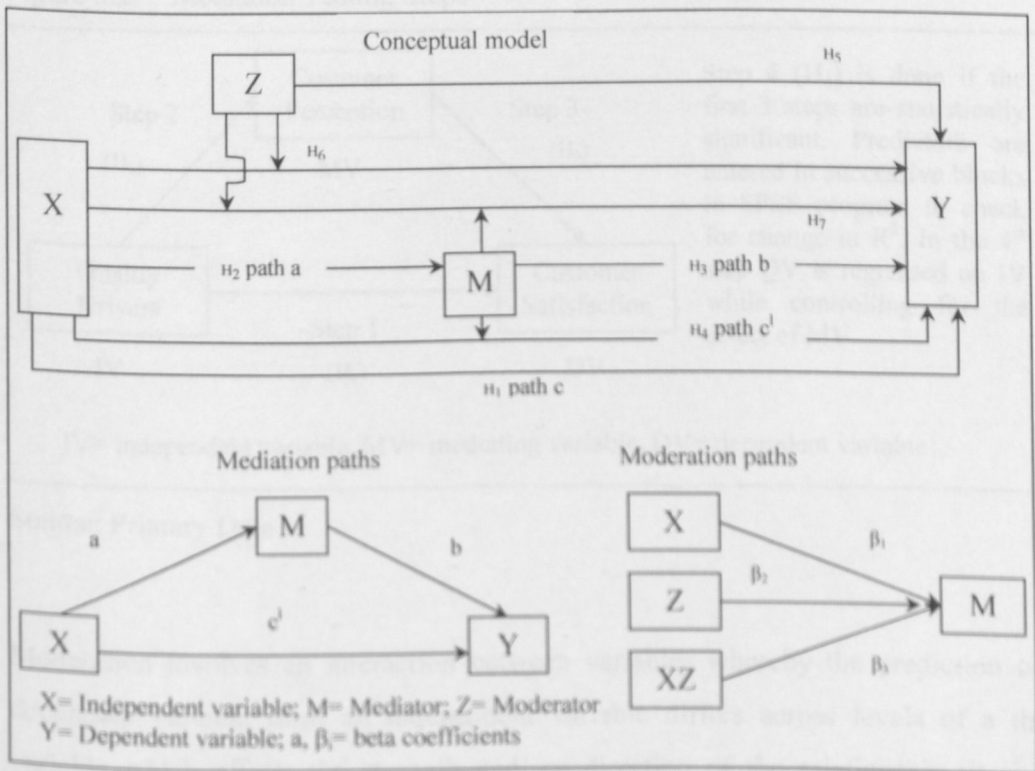
Variable	Nature	Indicator/ Operationalization	Specific measure	Question number
Quality Drivers ($X_1 \dots X_5$) Kotler and Keller (2006)	Independent	Quality of the Flour	How good the quality of the flour was relative to customer's expectation and its importance in purchase decisions	Q7, Q8 & Q9 of the Customers Questionnaire and Q8 of Mills Questionnaire
		Service Quality	How good the quality of service was relative to customer's expectation and its importance in purchase decisions	
		Complaints Handling	How good the supplier was at complaints resolution relative to customer's expectation and its importance in purchase decisions	
		Ease of doing Business	How easy it was to trade with the supplier relative to customer's expectation and its importance in purchase decisions	
		Flour Price	How favourable the flour price was relative to customer's expectation and its importance in purchase decisions	
Managerial Focus ($Z_1 \dots Z_3$)	Moderating	Employee Attitude	Employees passion for good service to customers	Q10 of Customers Questionnaire, Q9 to Q11 of Mills Questionnaire
		Business Agility	Flexibility in supplier's operations and services in meeting customer needs	
		Business Innovativeness	Supplier's offering of new, attractive customer solutions, or options	
Customer Perception ($M_1 \dots M_4$)	Mediating (Intervening)	Quality Critical Features	Customer's desire for product features that are critical to quality	Q11 of Customers Questionnaire & Q12 & Q13 of Mills Questionnaire
		Brand Imagery	Customer's imagery of the flour brand's features	
		Firm Imagery	Customer's imagery of the maize mill's characteristics	
		Competitive Substitutes	Reference to competitive brand substitutes during purchase decisions	
Customer Satisfaction (Y)	Dependent	Overall satisfaction	An overall assessment of business customer satisfaction	Q14 and Q15 of the Customers Questionnaire
		Intention to recommend	Extent to which the customer is willing to recommend the flour brand or firm to a friend or colleague.	

3.9 Data Analysis

This involved data cleaning, editing and coding followed by analysis and reporting. The statistical programme Software Package for the Social Sciences (SPSS) version 12 was used to analyse the data using both descriptive and inferential statistics. Normality of distribution was checked through skewness and kurtosis tests. Measures of central tendency and dispersion were used to profile firms. Correlations were used to examine variable relationships. A 95% confidence level was used in the study.

Simple and multiple linear regressions were used to test for the study hypotheses. The coefficient of determination (R^2) indicated the goodness-of-fit or robustness of the conceptual model. Mediation and moderation were tested in accordance with the procedures described by Baron and Kenny (1986) and Fairchild and MacKinnon (2009). Figure 3.1 shows the mediation and moderation path diagrams next to the conceptual model in which X is the independent variable (quality drivers), Z is the moderating variable (managerial focus), M the mediating variable (customer perception) and Y the dependent variable (CS).

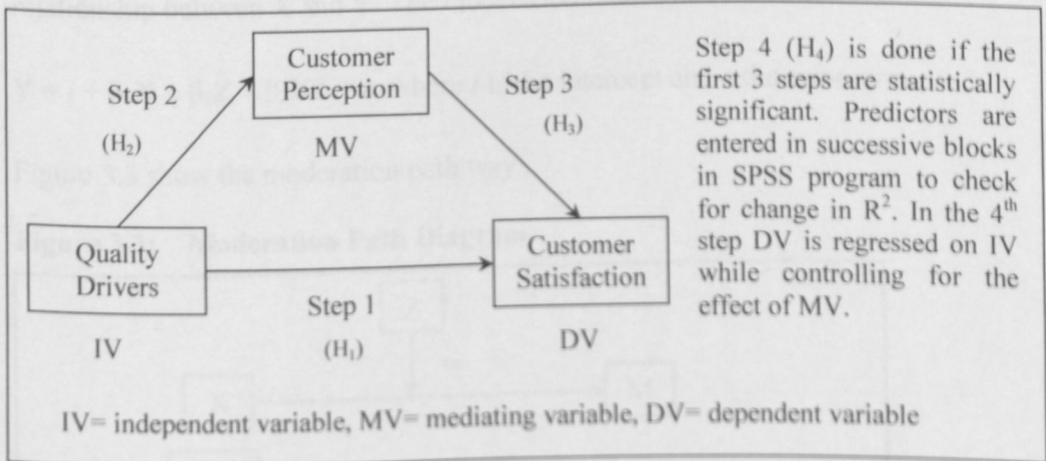
Figure 3.1: Mediation and moderation model path diagram



Reference for coefficient paths: Fairchild and MacKinnon (2009), A General Model for Testing Mediation and Moderation Effects, *Prevention Science* 10:87-99.

Mediation was tested through a four step process. In step one the dependent variable Y was regressed on the independent variable X and the standardized regression coefficient (beta for path c) examined to determine the size and direction of the relationship and checked for significance. This beta for path c was significantly different from zero and therefore in step two, the mediator M was regressed on the independent variable X to estimate the standardized beta regression coefficient for path a, which was examined to determine the size and direction of the relationship and was significantly different from zero. In step three, Y was regressed on M to determine the beta coefficient for path b, which was significant. In step four, the dependent variable Y was regressed on X while controlling the effect of M on Y, by performing a hierarchical regression analysis that placed M and X in successive independent variable boxes in the SPSS program. According to the test procedure, if both coefficients for paths a, and b are significant, then M mediates the relationship between X and Y and c' is assessed to check the link strength (Sharma *et al*, 1981; Bennett, 2000; Shaver, 2005; Fairchild and MacKinnon, 2009). Figure 3.2 shows the mediation testing steps along a path diagram.

Figure 3.2: Mediation Testing Steps



Source: Primary Data

Moderation involves an interaction between variables whereby the prediction of a dependent variable from an independent variable differs across levels of a third variable which affects the strength and/ or direction of the relationship. It could enhance, reduce or change the influence of the predictor. All the predictor variables

and their interaction term are centered (by subtracting the mean from the readings) to improve interpretation of regression coefficients and used in a single equation (Fairchild and MacKinnon, 2009; Hayes, 2009; MacKinnon and Fairchild, 2009).

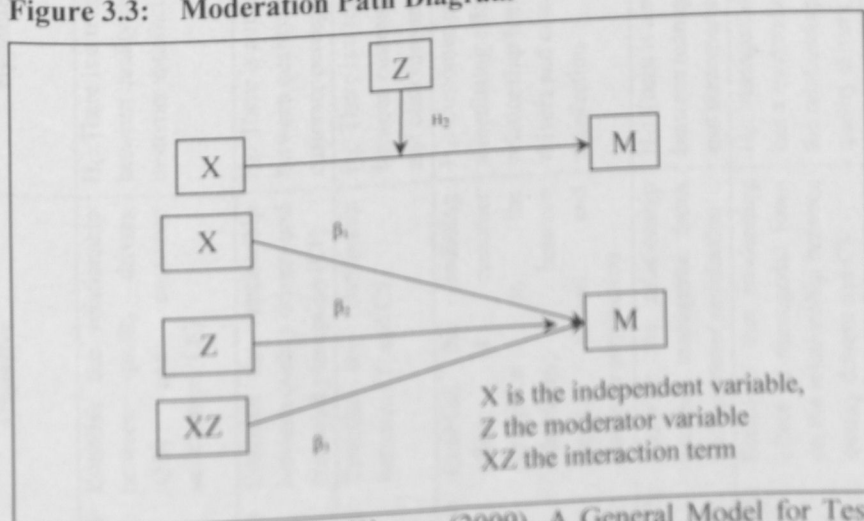
The testing for moderation involves testing for an interaction term using hierarchical multiple regression analysis. The independent variable and the moderator are entered into level one of the analysis program. The interaction term (a product of the standardized predictor and moderator variables) is then entered in step two. The interaction term represent a joint relationship between the two predictor variables and moderation is indicated if the additional variance in the outcome (beyond that explained by either single variable alone) is significant. In the output the main effects of the independent and moderator variables are displayed separate from the effect of the interaction term (Bennett, 2000; Morgan-Lopez and MacKinnon, 2006).

From the moderation path diagram in Figure 3.3 above, β_1 is the coefficient relating the independent variable X, to Y, when Z = 0, β_2 is the coefficient relating the moderator variable, Z to Y, when X = 0. β_3 is the regression coefficient for the interaction term and if it is statistically different from zero then Z moderates the relationship between X and Y. The moderation model was stated as:

$$Y = i + \beta_1 X + \beta_2 Z + \beta_3 XZ + e, \text{ where } i \text{ is the intercept and } e \text{ the error term.}$$

Figure 3.3 show the moderation path way

Figure 3.3: Moderation Path Diagram



Source: Fairchild and MacKinnon (2009). A General Model for Testing Mediation and Moderation Effects. *Prevention Science* 10: 87-99.

Table 3.2 shows a summary of the objectives, hypothesis, analysis method and interpretation criterion.

Table 3.2: Objectives, hypotheses and testing criteria

Objective	Hypothesis	Analysis method	Hypothesis Test Statistical significance at $\alpha \leq .05$
1) Establish the relationship between quality drivers (QD) and customer satisfaction (CS)	H ₁ : There is a relationship between quality drivers and customer satisfaction	CS = $\beta_0 + \beta_1 X + e$ = $\beta_0 + \beta_{11}X_1 + \beta_{12}X_2 + \beta_{13}X_3 + \beta_{14}X_4 + \beta_{15}X_5 + e$, where: $\beta_{12}, \beta_{13}, \beta_{14}, \beta_{15}$ = regression coefficients X_1, X_2, X_3, X_4, X_5 = Quality Drivers (Product quality, service quality, complaints handling, ease of business and price)	Simple regression analysis
2) Establish the relationship between quality drivers and customer perception (CP)	H ₂ : There is a relationship between quality drivers and customer perception	CP = $\beta_0 + \beta_2 X + e = \beta_0 + \beta_{21}X_1 + \beta_{22}X_2 + \beta_{23}X_3 + \beta_{24}X_4 + \beta_{25}X_5 + e$, where $\beta_{21}, \beta_{22}, \beta_{23}, \beta_{24}, \beta_{25}$ = regression coefficients X_1, X_2, X_3, X_4, X_5 = Quality Drivers, and e is the error term	Simple regression analysis
3) Establish the relationship between CP and CS	H ₃ : There is a relationship between customer perception and customer satisfaction	CS = $\beta_0 + \beta_3 X + e$, = $\beta_0 + \beta_{31}X_1 + \beta_{32}X_2 + \beta_{33}X_3 + \beta_{34}X_4 + \beta_{35}X_5 + e$, where: $\beta_{31}, \beta_{32}, \beta_{33}, \beta_{34}, \beta_{35}$ = regression coefficients X_1, X_2, X_3, X_4, X_5 = Quality Drivers	Simple regression analysis
4) Establish the mediating effect of customer perception on the relationship between quality drivers and customer satisfaction	H ₄ : Customer perception has a mediating effect on the relationship between quality drivers and customer satisfaction	Y = $\beta_0 + cX + e$ (to test the direct relationship between X & Y) M = $\beta_1 + aX + e$ (to test if independent variable predicts mediator) Y = $\beta_2 + bM + e$ (to test if mediator variable predicts Y) Y = $\beta_3 + c'X + bM + e$ (multiple regression with X&M predicting Y) Where X and M represent independent and mediating variables, β_{is} are intercepts, a is the effect of X on mediator, c' the effect of X on Y controlling M, b is the effect of M on Y while e is an error term.	Hierarchical regression analysis
5) Establish the relationship between managerial focus and customer satisfaction	H ₅ : There is a relationship between managerial focus and customer satisfaction	Y = $\beta_0 + \beta_2 Z + e = \beta_0 + \beta_1 Z_1 + \beta_2 Z_2 + \beta_3 Z_3 + e$ where: $\beta_1, \beta_2, \beta_3$, = regression coefficients, Z_1, Z_2, Z_3 , = Managerial focus dimensions (employee attitude, firm agility and innovativeness)	Simple regression analysis
6) Establish the moderating effect of managerial focus on the relationship between quality drivers and CS	H ₆ : Managerial focus (MF) has a moderating effect on the relationship between quality drivers and CS	M = $\beta_0 + \beta_1 X + \beta_2 Z + \beta_3 XZ + e$ = $\beta_0 + \beta_{11}X_1 + \beta_{12}X_2 + \beta_{13}X_3 + \beta_{14}X_4 + \beta_{15}X_5 + \beta_1 Z_1 + \beta_2 Z_2 + \beta_3 Z_3 + \beta_3 XZ + e$, where β_{is} = regression coefficients, X_1 to X_5 = quality drivers, Z_1 to Z_3 = managerial quality dimensions	Hierarchical regression analysis
7) Establish the joint effect of all variables on CS	H ₅ : The joint effect of QD, MF and CP on CS is different from individual variable effects	Y = $\beta_0 + \beta_1 X + \beta_2 Z + bM + \beta_3 XZ + e$	Hierarchical regression analysis

Reference: Fairchild and MacKinnon (2009), A General Model for Testing Mediation and Moderation Effects, *Prevention Science* 10:87-99

3.10 Summary of the Chapter

This chapter has described the research methodology used to conduct the study. Specifically it has described the research philosophy, research design, population of study, operationalization of the study variables, data collection and the data analysis method and program used. In addition the tests used to screen the data such as tests for reliability and validity as well as tests for assumptions of regression were explained. Such tests were necessary before subjecting the data to further statistical tests.

The next chapter presents the results of the study findings. The study adopted a positivistic research philosophy and the findings therefore sought to explain causal relationships among the variables related to customer satisfaction in the maize flour sector in Nairobi. The findings include the results of the data screening tests, descriptive statistics, correlations, and results of tests of the study hypotheses.

4.2 Response Rate and Data Screening

Although the study intended to survey all the 14 maize flour mills within Nairobi administrative boundaries grinding a minimum of 15 maize tonnes MT of maize per day and employing a minimum of 10 direct contract employees from each mill, data were collected from 12 mills and 21 of their direct business customers. One of the mills decided to participate in the survey during confidentiality issues over other mills. The 21 customers represented 61 percent response rate from the participating flour mills and at least six customers from each mill responded. Primary data were collected by use of well administered questionnaires.

Data screening was done to ensure it was reliable, accurate, and valid for testing the study hypotheses. This was done through checks for consistency and completeness and double checking with respondents before coding and going to SPSS. Preliminary checks were made to ensure the reliability of the survey instrument.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This study was broadly based on the premise that within the maize flour sector in Nairobi, quality drivers influence satisfaction of the Mills' direct business customers and that this influence is mediated by customer perception. It was further hypothesized that the maize mill management's focus on some key enabler variables moderates the relationship between the quality drivers and customer perception.

The current chapter presents the outcome of data analysis and findings in line with the objectives of the Study. The data were analysed using the Statistical Program for Social Sciences (SPSS) version 12, by use of both descriptive and inferential statistics. Tests on the data for the assumptions of linear regression were conducted and results were within the limits necessary for further statistical tests. The seven hypotheses of the Study were tested using simple and multiple regressions. Correlations were also conducted between various study variables including key characteristics of the studied firms.

4.2 Response Rate and Data Screening

Although the Study intended to survey all the 14 maize flour mills within Nairobi's administrative boundaries grinding a minimum of 15 metric tonnes MT of maize per day and randomly sampled 10 direct business customers from each mill, data were collected from 13 mills and 81 of their direct business customers. One of the smaller mills declined to participate in the Survey citing confidentiality issues even after reassuring them. The 81 customers represented 62 percent response rate from the participating flour mills and at least six customers from each mill responded. Primary data were collected by use of self administered questionnaires.

Data screening was done so as to ensure it was useful, reliable, and valid for testing causal theory. This was done through checks for consistency and completeness and double checked with respondents where necessary before coding and posting in SPSS. Preliminary checks were carried out to test for reliability of the Survey instruments

and statistical assumptions on variables aggregate mean scores before the data were used for further statistical analyses. The assumptions tested were linearity, normality, independence, homogeneity and multicollinearity necessary for further statistical tests such as linear regression and ANOVA (Alauddin and Nghiem, 2010; Razali and Wah, 2011). Testing for these assumptions was necessary because the validity of the conclusions drawn from a statistical analysis depends on the validity of the assumptions made.

Reliability test to check for internal consistency of the survey constructs was done by computing Cronbach's alpha coefficients. The coefficients exceeded the 0.6 lower level of acceptability (Bagozzi and Yi, 1988; Gliem and Gliem, 2003) indicating sufficient internal consistency and hence adequately measuring the survey constructs. Normality was tested using the Shapiro-Wilk test which has power to detect departure from normality due to either skewness or kurtosis or both. Its statistic ranges from zero to one and figures higher than 0.05 indicate the data is normal (Razali and Wah, 2011). All the readings in this study were above 0.05 confirming normality (Table 4.1). Normality assumes that the sampling distribution of the mean is normal.

Linearity was tested by use of ANOVA test of linearity which computes both the linear and nonlinear components of a pair of variables whereby nonlinearity is significant if the F significance value for the nonlinear component is below 0.05 (Zhang *et al.*, 2011). All the computed readings were above 0.05 confirming linear relationships (constant slope) between the predictor variables and the dependent variable. Independence of error terms, which implies that observations are independent, was assessed through the Durbin-Watson test whose statistic ranges from zero to four. Scores between 1.5 and 2.5 indicate independent observations (Garson, 2012). In the current study the test results ranged between 1.64 and 2.02 supporting independence of error terms.

Homoscedasticity was tested by use of Levene's test of homogeneity of variances. The test was not significant at $\alpha = 0.05$ confirming homogeneity. If the Levene statistic is significant at $\alpha = 0.05$ then the data groups lack equal variances (Gastwirth *et al.*, 2009). Levene's test measures whether or not the variance between the dependent and independent variables is the same. Thus it is a check of whether the spread of the scores (reflected in the variance) in the variables are approximately similar (Bryk and

Raudenbush, 1988). Multicollinearity was tested by computing the Variance Inflation Factors (VIF) and its reciprocal, the tolerance. It is a situation in which the predictor variables in a multiple regression analysis are themselves highly correlated making it difficult to determine the actual contribution of respective predictors to the variance in the dependent variable. The multicollinearity assumption has a VIF threshold value of 10 maximum (Robinson and Schumacker, 2009). In the current study tolerance ranged from 0.60 to 0.80 and therefore its reciprocal, the VIF was between one and two, way below the threshold.

Five assumptions of regression were tested and their results together with those of the test for reliability are summarized in Table 4.1. The threshold levels for the respective test statistics are listed below each assumption. For multicollinearity both the variance inflation factor (VIF) and its reciprocal (Tolerance) values are listed, the latter in parentheses. The results showed that the assumptions of regression were met and subsequently the data were subjected to further statistical analysis including tests of hypotheses as discussed in the following subsections.

Assumption	Test Statistic	Observed Value	Threshold Value	Result
Multicollinearity	Variance Inflation Factor (VIF)	1.64	10	Met
	Tolerance	0.61	0.10	Met
Normality	Skewness	0.10	±1.96	Met
	Kurtosis	1.21	±3.00	Met
Linearity	Partial Correlation	0.70	0.10	Met
	Partial Regression	0.70	0.10	Met

VIF= Variance Inflation Factor; was not applicable. Source: Primary Data

Results of factor analysis revealed that all the study variables' KMO scores exceeded 0.5 and the Bartlett's test of sphericity scores for all the variables were statistically significant at 0.05 (Table 3.6 in Appendix 3). This suggested that the proposed conceptual model was not an identity. Two factors emerged: the quality oriented factor, and hedonic factor. The quality oriented factor was loaded heavily by product quality, service quality and ease of doing business and factor two loaded heavily by price and convenience. The two

Table 4.1: Results of Tests of Statistical Assumptions

Variable	Measure	Sample size	Test of regression assumption and statistic used					
			Reliability (Cronbach's α test)	Normality (Shapiro-Wilk test)	Linearity (ANOVA test)	Independence (Durbin-Watson test)	Homogeneity (Levene test)	Collinearity VIF (Tolerance test)
	Threshold: Assumption is met if \rightarrow		0.6 min	$p > 0.05$	$p > 0.05$	1.5 to 2.5	$p > 0.05$	VIF 10 max
Quality Drivers	Importance attached to Quality of Product & Service; Ease of Business; Complaints Handling; & Product Price	81	0.70	0.39	0.42	2.02	0.32	1.25 (0.80)
Customer Perception	Customer reference to brand and firm imagery; features critical to quality; and competitive substitutes	81	0.60	0.66	0.37	1.64	0.47	1.59 (0.63)
Managerial Focus	Influence of staff attitude; business flexibility; and innovativeness	81	0.61	0.10	0.16	1.73	0.78	1.51 (0.66)
Customer Satisfaction	Customer's overall satisfaction and intention to recommend the firm or brand.	81	0.70	0.10	n/a	n/a	n/a	n/a

VIF= Variance Inflation Factor, n/a = not applicable. Source: Primary Data

Results of factor analysis revealed that all the study variables' KMO scores exceeded 0.5 and the Bartlett's test of sphericity scores for all the variables were statistically significant at 0.05 (Table 5.6 in Appendix 5). This suggested that the population correlation matrix was not an identity. Two factors emerged for quality drivers with factor one loaded heavily by product quality, service quality and ease of doing business and factor two loaded heavily by price and complaints handling. The two

factors accounted for 66.3% variation. Customer perception and managerial focus each had only one factor and each was loaded heavily by all the respective constructs in the variable. The computed factors closely matched the hypothesized study variables.

4.3 Profiles of the Sampled Firms

Besides collecting data on the key study variables, the respondent firms were also studied on size based on labour force and gross revenue sales per month and age of the firm. Each of these had four subgroups along which frequencies were calculated. This was done for both the 13 maize flour mills and their 81 sampled direct business customers.

4.3.1 Age and Size Profile of the Respondent Firms

As shown in Table 4.2, for both the Mills and Business Customers, a majority of the respondent firms were aged ten years and below. The proportions decreased with age.

Table 4.2: Age Profile of the Respondent Firms

Firm age in Years	Flour Mills		Business Customers	
	Frequency	%	Frequency	%
≤ 10	8	61.5	32	41.0
11 to 20	3	23.1	30	38.5
21 to 30	1	7.7	10	12.8
Over 30	1	7.7	6	7.7
Total	13	100	78	100

Source: Primary Data

The information in Table 4.2 reveals that majority of the players in the maize flour sector in Nairobi were relatively young as 41% of the respondent business firms were aged ten years and below while 61.5% of the respondent flour mills were aged ten years and below. Both samples showed progressive decrease in firm frequencies with firm age with the decrease being more rapid for the flour mill.

On firm size based on labour force, 49.4% of the business respondent firms had fifty employees and below (Table 4.3) while only 38.5% of the mill respondents had fifty or fewer employees meaning that the flour mills tended to employ more staff than the intermediary firms.

Table 4.3: Labour Force Profile of the Respondent Firms

Employees	Flour Mills		Business Customers	
	Frequency	%	Frequency	%
≤ 25	3	23.1	18	22.8
26 to 50	2	15.4	22	27.8
51 to 100	3	23.1	12	15.2
Over 100	5	38.5	27	34.2
Total	13	100	79	100

Source: Primary Data

Such a scenario as shown in Table 4.3 whereby on firm age a higher proportion of Mills are young but on labour force majority are the larger ones implies that a number of the newer Mills have expanded rapidly within their first decade of operation perhaps as a result of a growing demand for flour. On size based on gross sales per month, most respondents from both the flour mills and the business customers were reluctant in disclosing revenue information.

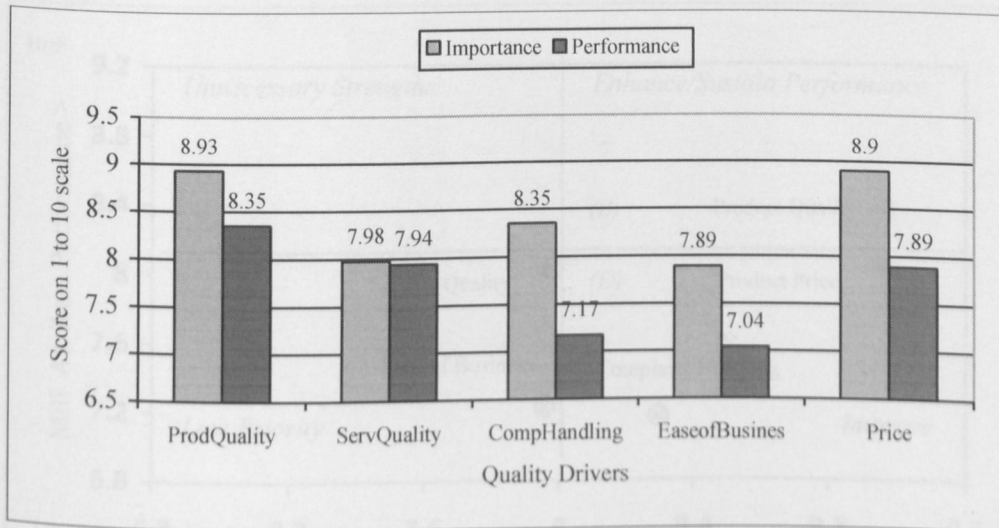
4.3.2 Quality Drivers

The independent variable was operationalized through product quality, service quality, complaints handling, ease of doing business and product price. This section compares mean scores of respondents' perceived mills performance across the attributes and these are compared to the levels of importance respondents placed on the respective features. The results are shown on a bar graph and on an importance-performance matrix. In addition the relative importance attached to the attributes by mill respondents is compared to that of their business customer respondents.

On a scale of 1 to 10 (where 1 = extremely important and 10 = not at all important) business customers stated the importance they attached to each quality driver when deciding where to source their maize flour from. On the same scale (where 1 = extremely good and 10 = extremely poor) business respondents stated their perceived level of attribute performance of their major maize flour supplier across these quality attributes. Results of the two measurements were then plotted together as shown in Figure 4.1. The aim was to have a visual comparison of how Mill performance on the various drivers of quality compared to the performance levels expected by their

business customers. Performance of the mills across the attributes was consistently lower than corresponding customers' expectations. This provided opportunities along specific quality drivers for Mill Management to work on improving customer offerings thereby improving customer satisfaction and overall business performance.

Figure 4.1: Quality Drivers Importance-Performance Scores



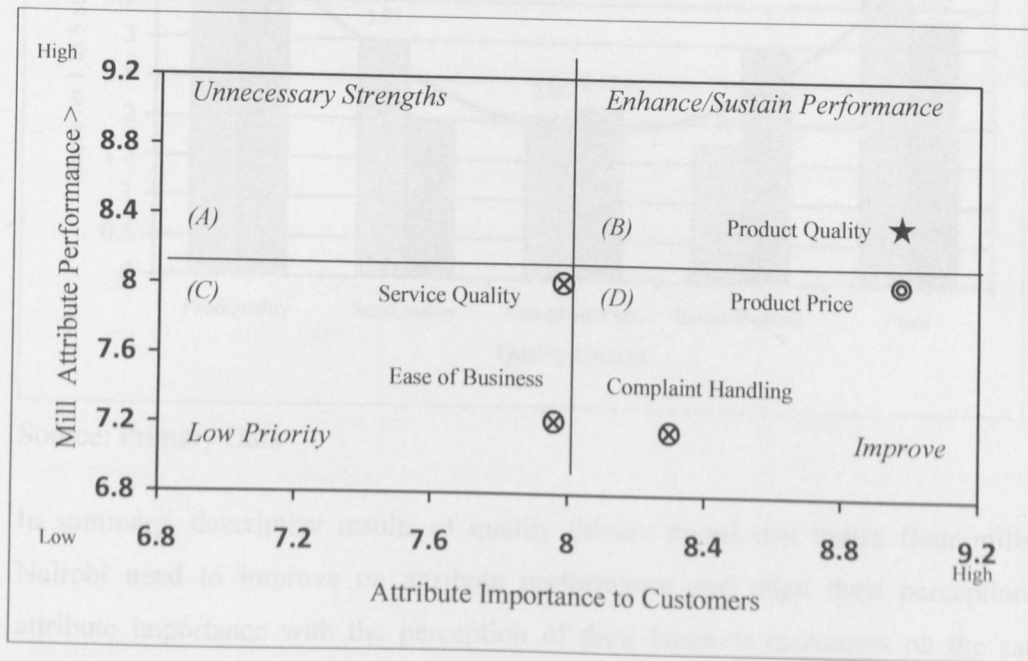
Source: Primary Data

Figure 4.1 reveals that on importance attached to quality drivers by business customers, product quality scored highest (mean score 8.93, s.e. 0.151) while ease of business scored lowest (mean score 7.89, s.e. 0.234). Product price was rated about the same as product quality. A similar trend was observed on mill performance across the quality drivers whereby product quality scored the highest while ease of business scored the least. Complaints handling had the largest difference between customer expectation (importance attached) and actual attribute performance while the quality of service had the least difference.

The responses on customers' perceived attribute importance and mill performance were also plotted on an importance-performance matrix as shown in Figure 4.2. The matrix shows the extent to which Mill efforts across quality drivers, as reflected by the performance scores, matches business customers' perceived importance of those attributes. Attributes that score high on the importance scale (Quadrant B) require that Mills perform equally high on the same so as to match customer expectations. Only product quality scored well in this regard. Mills need to sustain their efforts on

product quality and improve their efforts on price competitiveness and complaints handling to match Business customers' expectations. Although service quality and ease of doing business scored low (Quadrant A), they can be useful differentiators if routinely performed well. As such Mills should endeavour to improve on them.

Figure 4.2: Quality Drivers Importance-Performance matrix

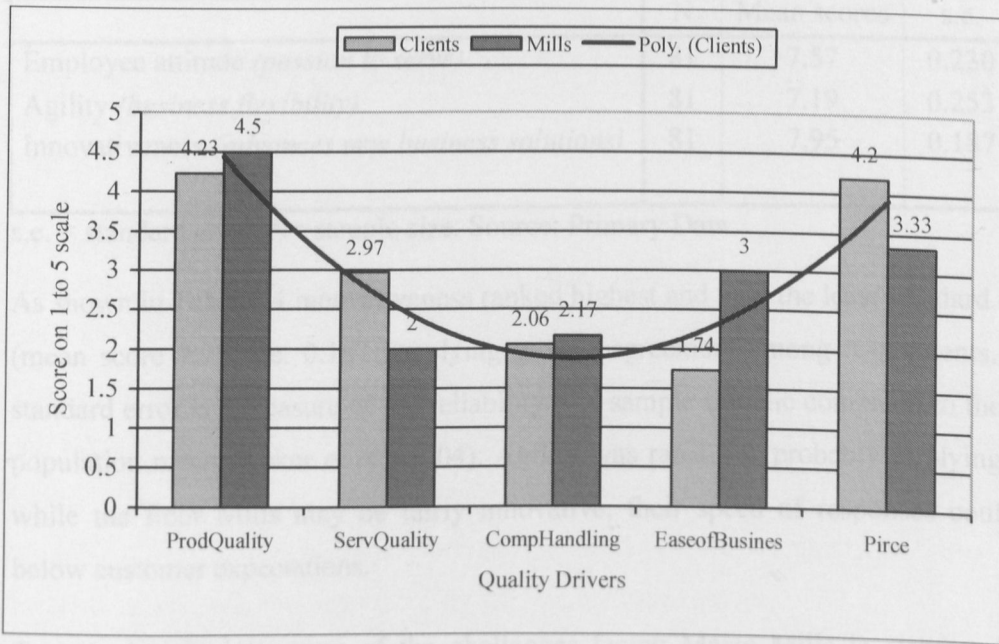


Source: Primary Data

To get further insight into the role of quality drivers in purchase decisions, mills and their business customer respondents were asked to rate the quality drivers in order of relative importance on a scale of 1 to 5 (where 1= extremely important, 5= not important at all). The aim was to check for any differences in attribute ratings between the two groups. The results are shown in Figure 4.3.

Both the flour Mills and their Clients rated product quality first followed by product price. Both also rated complaints handling about the last. However, they differed on their rating of service quality and ease of doing business. Business customers rated service quality third but mills rated it last of the five drivers. Mills rated ease of doing business third but customers rated it last. Business customers rated service quality lower than price which could mean that, other factors constant, the business customers are willing to sacrifice a little quality of service for a lower price due to the profit maximization goal of entrepreneurs.

Figure 4.3: Relative Importance of Quality Drivers



Source: Primary Data

In summary, descriptive results of quality drivers reveal that maize flour mills in Nairobi need to improve on attribute performance and align their perception of attribute importance with the perception of their business customers on the same. Results of the importance-performance matrix showed that only performance on product quality was closely aligned with customer perception of the attribute importance, and even this has room for improvement. Mills need to improve on their performance across the other attributes.

4.3.3 Managerial Focus

Managerial focus was the moderating variable in the current study and responses were collected through three constructs namely; employee attitude, agility and innovativeness. The respondents were asked to state (based on their trading experience) their perceived performance of their maize flour supplier across these attributes. The results are shown in Table 4.4.

Table 4.4: Scores of managerial focus attributes- Business Customers

	N	Mean scores	s.e.
Employee attitude (<i>passion to serve</i>)	81	7.57	0.230
Agility (<i>business flexibility</i>)	81	7.19	0.253
Innovativeness (<i>advances new business solutions</i>)	81	7.95	0.187

s.e. = standard error, N= sample size. Source: Primary Data

As shown in Table 4.4 innovativeness ranked highest and with the least standard error (mean score 7.95, s.e. 0.187) implying greater agreement among respondents. The standard error is a measure of the reliability of a sample statistic compared to the true population mean (Aaker *et al.*, 2004). Agility was rated last probably implying that while the flour Mills may be fairly innovative, their speed of responses could be below customer expectations.

To gain insight into some of the challenges facing Maize Mills in striving to be innovative, Mill respondents were asked to give their perception of the role played by a number of factors as barriers to their firm's innovativeness. Table 4.5 summarizes the relevant results.

Table 4.5: Perceived barriers to Mill innovativeness- Mill Respondents

	N	Mean score	s.e.
Need to innovate not vividly clear to employees	13	6.46	0.694
Senior mgt not keen on nurturing new ideas	13	4.85	0.775
Ownership of innovation fragmented across firm	13	4.46	0.806
Most staff disengaged from firm's creative work	13	5.38	0.836
Misalignment of job roles and talent acquisition	13	5.69	0.728

s.e. = standard error, N= sample size. Source: Primary Data

As shown in Table 4.5 the leading perceived barrier to innovativeness within the flour mills was lack of a clear need for innovation within the Flour Mills. This is an attribute that requires the participation of Senior Management to communicate business goals and aspirations and to promote an atmosphere that encourages innovation backed by availability of requisite resources. To explore further on the attributes of managerial focus, the Mill respondents were also asked to state their perception of the extent to which a number of traits enhance business agility. The results are presented in Table 4.6.

Table 4.6: Perceived drivers of mill agility- Mill Respondents

	Mills	Mean score	s.e.
Quick decision making & execution	13	7.15	0.783
A high performance culture	13	7.46	0.704
Access to timely & right information	13	7.54	0.562
A flexible management process	13	7.62	0.583
A decentralised reporting structure	13	6.85	0.861
Lean operations- <i>waste/unwanted steps quickly removed</i>	13	7.15	0.799

s.e. = standard error, N= sample size. Source: Primary Data

The results in Table 4.6 show that a flexible management process and access to timely and right information were ranked highest. This implies the need for Mills to reduce levels of bureaucracy in their operations as low as possible. The need for Mills to promote a high performance culture ranked third. This is necessary to foster high business aspirations that are necessary in a competitive market.

To assess the level of agility across firm functions, the Mill respondents were asked to state their perceptions of how agile their various departments were. The results are presented in Table 4.7.

Table 4.7: Agility across Maize Mill Departments- Mill Respondents

	N	Mean score	s.e.
Marketing	13	7.62	0.684
Sales	13	7.92	0.684
Customer Service	13	7.46	0.685
Research & Development	13	5.00	0.824
Information Technology	13	5.00	0.840
Finance	13	6.62	0.924
Supply Chain	13	6.85	0.815
Procurement	13	6.15	0.966
Production	13	8.15	0.687
Human Resources	13	6.85	0.815
Senior Management	13	7.00	0.884
Overall Firm Agility	13	6.69	0.865

Source: Primary Data

As shown in Table 4.7 Production Department was ranked highest (mean score 8.15 s.e. 0.687) while human resource and information technology were ranked lowest.

This represented an area of opportunity for improvements. The Mill managements need to look into factors that affect levels of agility in the Departments of human resource and information technology as these two departments can have negative implications on the level of vibrancy and agility in other departments, and on operations and processes across the firm. Recruitment of the right employees followed by appropriate motivation can foster positive employee attitude thereby enhancing customer satisfaction. Agile information technology departments can foster appropriate information systems that support timely and accurate information sharing for quick decision making which is important in a competitive market.

Overall firm agility scored a mean score of 6.69, s.e. 0.865, on a scale of 1 to 10 (where 1= not agile at all, 10= extremely agile). The moderate mean score indicated potential for improvements and called for senior management to cultivate an agile atmosphere and culture across the Flour Mill. This would be a key improvement target in view of rising competition in the local maize flour sector.

4.3.4 Business Customers' Perceptions

Customer perception was the mediating variable in the study and the pertinent responses were gathered by use of the four constructs contained in Table 4.8. The business customer respondents were asked to indicate the extent to which each of the constructs influenced their choice of Maize Flour Supplier.

Table 4.8: Business Customers' Perception constructs

	N	Mean score	s.e.
Desire for quality critical features	81	6.90	0.259
Customer's brand imagery	81	7.40	0.230
Customer's firm imagery	81	5.10	0.325
Reference to competitive substitutes	81	7.30	0.222

s.e. = standard error, Source: Primary Data

The results in Table 4.8 reveal that customer's brand imagery and reference to competitive substitutes were ranked highest with mean scores of slightly over 7.0. In view of this, it is necessary for marketing and sales teams at every maize flour mill in Nairobi to remain vigilant of their competitors' flour offerings as their business customers often compare the substitutes. Firm imagery was ranked the lowest and with the largest standard error indicating varying views about the concept.

To check on the tools used by maize flour mills to enhance customer perception, the Mill respondents were asked to indicate the extent to which their firms used a variety of tools in fostering how customers perceived their brands or firms. The results are presented in Table 4.9.

Table 4.9: Tools for Enhancing Business Customer Perceptions

	N	Mean score	s.e.
Communicating brand identity	13	5.92	.560
Surveying user brand imagery	13	5.38	.738
Brand promotional activities	13	5.54	.685
Surveying competitor brand positioning	13	6.31	.603
Setting brand strategies in view of rival's	13	7.08	.645
Brand strategies aligned to buyer motives	13	7.38	.432

Source: Primary Data

The results in Table 4.9 suggest that promotional activities and surveys on brand imagery ranked the lowest. This was a pointer to a possible feeling by the Mill Marketing personnel that their firms were not creating enough awareness about their brands in view of rising competition in the sector.

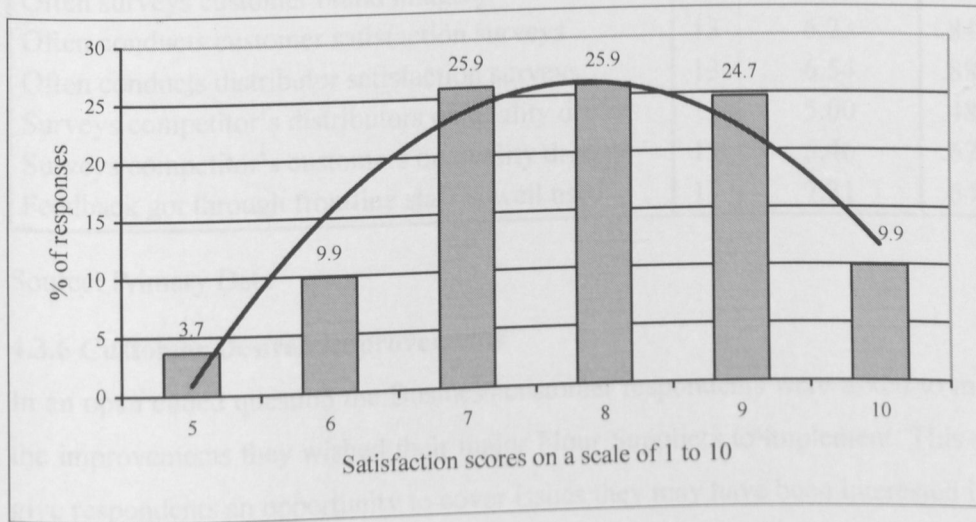
4.3.5 Business Customers Satisfaction

Satisfaction of the business customers was the dependent variable in the current study and was measured through an overall satisfaction score and a score on how likely the respondent was to recommend the Flour Mills to a friend or colleague. Rating was on a scale of 1 to 10 (where for overall satisfaction 10= extremely satisfied and 1= extremely dissatisfied and for intention to recommend 10= extremely likely and 1= extremely unlikely). A score of 5 meant the business customer was neither satisfied nor dissatisfied or was undecided at whether or not to recommend the Flour Mill.

Overall satisfaction had a mean score of 7.88 s.e. 0.142 while intention to recommend had a mean score of 8.02 s.e. 0.161. The composite score of the two constructs had a mean score of 7.95 s.e. 0.130. The slightly higher score on the intention to recommend compared to the overall satisfaction score could imply that while the business customers are willing to recommend their major Maize Flour Supplier to a colleague or friend, there are issues that the supplier needs to improve on.

To check on the satisfaction response profile a summary of the frequency distribution of the overall satisfaction is presented in Figure 4.4.

Figure 4.4: Customers Overall Satisfaction Frequency Distribution



Source: Primary Data

The results in Figure 4.4 indicated that only about 10% of the 81 business customers felt they were extremely satisfied. The results further revealed that majority of the business respondents (76.5%) scored their overall satisfaction between 7 and 9 on the scale on 1 to 10. In addition, 13.6% scored below 7 and of these, 3.7% felt they were neither satisfied nor dissatisfied with their major Maize Flour Supplier. It is therefore necessary for mills to strive to improve their offerings with a view to having more business customers move to extreme satisfaction.

To check on the common features considered in satisfaction surveys, the Mill respondents were asked to mention the extent to which their firms surveyed satisfaction on eight common satisfaction constructs. As presented in Table 4.10 results indicated that the leading features surveyed by the Flour Mills were quality issues related to introduction of new brands and improvements to existing ones. The least surveyed attributes related to competitor intermediaries and other customers. Failure by the Flour Mills to survey issues related to their competitors would be a major drawback to enhancement of competitiveness because as revealed earlier in the analysis of customer perception, business respondents stated that reference to competitive substitutes was a key determinant of their choice of a Flour Supplier.

Table 4.10: Mills' Customer Satisfaction Survey Features

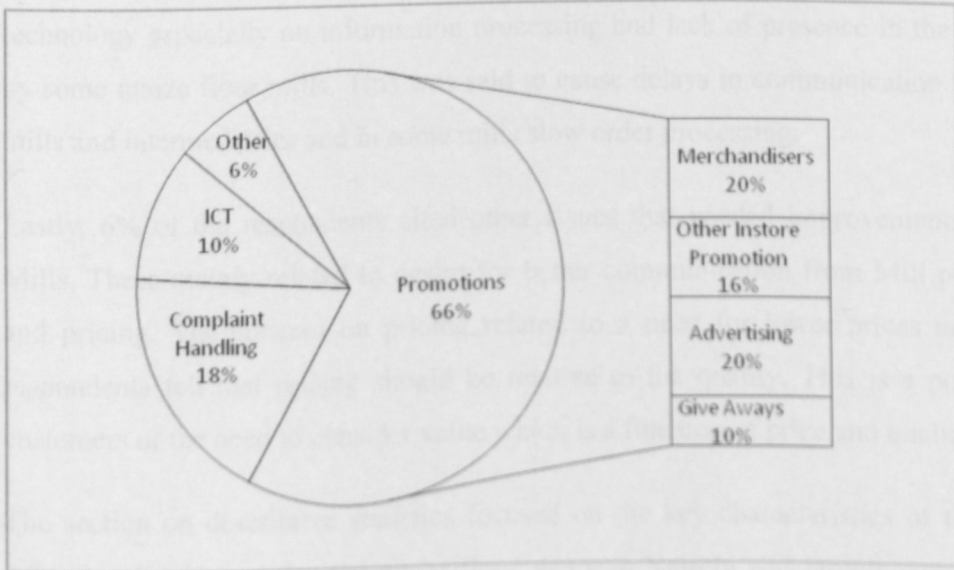
	N	Mean score	s.e.
Surveys quality critical features for new brands	13	7.00	.689
Surveys quality critical features to alter brands	13	6.62	.805
Often surveys customer brand imagery	13	5.85	.741
Often conducts customer satisfaction surveys	13	6.23	.848
Often conducts distributor satisfaction surveys	13	6.54	.882
Surveys competitor's distributors on quality drivers	13	5.00	.480
Surveys competitor's customers on quality drivers	13	5.46	.676
Feedback got through frontline staff is well used	13	7.31	.644

Source: Primary Data

4.3.6 Customer Desired Improvements

In an open ended question the Business customer respondents were asked to mention the improvements they wished their major Flour Suppliers to implement. This was to give respondents an opportunity to cover issues they may have been interested in. The responses were then grouped and frequencies computed as presented in Figure 4.5.

Figure 4.5: Customer Desired Improvements



Source: Primary Data

As presented in Figure 4.5 the main concern was promotional activities as about two thirds of the respondents felt that Maize Flour Mills were not promoting their flour brands enough. This was followed by a need to improve on complaints handling and greater use of information and communications technology.

As further shown in Figure 4.5 the 66% responses on promotional issues that needed improvement related to four activities namely more merchandisers at 20%, more in-store promotions at 16%, greater advertising at 20% and greater use of giveaway promotional items at 10%. Respondents felt that brand merchandisers need to talk directly to end users more and constantly review stock levels with store managers. The 20% on mass media called on Mills to advertise more including on radio and television during prime time and to avoid promoting their leading brands almost at the exclusion of their other flour brands. This is an important point to note because as a firm promotes more brands it is likely to notice a rising star brand that can then be nurtured to become a cash cow later or to serve a niche market.

On complaints handling the respondents wished that Mill Personnel would pay close attention to nature of complaints (be good listeners), speed up response time to resolve complaints, and address complaints individually rather than group complaints and offer general responses. Delayed collection of rejected flour deliveries (such as damages during offloading and other agreed replacements) was also cited as an area for mill improvements. On ICT the respondents cited low adoption of information technology especially on information processing and lack of presence in the internet by some maize flour mills. This was said to cause delays in communication between mills and intermediaries and in some mills slow order processing.

Lastly, 6% of the respondents cited other issues that needed improvements by the Mills. These mainly related to desire for better communication from Mill personnel and pricing. The concern on pricing related to a need for lower prices and some respondents felt that pricing should be relative to the quality. This is a pointer by customers of the need to consider value which is a function of price and quality.

The section on descriptive statistics focused on the key characteristics of the study data. Results showed that the maize flour sector in Nairobi was largely composed of young firms aged ten years and below. Across the quality drivers, mill attribute performance was consistently lower than the importance attached to the features by the business customers and this presents an opportunity for improvement by the Mills. Likewise business respondents felt that Maize Millers needed to promote their brands more vigorously. The following sections focus on further statistics.

4.4 Results of Correlation Analyses

The following subsections present results of correlation analyses to establish relationships between firm characteristics and customer satisfaction and between the research variables. The results are presented in tabular and graph formats.

4.4.1 Correlations between Firm Age, Size and Customer Satisfaction

To evaluate relationships between various firm characteristics that may be of managerial importance, a cross tabulation was conducted involving firm age, size and satisfaction. The results of Product Moment (Pearson) correlation coefficients are shown in Table 4.11.

Table 4.11: Correlations between Firm Age, Size and Satisfaction

	Recommend Intention	Workforce	Satisfaction	Firm Age
Recommend Intention	1			
Workforce	.209	1		
Satisfaction	.481**	.310**	1	
Firm Age	-.155	.335**	-.035	1

** $p < 0.01$ (2-tailed). N=81, Source: Primary Data

As can be discerned in Table 4.11 there was low but insignificant negative correlation between age of the firm and satisfaction (-0.035) or intention to recommend (-0.155). This suggests that older, more established distributors and other intermediaries are harder to please than more recent ones. However, the size of the firm (labour force) had positive correlations with both intention to recommend (0.209) and satisfaction and the latter was significant (0.310, $p < 0.05$). Satisfaction and intention to recommend had a highly statistically significant and positive correlation (0.481, $p < 0.05$). The moderate coefficient implied that overall satisfaction was only a moderate predictor of customer referrals at least in this sector. It would therefore be advisable to measure customers' intention to recommend directly so as to get a better estimate of referrals. Age of the firm was significantly positively correlated with labour force (0.335, $p < 0.05$) probably because older firms are likely to be bigger in output and probably less automated than more recent ones.

4.4.2 Correlation Analyses for Quality Drivers and Satisfaction

A set of five quality drivers constituted the independent variable. These were product quality, service quality, complaints handling, ease of doing business and product price. Customer satisfaction was the dependent variable and was measured on two constructs namely; overall customer satisfaction and customer's intention to recommend the brand or firm to others. Correlation analyses were conducted to check for the relationships among the drivers of quality and on their influence on satisfaction and intention to recommend. The results are summarized in 4.12.

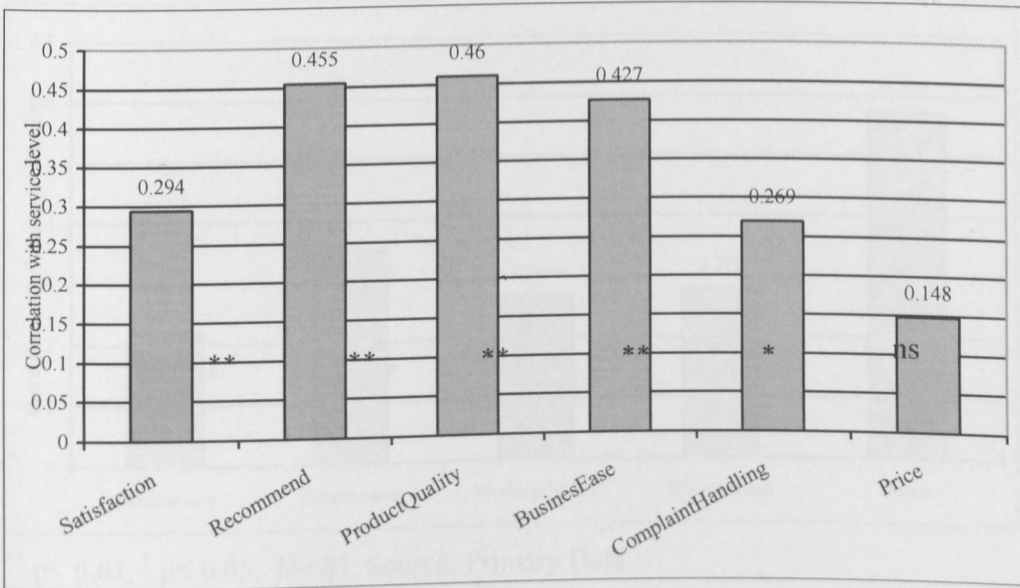
Table 4.12: Correlations between quality drivers and overall satisfaction

	Satisfaction	Recommend Intention	Product Quality	Service Quality	Complaints Handling	Ease of Business	Price
Overall Satisfaction	1						
Recommend Intention	.481**	1					
Product Quality	.136	.215	1				
Service Quality	.294**	.455**	.460**	1			
Complaints Handling	.221*	.352**	.094	.269*	1		
Ease of Business	.053	.159	.165	.427**	.279*	1	
Price	.153	.190	.146	.148	.574**	.174	1

** $p < 0.01$ level (2-tailed), * $p < 0.05$ level (2-tailed), $N = 81$. Source: Primary Data

From the results of correlations analysis as depicted in Table 4.12, service quality emerged as the feature with the most profound positive influence on other quality drivers and on satisfaction and intention to recommend. Service quality had good influence on product quality ($r = 0.46$, $p < 0.05$) and moderate correlations with complaints handling and ease of doing business as well. It had a positive non-significant relationship with product price. Likewise it had a significant positive correlation with overall satisfaction and intention to recommend. The implication of this is that Business customers are likely to associate good service with superior quality of product and associated processes. Figure 4.6 more succinctly highlights these correlations between the level of service performance and the other attributes.

Figure 4.6: Correlation between service quality and other parameters

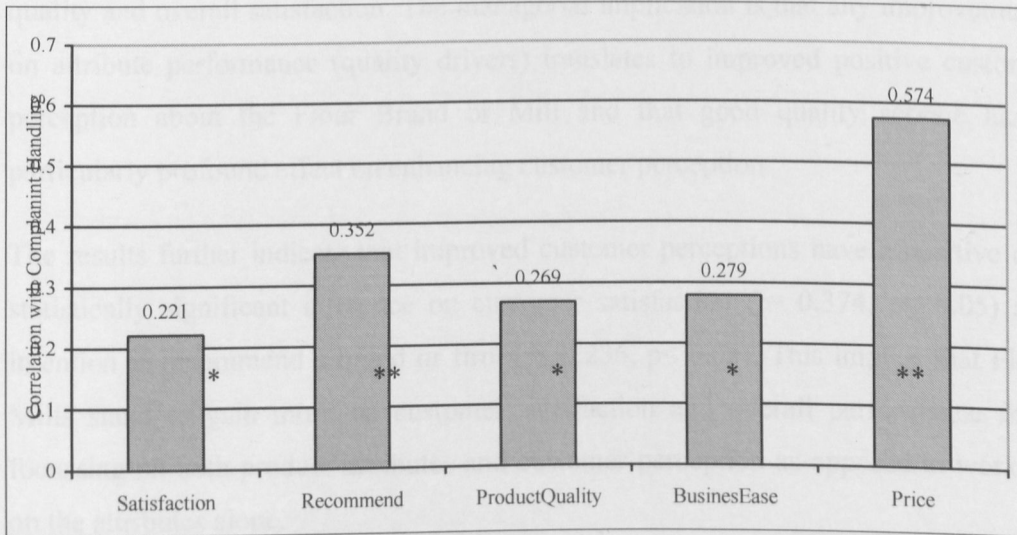


** $p < 0.01$, * $p < 0.05$, ns: not significant, N= 81, Source: Primary Data

The highly statistically significant correlation between service performance and intention to recommend ($r = 0.46$, $p < 0.05$) implies that the higher the level of service performance experienced by a business customer, the higher the likelihood that the customer will recommend the brand or firm to a colleague or friend. The highly statistically significant correlation coefficient relating to ease of doing business ($r = 0.427$, $p < 0.05$) suggests that a high level of service performance experienced by a business customer reassures the client that any problem arising from the purchase will be attended to expeditiously.

Customer Complaints handling had positive and statistically significant correlation coefficients with customer satisfaction, intention to recommend and three quality drivers (Figure 4.7). The coefficients were approximately 0.3 but the coefficient for price was higher and highly significant ($r = 0.574$, $p < 0.05$). The implication of this is that speedy and effective complaints resolution goes a long way to promote overall satisfaction and could pave way for acceptance of higher prices.

Figure 4.7: Correlations- complaints handling and other parameters

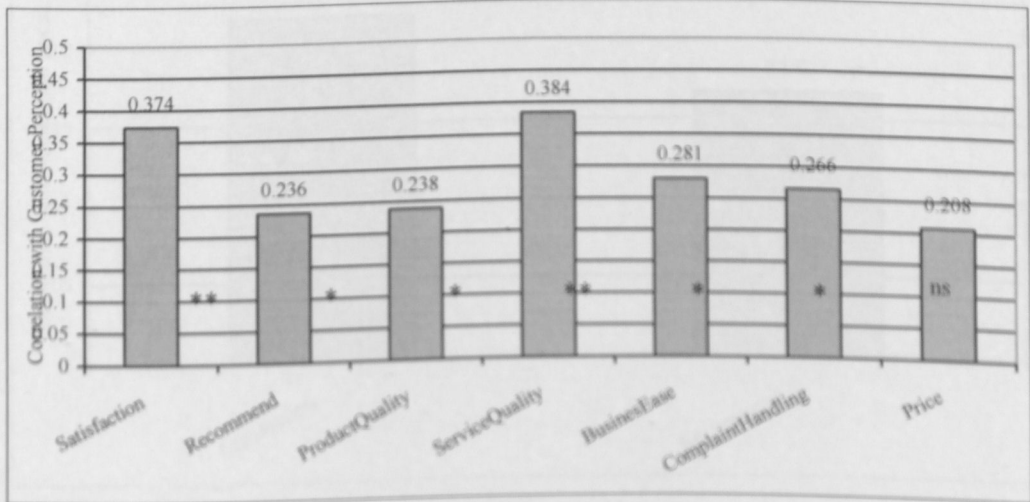


** $p < 0.01$, * $p < 0.05$. N= 81. Source: Primary Data

4.4.3 Correlations Relating to Customer Perception

As shown in Figure 4.8 correlation coefficients between aggregate mean scores of customer perception and quality drivers were positive and statistically significant for all quality drivers except for price whose coefficient fell slightly outside the threshold of $p < 0.05$. The correlation coefficients were also positive and statistically significant for both overall satisfaction and intention to recommend.

Figure 4.8: Correlations between Quality Drivers and Customer Perception



** $p < 0.01$, * $p < 0.05$. Source: Primary Data

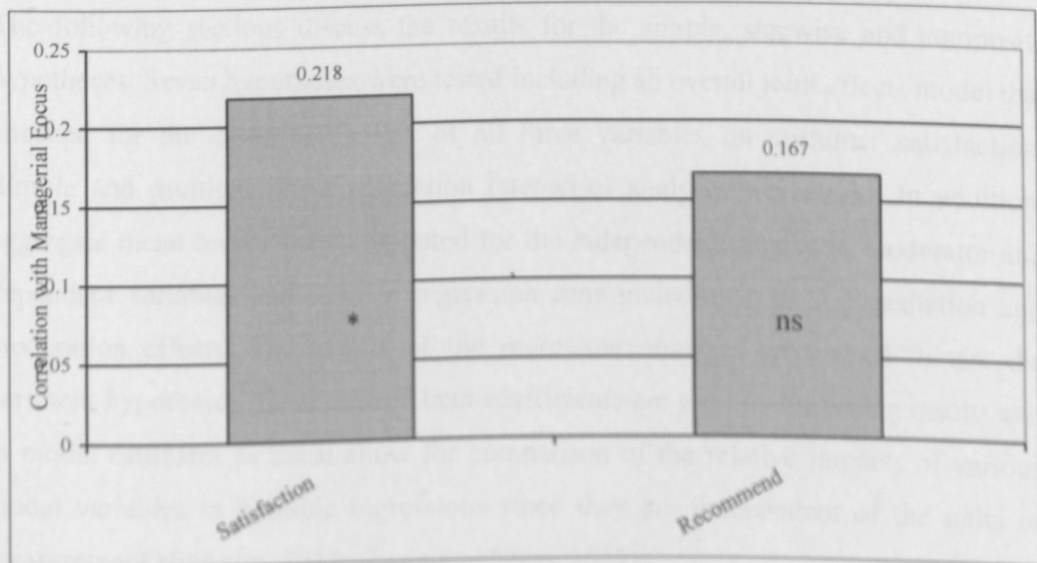
The correlation coefficients were highly statistically significant ($p < 0.05$) for service quality and overall satisfaction. The managerial implication is that any improvements on attribute performance (quality drivers) translates to improved positive customer perception about the Flour Brand or Mill and that good quality service has a particularly profound effect on enhancing customer perception.

The results further indicate that improved customer perceptions have a positive and statistically significant influence on customer satisfaction ($r = 0.374$, $p < 0.05$) and intention to recommend a brand or firm ($r = 0.236$, $p < 0.05$). This implies that Flour Mills stand to gain more on customer satisfaction and overall performance from focussing on both product attributes and customer perception as opposed to working on the attributes alone.

4.4.4 Correlations Relating to Managerial Focus

Figure 4.9 presents the correlation coefficients between aggregate mean scores of managerial focus and the measures of satisfaction. The correlation coefficient between managerial focus and overall satisfaction was positive and statistically significant ($r = 0.218$, $p < 0.05$). This indicates that managerial focus on enabler variables influences customer satisfaction.

Figure 4.9: Correlations between Managerial Focus and other variables



* $p < 0.05$, ns = not significant. Source: Primary Data

4.4.5 Summary of Correlation Analyses

The section on correlation analyses evaluated the relationships between variables that would have managerial implications. The negative correlation between age of the business customer firm and customer satisfaction suggests that Flour Mills need to innovate continuously and research on features that matter most to the more established Maize Flour supply chain intermediaries.

Among the quality drivers, quality of service had the most significant positive influence on the other variables, customer perception and overall satisfaction. This suggests that favourable customer experience in the flour subsector promotes positive attitudes towards the Flour Brand or Mill and this in turn influences satisfaction of the business customers. It is therefore necessary for Mills to pay particular attention to features that foster good customer service such as employee attitude.

The association between overall business customer satisfaction and intention to recommend was positive and highly statistically significant but the coefficient was only moderate in magnitude. This implies that customer satisfaction in the studied subsector was only a moderate predictor of referrals. It is therefore advisable for Maize Flour mills in the sector to directly measure intention to recommend.

4.5 Tests of Hypotheses

The following sections discuss the results for the simple, stepwise and composite hypotheses. Seven hypotheses were tested including an overall joint effects model that checked for the combined effect of all three variables on customer satisfaction. Simple and multiple linear regression (stepwise) analyses were used. In addition, aggregate mean scores were computed for the independent, mediator, moderator and dependent variables and used in regression runs including tests for mediation and moderation effects. The results of the regression analyses were used to test the pertinent hypotheses. Standardized beta coefficients are used in discussing results and in model estimates as these allow for comparison of the relative impacts of various model variables in multiple regressions since they are independent of the units of measurement (Johnson, 2012; Kwan and Chan, 2011).

4.5.1 Test of Hypothesis One

The results of simple and stepwise regression analyses with the quality drivers predicting overall customer satisfaction are shown in Appendix 5, Tables 5.1 and 5.2. The simple regression analyses revealed that all the quality drivers had positive influences on overall customer satisfaction but only Service Quality and Complaints Handling had statistically significant effects both at $p < 0.05$. The hypothesis relating to service quality was stated as follows:

H_{1sq}: There is a statistically significant relationship between service quality and customer satisfaction.

The model had a moderate beta coefficient ($\beta = 0.441$, $p < 0.05$) and explained 19.4% of the observed variation. The coefficient meant that for a unit standard deviation improvement in the quality of service, overall customer satisfaction would improve by about 0.44 of a standard deviation. From the results, the model that would be used to predict the expected level of customer satisfaction for a given level of service quality was expressed as shown below.

$$Y = 5.105 + 0.441SQ + e, p < 0.05, R^2 = 19.4\% \dots\dots\dots(1_{sq})$$

where Y= customer satisfaction and SQ= level of service quality.

The hypothesis relating to the relationship between customer complaints and overall customer satisfaction was expressed as follows:

H_{1ch}: There is a statistically significant relationship between complaints handling and customer satisfaction.

Results revealed a beta coefficient of 0.338 ($p < 0.05$) and the model explained 11.4% variation. The resultant predictive model was expressed as follows:

$$Y = 6.545 + 0.338CH + e, p < 0.05, R^2 = 11.4\% \dots\dots\dots(1_{ch})$$

where CH = level of complaints handling

Consequently the study failed to reject hypotheses H_{1sq} and H_{1ch} but rejected the other hypotheses related to the simple regression analyses of quality drivers and customer satisfaction. The influence of product quality though positive fell slightly below the $p \leq 0.05$ significance level as the p value was 0.64. Since the standardized coefficient

for the quality of service was greater than that for complaints handling, and the effects of the other quality drivers were not statistically significant, the results suggest that the level of service quality had the greatest influence on customer satisfaction.

In the stepwise regression analysis the five quality drivers were loaded onto successive steps in the analysis program. Service quality was loaded first followed by complaints handling then product quality, price and finally ease of doing business. The results are presented in Table 5.2 in Appendix 5. The ANOVA table indicated that all the F values were statistically significant ($p < 0.05$). The coefficients for service quality and complaints handling were statistically significant ($P < 0.05$, adjusted $R^2 = 18.4\%$ and $p < 0.05$, adjusted $R^2 = 21.0\%$ respectively) while the coefficients for the other quality drivers were not statistically significant.

The composite hypothesis (H_1) tested the direct relationship between quality drivers and customer satisfaction using aggregate mean scores. The two measures of satisfaction were regressed against those of the quality drivers using the SPSS version 12.0 program. The output is shown in Table 4.13 a to c.

H_1 : There is a statistically significant relationship between quality drivers and customer satisfaction.

Table 4.13: Results for Hypothesis One

Customer Satisfaction regressed on aggregate mean scores of Quality Drivers

a) Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.391(a)	.153	.142	1.08776

a Predictors: (Constant), Quality Drivers

b) ANOVA(b)

Mode l		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.827	1	16.827	14.222	.000(a)
	Residual	93.475	79	1.183		
	Total	110.302	80			

a Predictors: (Constant), Quality Drivers, b Dependent Variable: C. Satisfaction

c) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	4.831	.836		5.778	.000
	QualityDrivers	.406	.108	.391	3.771	.000

a Dependent Variable: Customer Satisfaction. Source: Primary Data

As shown in Table 4.13 there was a statistically significant linear relationship between quality drivers and satisfaction ($\beta = 0.391$, $p < 0.05$) and hence the study failed to reject hypothesis H_1 . The influence of quality drivers on customer satisfaction was moderate as the model accounted for 15.3% variability ($R^2 = 0.153$). The resulting simple linear regression model that can be used to predict the level of satisfaction for a one standard deviation improvement in the performance level of quality drivers can be expressed as:

$$CS = 4.831 + 0.391QD + e \dots\dots\dots (1)$$

Where CS = level of customer satisfaction and QD = level of quality drivers performance. The standardized beta coefficient 0.391 represents the expected improvement in satisfaction for a unit standard deviation improvement in the performance of quality drivers. It implies that, other factors constant, a one standard deviation improvement in the performance of quality drivers would raise the level of customer satisfaction by a factor of about 0.4 of a standard deviation. The regression results indicate that quality drivers positively influence level of customer satisfaction.

4.5.2 Test of Hypothesis Two

In testing the composite model (H_2) aggregate mean scores of customer perception were regressed on those of quality drivers and the relationship was positive and statistically significant ($\beta = 0.418$, $p < 0.05$) and the model explained 17.4% of the variation, supporting the second condition for testing the effect of mediation as presented in Table 4.14 a to c. The study failed to reject hypothesis H_2 which stated:

H_2 : *There is a statistically significant relationship between quality drivers and customer Perception.*

Table 4.14: Results for Hypothesis Two
Customer Perception regressed on Quality Drivers

a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.418(a)	.174	.164	1.45732

a Predictors: (Constant), Quality Drivers

b) ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35.426	1	35.426	16.681	.000(a)
	Residual	167.779	79	2.124		
	Total	203.205	80			

a Predictors: (Constant), Quality Drivers, b Dependent Variable: Customer Perception

c) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	2.146	1.120		1.916	.059
	QualityDrivers	.590	.144	.418	4.084	.000

a Dependent Variable: Customer Perception. Source: Primary Data

The resultant regression model that predicts the level of customer perception for a given level of quality drivers' performance can be expressed as:

$$CP = 2.146 + 0.418QD + e, \dots\dots\dots(2)$$

where CP = customer perception and QD = quality drivers.

The model shows that for one standard deviation improvement in the performance of quality drivers, customer perception would improve by 0.418 of a standard deviation.

4.5.3 Test of Hypothesis Three

Results of simple regression with the constructs of customer perception predicting overall customer satisfaction are shown in Tables 5.3 and 5.4 in Appendix 5. Customer perception had four constructs namely; desire for features critical to quality, brand imagery, firm imagery and reference to competitive substitutes. All the four constructs had positive influence on customer satisfaction. However, only brand imagery and desire for features critical to quality had statistically significant effects.

Brand imagery had the greatest effect ($\beta = 0.513, p < 0.05$) followed by desire for features critical to quality ($\beta = 0.259, p < 0.05$).

In the stepwise regression analysis the customer perception constructs were loaded onto successive steps in the analytical program starting with brand imagery followed by reference to features critical to quality. Results from the ANOVA table indicated that all the F values for all the constructs were statistically significant ($p < 0.05$) but results on the beta coefficients showed that only brand imagery was statistically significant (Table 5.4 in Appendix 5).

The analysis of hypothesis H₃ (step 3 of mediation testing) on aggregate mean scores involved checking whether customer perception predicted customer satisfaction and whether the relationship was statistically significant. The hypothesis was stated as:

H₃: There is a statistically significant relationship between customer perception and customer satisfaction

Aggregate mean scores of customer satisfaction were regressed against those of customer perception and the relationship was positive and statistically significant ($\beta = 0.349, p < 0.05$) and the model explained 12.2% of the variation, supporting the third condition for testing the effect of mediation as shown in Table 4.15 a to c. The study failed to reject hypothesis H₃.

Table 4.15: Results for Hypothesis Three

a) Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.349(a)	.122	.111	1.10713

a Predictors: (Constant), Customer Perception

b) ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.469	1	13.469	10.989	.001(a)
	Residual	96.833	79	1.226		
	Total	110.302	80			

a Predictors: (Constant), Customer Perception, b Dependent Variable: Customer Satisfaction

c) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	6.233	.533		11.701	.000
	Customer Perception	.257	.078	.349	3.315	.001

a Dependent Variable: Customer Satisfaction. Source: Primary Data

The resulting regression model that predicts the level of customer satisfaction (CS) for a given level of customer perception (CP) is:

$$CS = 6.233 + 0.349CP + e \dots\dots\dots(3)$$

The model indicates that for a unit standard deviation improvement in the level of customer perception about a brand or firm, customer satisfaction level would improve by a factor of about 0.349 of a standard deviation. The success of the first three conditions for mediation lead to the conduct of the final test in line with hypothesis H₄ that was stated as follows:

4.5.4 Test of Hypothesis Four (Mediation)

H₄: Customer perception has a mediating effect on the relationship between quality drivers and customer satisfaction.

In this fourth step of mediation testing, customer satisfaction was regressed on quality drivers while controlling for the effect of customer perception to check for the significance of the resultant R² change and coefficients for quality drivers. Statistical insignificance would imply full mediation otherwise it would be partial (Baron and Kenny, 1986; Shaver, 2005). Customer satisfaction was regressed on quality drivers with customer perception loaded into block two in SPSS program to control its effect. Both the R² change (R² = 0.073) and the coefficient (β = 0.296) were statistically significant (p < 0.05) indicating partial mediation. This meant that the response of business customers in the Maize Flour Sector in Nairobi to stimuli related to quality drivers was mediated by their internal transformations. Results are shown in Table 4.16.

Table 4.16: Results for Hypothesis Four

Satisfaction regressed on Quality Drivers while controlling for Customer Perception

a) Model Summary

Model	R	R ²	Adj R ²	Std. Error of Estimate	Change Statistics				
					R ² Change	F Change	df 1	df 2	Sig. F Change
1	.349-a	.122	.111	1.10713	.122	10.989	1	79	.001
2	.441-b	.195	.174	1.06720	.073	7.022	1	78	.010

a Predictors: (Constant), Customer Perception, b Predictors: (Constant), Customer Perception, Quality Drivers

b) ANOVA(c)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.469	1	13.469	10.989	.001(a)
	Residual	96.833	79	1.226		
	Total	110.302	80			
2	Regression	21.467	2	10.734	9.424	.000(b)
	Residual	88.835	78	1.139		
	Total	110.302	80			

a Predictors: (Constant), Customer Perception, b Predictors: (Constant), Customer Perception, Quality Drivers, c Dependent Variable: Satisfaction

c) Coefficients(a)

Model	Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	6.233	.533		11.701	.000
	Customer Perception	.257	.078	.349	3.315	.001
2	Constant	4.474	.839		5.332	.000
	Customer Perception	.166	.082	.226	2.018	.047
	Quality Drivers	.308	.116	.296	2.650	.010

a Dependent Variable: Satisfaction. Source: Primary Data

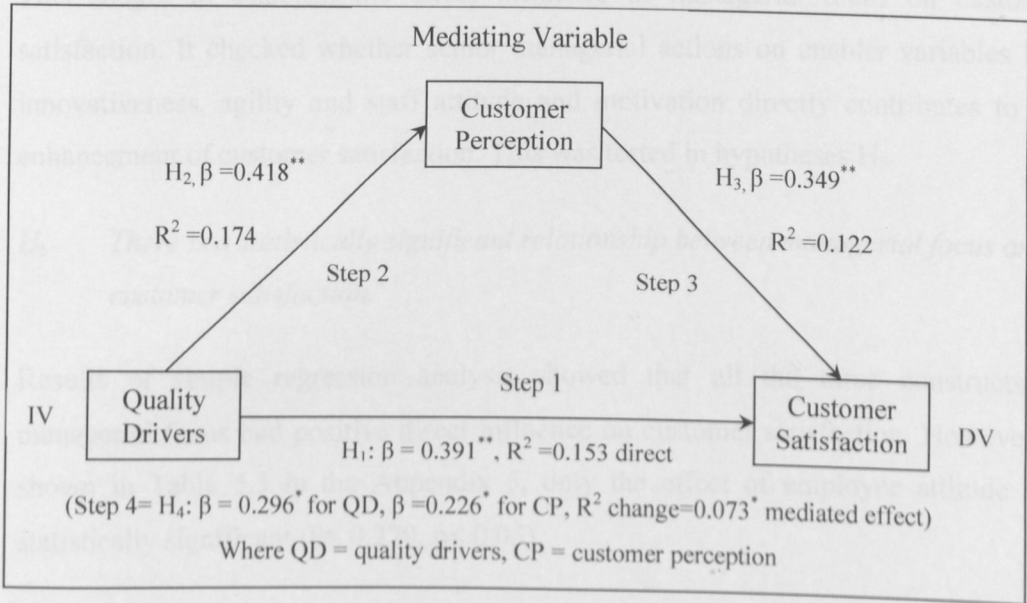
The study failed to reject H₄. The resulting regression model from the fourth step of mediation testing, expressed on the beta coefficients can be expressed as:

$$CS = 4.474 + 0.296QD + 0.226CP + e \dots\dots\dots(4)$$

A diagrammatic summary of the results from the four steps of mediation testing is presented in Figure 4.11. The results are shown along the mediation path diagram. The testing process showed that customer perception significantly mediates the

relationship between quality drivers and customer satisfaction in the studied firms. The mediation is partial because even after controlling for the effects of customer perception in step four, the R^2 change and the beta coefficient that accounted for the influence of quality drivers were statistically significant.

Figure 4.10: Summary Results of Mediation Effect Testing



** $P < 0.05$, * $p < 0.05$, β = beta coefficient, IV = Independent Variable, DV = Dependent Variable. Source: Primary Data

The four regression equations relating to the tests for mediation effect, expressed in beta coefficients are:

Step 1: $CS = 4.831 + 0.391QD + e$,

Step 2: $CP = 2.146 + 0.418QD + e$,

Step 3: $CS = 6.233 + 0.349CP + e$

Step 4: $CS = 4.474 + 0.296QD + 0.226CP + e$

where CS= customer satisfaction, QD= quality drivers, CP= customer perception

The test for mediation effect has shown that customer perception partially mediates the relationship between quality drivers and customer satisfaction of business clients within the maize flour sector in Nairobi. In step 4, the bigger beta coefficient relating to quality drivers ($\beta = 0.296$) compared to that of customer perception ($\beta = 0.226$) implies that, other factors constant, both variables are important in maize flour purchase decisions in the sector, but business clients place slightly more emphasis on

quality drivers. However, Maize Flour Mills need to foster improvements in both quality drivers and customer perception as both have a role to play in customer satisfaction.

4.5.5 Test of Hypothesis Five

This sought to establish the direct influence of managerial focus on customer satisfaction. It checked whether senior managerial actions on enabler variables like innovativeness, agility and staff attitude and motivation directly contributes to the enhancement of customer satisfaction. This was tested in hypotheses H₅:

H₅: There is a statistically significant relationship between managerial focus and customer satisfaction.

Results of simple regression analysis showed that all the three constructs of managerial focus had positive direct influence on customer satisfaction. However as shown in Table 5.5 in the Appendix 5, only the effect of employee attitude was statistically significant ($\beta = 0.279, p < 0.05$).

Average mean scores of customer satisfaction were then regressed on those of managerial focus. The relevant results are summarized in Table 4.17 a to c.

Table 4.17: Results for Hypothesis Five

a) Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.222(a)	.049	.037	1.15224

a Predictors: (Constant), Managerial Focus

b) ANOVA(b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.418	1	5.418	4.081	.047(a)
	Residual	104.884	79	1.328		
	Total	110.302	80			

a Predictors: (Constant), Managerial Focus, b Dependent Variable: Satisfaction

c) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.604	.679		9.725	.000
	MngFocus	.178	.088	.222	2.020	.047

a Dependent Variable: Satisfaction. Source: Primary Data

The results contained in Table 4.17 reveal a positive and statistically significant effect managerial focus on customer satisfaction ($\beta = 0.222$, $p < 0.05$) and the model accounted for 4.9% of variation in customer satisfaction. The resulting regression equation that would help predict the level of customer satisfaction for a given level of managerial focus was formulated as follows:

$$CS = 6.604 + 0.222MF + e. \dots\dots\dots(5)$$

Where CS = customer satisfaction, MF = managerial focus

The study failed to reject hypothesis H₇.

4.5.6 Test of Hypothesis Six (Moderation)

Moderation tests whether responses by a dependent variable to changes in a predictor variable vary across levels of a third variable that affects the strength and/or direction of the relationship. Predictor variables and their interaction term are used in a single regression equation. Moderation is present if the coefficient for the interaction term is statistically significant (Fairchild and MaKinnon, 2009).

This study hypothesized that managerial focus on some key enabler variables moderates the relationship between quality drivers and customer satisfaction. This was tested under hypothesis H₆:

H₆: Managerial focus has a statistically significant moderating effect on the relationship between quality drivers and customer satisfaction.

The procedure of moderation testing when both predictor variables are continuous, as outlined by Bennett (2000), Fairchild and MacKinnon (2009) and Baron and Kenny (1986) was followed in the current study. The predictor variables were centered by subtracting the mean scores, standardized and their interaction term calculated as a product of the independent and moderator variables. The predictor variables were then entered in level one in the SPSS program and the interaction term entered in level two. The change in R² and the coefficient and significance level due to the interaction term were used to check for moderation effect. The relevant results are presented in Table 4.18 a to c.

Table 4.18: Results for Hypothesis Six

a) Model Summary

Model	R	R ²	Adj. R ²	Std. Error of Estimate	R ² change	F change	df1	df2	Sig. F Change
1	.400-a	.160	.139	.9281	.160	7.439	2	78	.001
2	.408-b	.166	.134	.931	.006	.576	1	77	.450

a Predictors: (Constant), Managerial Focus, Quality Drivers

b Predictors: (Constant), Managerial Focus, Quality Drivers, Interaction Term

Dependent variable: Customer satisfaction

b) ANOVA(c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.815	2	6.407	7.439	.001(a)
	Residual	67.185	78	.861		
	Total	80.000	80			
2	Regression	13.314	3	4.438	5.124	.003(b)
	Residual	66.686	77	.866		
	Total	80.000	80			

a Predictors: (Constant), Managerial Focus, Quality Drivers

b Predictors: (Constant), Managerial Focus, Quality Drivers, Interaction Term

c Dependent Variable Customer Satisfaction

c) Coefficients

Model		Unstandardized		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	< 0	.103		.000	1.000
	Quality Drivers	.357	.111	.357	3.212	.002
	Managerial Focus	.094	.111	.094	.842	.403
2	(Constant)	.019	.106		.179	.858
	Quality Drivers	.343	.113	.343	3.042	.003
	Managerial Focus	.122	.117	.122	1.035	.304
	Interaction Term	-.087	.115	-.083	-.759	.450

a Dependent Variable: Customer Satisfaction. Source: Primary Data

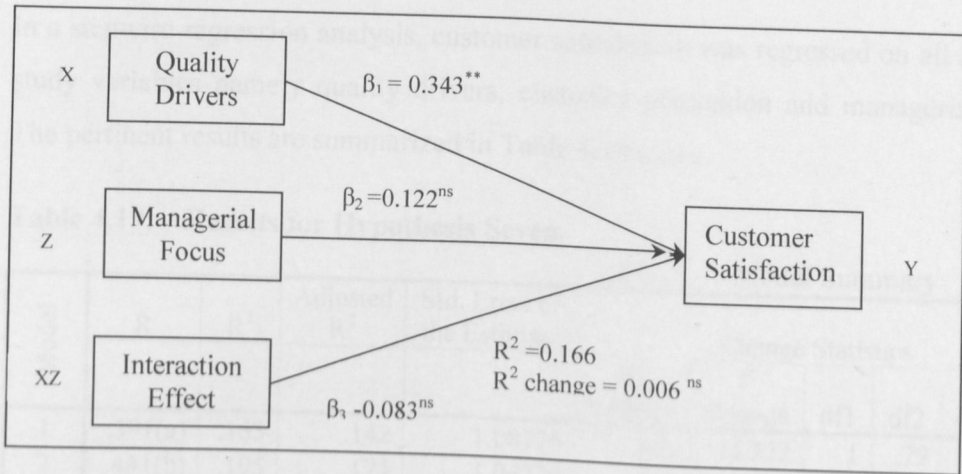
The resultant single moderation regression equation is:

$$CS = 0.019 + 0.343QD + 0.122MF + -0.083QD.MF + e, \dots\dots\dots(6)$$

Where; QD= quality drivers, MF= managerial focus and CS= customer satisfaction

Figure 4.11 is a diagrammatic summary of the results for moderation testing. It shows the regression coefficients along the tested variable relationships and the change in R^2 due to the interaction term and indicates the significance levels obtained.

Figure 4.11: Summary Results of Moderation Testing



* $P < 0.05$, ** $p < 0.05$, ns = not significant. Source: Primary Data

As shown in Figure 4.11 of moderation testing, the influence of quality drivers on customer satisfaction was positive and statistically significant ($p < 0.05$) while that for managerial focus though positive was not statistically significant ($p > 0.05$). The change in R^2 due to the interaction term was near zero and was not statistically significant ($p > 0.05$) and therefore the study rejected hypothesis H_6 . The results suggest that the moderation effect of managerial focus on the relationship between quality drivers and customer satisfaction is likely to be minimal. However because the direct influence of managerial focus on customer satisfaction (hypothesis H_5) was positive and statistically significant, the managements of Maize Flour Mills need to pay adequate attention to managerial focus constructs because any improvements on such enabler variables directly influences customer satisfaction.

4.5.7 Test of Hypothesis Seven (Joint Effect)

In addition to assessing the effects of the individual variables, the study sought to check for the joint effect of the variables on customer satisfaction. The study therefore

had hypothesized that collectively the three study variables have joint influence on customer satisfaction. This effect was tested under H₇ as follows:

H₇: *Quality drivers, customer perception and managerial focus collectively (jointly) influence customer satisfaction.*

In a stepwise regression analysis, customer satisfaction was regressed on all the three study variables namely quality drivers, customer perception and managerial focus. The pertinent results are summarized in Table 4.19 a to c.

Table 4.19: Results for Hypothesis Seven

a) Model Summary

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics				
					R ² Change	F Change	df1	df2	Sig. F Change
1	.391(a)	.153	.142	1.08776	.153	14.222	1	79	.000
2	.441(b)	.195	.174	1.06720	.042	4.074	1	78	.047
3	.441(c)	.195	.163	1.07396	.000	.021	1	77	.886

a Predictors: (Constant), Quality Drivers

b Predictors: (Constant), Quality Drivers, Customer Perception

c Predictors: (Constant), Quality Drivers, Customer Perception, Managerial Focus

b) ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.827	1	16.827	14.222	.000(a)
	Residual	93.475	79	1.183		
	Total	110.302	80			
2	Regression	21.467	2	10.734	9.424	.000(b)
	Residual	88.835	78	1.139		
	Total	110.302	80			
3	Regression	21.491	3	7.164	6.211	.001(c)
	Residual	88.811	77	1.153		
	Total	110.302	80			

a Predictors: (Constant), Quality Drivers

b Predictors: (Constant), Quality Drivers, Customer Perception

c Predictors: (Constant), Quality Drivers, Customer Perception, Managerial Focus

d Dependent Variable: Customer Satisfaction

c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.831	.836		5.778	.000
	Quality Drivers	.406	.108	.391	3.771	.000
2	(Constant)	4.474	.839		5.332	.000
	Quality Drivers	.308	.116	.296	2.650	.010
	Customer Perception	.166	.082	.226	2.018	.047
3	(Constant)	4.518	.897		5.035	.000
	Quality Drivers	.311	.119	.299	2.621	.011
	Customer Perception	.173	.095	.235	1.820	.073
	Managerial Focus	-.015	.101	-.018	-.144	.886

a Dependent Variable: Customer Satisfaction. Source: Primary Data

The resultant regression model for the joint effects models is:

$$CS = 4.518 + 0.299QD + 0.235CP - 0.018MF + e \dots\dots\dots(7)$$

As indicated by the significance level of F in the ANOVA Table, the collective influence of quality drivers, customer perception and managerial focus on customer satisfaction was highly statistically significant ($p < 0.05$). Consequently the study failed to reject hypothesis H₇. With quality drivers and customer perception predicting customer satisfaction, the effects of both predictors were positive and statistically significant ($p < 0.05$ and $p < 0.05$ respectively). However, the influence of managerial focus was not statistically significant ($p > 0.05$).

4.6 Discussion

Among the quality drivers, service quality and complaints handling were found to have moderate to robust positive and statistically significant correlations with several other drivers of quality and with overall satisfaction and intention to recommend. Service quality had particularly higher coefficients; its correlation coefficients with perceived ease of business, intention to recommend and perceived product quality were 0.427, 0.455, and 0.46 ($p < 0.05$) respectively and 0.294 ($p < 0.05$) with overall satisfaction. This means that customers are likely to associate good service with good performance on other aspects of business transactions and will be inclined to recommend the brand or firm. This is in agreement with the propositions of several theories of consumer behaviour related to confirmation-disconfirmation and motivation through conditional learning among others (Oliver, 1980; Walden, 1993). The central premise is that consumers compare expected performance with actual

performance experienced and good experience motivates customers to repurchase and refer others. The findings also agree with the indications of national customer satisfaction index models and the Service Profit Chain that service quality is a key motivator in customer satisfaction (Heskett *et al*, 1994; Anderson *et al*, 1996; Fornell *et al*, 1996;). The correlation coefficient between overall satisfaction and customer's intention to recommend was 0.46 implying that customer satisfaction can only be seen as a moderate predictor of potential referrals. This partly agrees with the findings of Jones and Sasser (1995) that mere customer satisfaction is not enough, such customers can easily defect, and therefore suppliers need to aim for higher customer satisfaction or delight.

Results showed that customer perception partially mediated the relationship between quality drivers and customer satisfaction and that brand and firm imagery constructs were major drivers in this process. This means that the institutional buyers in the studied maize flour sector form attitudes/ perceptions of the cues from the flour millers to form in interpreting satisfaction levels. This agrees with the themes of consumer behaviour theories that seek to explain the role of attitude and perception in consumption decisions. Attitude theories such as the Theory of Reasoned/ Planned Behaviour, Tri-Component Attitude model postulate that attitude and subjective norms in conjunction with cognitive and emotional considerations influence intentions which in turn give impetus for action (Bagozzi, 1992; Batra *et al*, 1996).

The results of this study are comparable to a number of other empirical studies. The results showed that service quality had positive and statistically significant influence on customer satisfaction and other variables. This agrees with the findings of Silvestro and Cross (2000) who observed a strong positive correlation between service quality and customer satisfaction at the 95% level and concluded that a key aim of management should be to improve perceptions of service quality for their customers. Ramaseshan and Vinden (2009) reported that quality drivers accounted for up to 54% of satisfaction with retail stores.

Managerial focus had a statistically significant positive direct influence on satisfaction with a coefficient of 0.222 ($p < 0.05$), and the model accounting for 4.9% of variation in customer satisfaction. Among the managerial focus constructs, business customer respondents had high ratings for innovativeness. This calls upon the Flour Mills to

focus well on improving innovativeness as this will improve customer satisfaction and bring in new revenue. The results are comparable to the findings by Desai (2008) who reported that while new initiatives in firms with discontinuous growth represented only 14% of total projects, they contributed 38% to total revenue. Although the moderation effect of managerial focus on the relationship between quality drivers and customer satisfaction was not statistically significant, firms need to pay adequate attention to managerial focus as it directly positively influenced customer satisfaction.

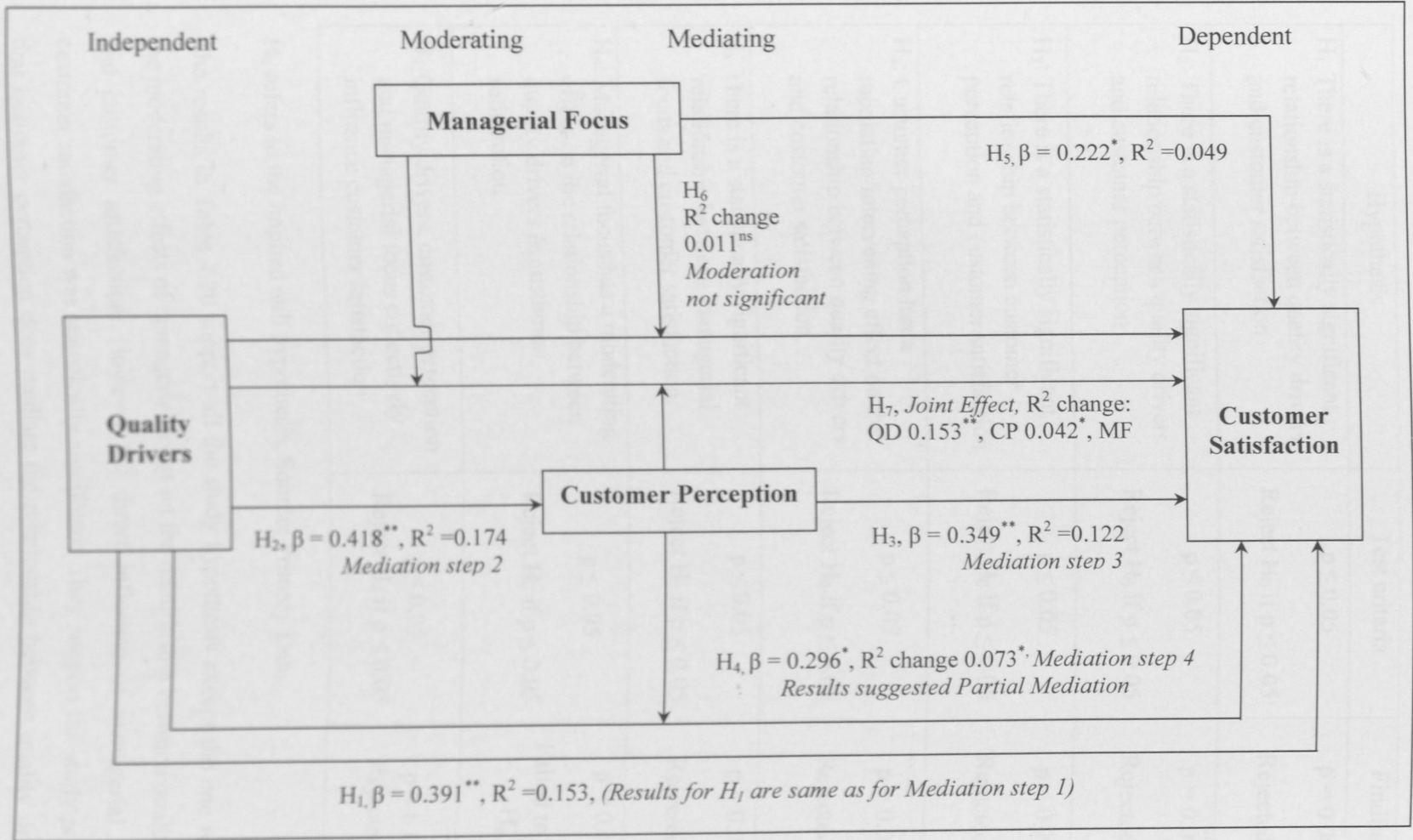
Results from simple regressions suggested that employee attitude is a fairly good predictor for customer satisfaction. The beta coefficient between employee attitude and overall customer satisfaction was 0.279. This agrees with several other studies. Simmerman (1995) reported that 70% of customer desertions were due to poor service compare to 20% combined for price and product quality. Adams (2006) found that employee attitude was often a leading cause of customer defections (68%) followed by other dissatisfactions (14%) and customer migration to competitors at 9%.

4.7 Summary of the Chapter

There was a statistically significant relationship between quality drivers and customer satisfaction ($\beta = 0.391$, $p < 0.05$) and the model accounted for 15.3% variability ($R^2 = 0.153$). This met the first condition for testing mediation effect. Next, customer perception was regressed on quality drivers and the coefficient 0.418 was statistically significant ($p < 0.05$) and the model explained 17.4% of the variation, meeting the second condition for mediation effect. In step three, CS was regressed on customer perception and resulted in a statistically significant coefficient of 0.349 ($p < 0.05$) thus meeting the third condition for mediation. In step four CS was regressed on quality drivers while controlling for the effects of customer perception. Both the R^2 change (0.073) and the coefficient (0.296) were significant ($p < 0.05$) indicating partial mediation. This means that the response of business customers in the maize flour sector in Nairobi to stimuli related to quality drivers is partially mediated by their internal transformations (perception).

Figure 4.12 and Table 4.20 summarize the results of the hypotheses tests. The figure shows a path diagram of the hypotheses indicating the regression coefficients, the status of significance and corresponding R^2 . In Table 4.20 the hypotheses are stated, their test criteria, the results obtained and conclusion reached.

Figure 4.12: Diagrammatic Summary of Results for Hypotheses Tests



** $p < 0.01$, * $p < 0.05$, ns = not significant. The QD= Quality Drivers, CP= Customer Perception, MF= Managerial Function

Source: Primary Data

Table 4.20: Tabular Summary of Results for Hypotheses Testing

Hypothesis	Test criteria	Findings
H ₁ : There is a statistically significant relationship between quality drivers and customer satisfaction	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.000$ Rejected H ₀
H ₂ : There is a statistically significant relationship between quality drivers and customer perception	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.000$ Rejected H ₀
H ₃ : There is a statistically significant relationship between customer perception and customer satisfaction	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.001$ Rejected H ₀
H ₄ : Customer perception has a mediating/intervening effect on the relationship between quality drivers and customer satisfaction.	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.010$ Rejected H ₀
H ₅ : There is a statistically significant relationship between managerial focus and customer satisfaction.	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.047$ Rejected H ₀
H ₆ : Managerial focus has a moderating effect on the relationship between quality drivers & customer satisfaction	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.450$ Failed to reject H ₀
H ₇ : Quality drivers, customer perception and managerial focus collectively influence customer satisfaction	$p \leq 0.05$ Reject H ₀ if $p \leq 0.05$	$p = 0.001$ Rejected H ₀

H₀ refers to the implied null hypothesis, Source: Primary Data

The results in Table 4.20 support all the study hypothesis except the one relating to the moderating effects of managerial focus on the relationship between quality drivers and customer satisfaction. However the direct influence of managerial focus on customer satisfaction was statistically significant. They support the study proposition that customer perception does mediate the relationship between quality drivers and customer satisfaction.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the key study findings and conclusions reached. It also discusses the theoretical and practical implications of the observed results. A number of the limitations encountered during the study are highlighted. The chapter ends with suggestions for further research arising from the study findings.

5.2 Summary

The current study sought to establish the influence of quality drivers on the satisfaction of business customers within large Maize Flour Mills in Nairobi and assess how customer perception and managerial focus influence this relationship. Several hypotheses about these relationships were tested using primary data. This section summarizes the major findings.

The results of the study revealed that the influence of quality drivers on customer satisfaction in the direct business trade of large Maize Flour Mills in Nairobi is positive and statistically highly significant ($p < 0.05$) and is partially mediated by customer perception. The attention of senior firm management on key enabler variables (managerial focus) such as employee attitude, firm agility and innovativeness had statistically significant direct influence on customer satisfaction. However, the moderation effect of managerial focus on the relationship between quality drivers and customer satisfaction was not statistically significant. The joint influence of quality drivers, customer perception and managerial focus on customer satisfaction was statistically significant.

Quality of service and complaints handling emerged as key drivers of overall satisfaction and customers' intention to recommend. Quality of service had positive and significant correlations with a number of the other quality drivers and with satisfaction and intention to recommend. This implies that improvements in the quality of service go a long way in improving customer perception of other quality drivers and satisfaction. Satisfaction was positively correlated with a customer's intention to recommend a brand or firm of ($\beta = 0.481, p < 0.05$). This implies that for

the maize flour sector, business customer satisfaction is only a moderate predictor of referrals or the intention to recommend. Intention to recommend needs to be measured directly as it can only be moderately estimated from mere satisfaction.

An importance-performance assessment matrix revealed that performance of the Maize Flour Mills across the quality drivers matched their business customers' attribute importance rating only with respect to product quality. The Flour Mills fell short on performance of the other quality drivers relative to importance ratings. Ease of doing business and complaints handling scored particularly low relative to attribute importance. The low score on complaints handling was further supported by feedback from close to a fifth of the business customer respondents urging the Flour Mills to improve on complaints handling through greater attention to complaint details and faster complaints resolution.

Among the customer perception constructs, brand image had the greatest positive and statistically significant effect on customer satisfaction ($\beta = 0.513$, $p < 0.05$). On managerial focus constructs, the leading perceived barrier to innovation was lack of a clear need for innovation within the Maize Flour Mills. This agrees with the findings of Desai (2008) who stressed the need for an innovative mandate vividly clear to all employees in ways that articulate creative behaviour at all levels, but reported a lack of corporate mindset to appropriately align human and other resources and to harvest, nurture and manage ideas to turn them into commercial ventures. Key drivers of business agility were a flexible management process and access to timely and right information.

Besides the urge for improved complaints handling, the business customers wished the Flour Mills would increase flour promotional activities. About two thirds of the business customer respondents felt that Mills needed to step up their use of flour merchandisers, increase advertising, diversify the range of brands promoted and use a wider range of promotional tools.

5.3 Conclusions

Based on the results obtained from the tests of the study hypotheses it is concluded that the influence of quality drivers on customer satisfaction is both direct and partially mediated through customer perception, both influences being positive and

highly statistically significant ($p < 0.05$). This implies that Flour Mills in Nairobi need to actively pay attention to the direct quality drivers such as product quality and price as well as customers perception variables such as user imagery of the brand and firm.

The moderation effect of managerial focus on the relationship between quality drivers and customer satisfaction was not statistically significant. However, managerial focus had positive and statistically significant direct effect on customer satisfaction ($p < 0.05$). This suggests that any improvements on senior managers' attention to enabler variables like employee attitude, innovation and agility have direct but varying impacts on customer satisfaction.

The results further suggest that business customers within the Maize Flour subsector are more willing to do business with Flour Mills that offer superior service quality, are efficient in resolving complaints and foster positive brand imagery. To sustain the satisfaction of such customers, the findings showed that Flour Mills need to consider the direct quality drivers as well as upstream firm enabler variables such as employee attitude, firm agility and innovativeness. This promotes positive customer perception about the Mill and its flour brand thereby enhancing customer satisfaction.

5.4 Implications of the Study

The findings from this research present a number of issues that have implications for the theory of marketing, managerial practices and policy issues. On theory the study has contributed to the evolution and adaptation of customer satisfaction models by adding two enabler variables namely; managerial focus and customer perception as moderator and mediator variables respectively. There was a positive and significant mediating effect of customer perception on the relationship between primary quality drivers and CS while managerial focus had positive and significant direct effect on satisfaction. Most existing models of CS focus on primary quality drivers and ignore the cascade of managerial policies and actions that drive those preconditions (Johnson *et al*, 2001).

Secondly the findings agreed with previous studies that customer satisfaction is only a moderate predictor of referrals and it is therefore necessary to measure directly a customer's intention to recommend. The relationship between satisfaction and intention to recommend was moderately positive and statistically significant ($\beta = 0.48$,

$p < 0.05$). This agrees with the findings of Jones and Sasser (1995) and Reichheld (2003). Quality of service had a particularly major and positive impact on customer satisfaction both directly and by its effects on other variables affecting customer satisfaction. It was closely followed by complaints handling. This is in agreement with the proposition of the Service Profit Chain (Heskett *et al.* 1997) that service quality (which reflects on employee attitude) drives customer satisfaction and other previous studies indicating that the quality of service is often a major driver for customer satisfaction and overall firm performance (Pfeffer, 1998; Adams, 2006).

On managerial implications, when attribute performance were plotted against attribute importance, results showed that the Maize Flour Mills need to improve their performance across the quality drivers especially on service quality and complaints handling to match customers' attribute importance ratings. The need to improve on these two drivers is further supported by the observation that quality of service had a particularly major and positive impact on customer satisfaction both directly and by its effects on other variables affecting customer satisfaction.

The results of mediation and moderation testing have several managerial implications. As the performance of quality drivers was partially mediated by customer perception, Mills need to routinely survey on customer attitudes so as to keep track of key perception attributes such as brand imagery that emerged as a major driver of customer satisfaction. Results of the test for moderation effect suggest that improvements on attributes of managerial focus such as employee attitude, business agility and innovativeness contribute directly towards customer satisfaction. To sustain the satisfaction of such customers, the findings showed that Flour Mills need to consider the direct quality drivers as well as upstream firm enabler variables such as employee attitude, firm agility and innovativeness. This agrees with the findings of Ramaseshan and Vinden (2009) who observed that firms operating in retail related segments constantly need new approaches to retain and win new customers because the buyers have a wide choice of suppliers and switching costs tend to be low.

The main barrier hindering greater innovativeness within the Maize Flour Mills was lack of firm-wide awareness of the need to innovate. In view of this, the Flour Mills need to cultivate a corporate mindset or culture that is aware of and is proactive in idea generation and nurturing to constantly generate new business solutions.

Management has to avail requisite work resources, align the same with their human resource and drive the innovation or creativity process.

Results further demonstrated that there was room for improvement of customer satisfaction within the studied Flour Mills because overall satisfaction averaged 7.88 ± 1.28 on a scale of 1 to 10. Furthermore only about 10% of the respondents were extremely satisfied while 3.7% were neither satisfied nor dissatisfied and another 10% scored 6 out of 10 on overall satisfaction. The managements of the Flour Mills need to look at the concerns of customers scoring less than extreme satisfaction.

The results have some implications that can be useful at national policy level. Kenya's strategy for revitalizing agriculture and vision 2030 both aspire to increase the country's regional and global trade through branding of key agricultural products, improved efficiency and competitiveness at firm level, including agro-processing. At wholesale and retail level, the vision aims at improving efficiency, increase market share of products sold through formal channels including supermarkets and at manufacturing level it aims at increasing Kenya's regional competitiveness in manufactured goods (Ministry of Agriculture, 2004; Ministry of Planning, 2007). In this regard, Vision 2030 aspires to invest in training, research and development and improve efficiency in the marketing system. The current study reported lack of awareness of the need to innovate, the mediation effect of customer perception and the need to focus on enabler variables. These can be important training areas for vision 2030 to consider. Furthermore, the volume of trade within the East African Community is expected to increase as member states reduce trade barriers (KPMG, 2013). This will open new trade opportunities but could increase competition. Training local firms on the issues of quality drivers, customer perception and managerial focus can help to improve their regional and global competitiveness.

5.5 Limitations of the Study

Although this study helped to shed light on the dynamics of customer satisfaction on a key subsector of Kenya's vibrant food processing sector, it was subject to a number of limitations. These mainly related to the setup of the study relative to the resources available within the research period. As such the constraints influenced the scale of the study but did not affect the conduct of the research once the design was arrived at.

Due to time, cost and operational constraints the study used a cross-sectional research design and focused on firms in Nairobi. Data were collected from business customers once to get their views and perceptions concerning the variables and constructs under study. This is helpful in getting insight about the dynamics of a market segment or consumer group at a particular point in time. However, perceptions vary over time and across markets or regions as influenced by changes in consumer preferences or economic changes that influence purchase and consumption patterns. For this reason there are opportunities for longitudinal and wider studies in the same area of research. The study focussed on a limited number of variables and constructs but consumer behaviour is influenced by many more factors. Other variables can provide additional insights and explanations concerning the drivers of satisfaction in the subsector.

5.6 Suggestions for Further Research

As this was a cross-sectional research that studied customer satisfaction dynamics in a sector at a particular point in time, first and foremost other research could use longitudinal research design to track changes over time. Rust *et al.*, (1999) reported that besides mere quality limits, perceived variability and/ or consistency in quality over time is important to capture as well. Such deeper insights on dynamics of quality drivers would help marketers and brand managers in a competitive market such as the local maize flour subsector to refine their market offerings and customer satisfaction programmes for better competitive advantage.

Secondly more variables could be included as well as wider geographical territory and industry sectors. Extra variables can include the evolving trends such as the changing dietary preferences and increasing availability of alternative carbohydrate sources in Kenya as reported by Mukumbu and Jayne (1994). This includes the growing trend of fortified flour blends, and incorporate factors such as the increasing dietary consciousness among consumer segments (Muyanga *et al.*, 2005). These trends are likely to lead to changes in the consumption of maize flour which would limit generalization of study findings for forecasting and estimations. Furthermore one can disaggregate quality attributes along the Kano model's 'critical to quality' dimensions with a view to identifying the key performance factors that often form the common basis for competition (Oliver 1997; Anderson and Mittal, 2000).

Thirdly, managerial focus was found to directly influence on customer satisfaction yet its moderation effects on the relationship between quality drivers and customer satisfaction was not statistically significant. It would be necessary to investigate further why that was so, through wider research on governance and resource management as they relate to customer perception. Finally, as customer perception was found to partially mediate the relationship between quality drivers and customer satisfaction, further research can assess the level of awareness (among players in the subsector) of the existence of such mediation effects. Investigation of such relationships in other product and service sectors can also be considered. This is because with such awareness marketers can formulate more holistic marketing and promotional programmes.

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APPENDICES

Appendix 1: Questionnaires

Questionnaire for Maize Flour Mills

Dear Respondent,

This questionnaire is aimed at collecting feedback that can help maize flour mills serve their customers better with respect to features that influence maize flour purchase decisions.

Section A: Background Information

- 1) Name of the firm (*Optional*)
- 2) Job Title of Respondent Years worked at firm
- 3) Number of employees: ≤ 25 26-50 51-100 > 100
- 4) Age of firm in years: ≤ 10 11-20 21-30 > 30
- 5) Average gross sales/ month (KShm): ≤ 25 26-50 51-100 >100
- 6) Key maize flour brands: a) _____ b) _____ c) _____
- 7) Please state whether your firm is registered with the following standards:

Standard	Tick the standards registered with
ISO 9000: Quality management system	
ISO 22000: Food safety management system	
Other	

Section B: Perceived Relative Importance of Quality Drivers

- 8) Please **rate the relative importance** of the following features in influencing a business customer's choice of a maize flour supplier.

(1= least important, 5= most important)

Service Quality	Product Quality	Complaints Handling	Ease of doing Business	Product Price

Section C: Perceived Flour Mill Agility

9) Agility refers to a firm's readiness and ability to respond to change (opportunities or challenges) faster than its competitors. In your view, on a scale of 1 to 10, to what extent do the following traits enhance a business' agility?
Tick the appropriate box

		1= Not Important at All, 10= Extremely Important									
Trait	Rating	1	2	3	4	5	6	7	8	9	10
Rapid decision making and execution											
A high performance culture											
Ability to access the right information at the right time											
Flexible management of teams and human resources											
Decentralised management reporting structure											
Lean operations- waste/ unwanted steps are quickly removed											

10) In your view, on a scale of 1 to 10, how agile are the following departments at your firm? *Tick the appropriate box*

		1= Not Agile at All, 10= Extremely Agile									
Department	Rating	1	2	3	4	5	6	7	8	9	10
Marketing											
Sales											
Customer service											
Research and development											
IT (Information Technology)											
Finance											
Supply chain											
Procurement											
Operations and Production											
Human resource											
Senior management											
Overall firm agility- readiness to respond to change											

11) To what extent do you agree with these reasons as barriers to your firm's innovativeness? *Tick the appropriate box*

<i>1 = Extremely Disagree, 10 = Extremely Agree</i>										
	1	2	3	4	5	6	7	8	9	10
The need to innovate is not vividly clear to all employees										
Senior managers are not keen on harnessing & managing new ideas										
Ownership for innovation is fragmented across the firm										
Most workers are disengaged from the firm's creative capacity										
We have misalignment of job roles with talent acquisition										

Section D: Customer Perception and Satisfaction

12) Extent to which the flour mill strives to enhance customer perception

<i>1 = Extremely Disagree, 10 = Extremely Agree</i>											
Statement	Rating	1	2	3	4	5	6	7	8	9	10
Firms can enhance customer perception of their brand or firm through various activities. To what extent do you agree with the following statements? <i>Tick the appropriate box</i>											
We use adequate communications strategies to convey brand identity											
We conduct surveys to compare our brand identity to user imagery											
We conduct adequate promotional activities on our brand											
We survey competitor positioning of their brands											
We consider competitor strategies when positioning our brand											
We consider customer buying motives in our positioning strategies											

13) Tools for capturing customer feedback:

Firms can use a variety of methods to capture feedback from customers. On a scale of 1 to 10, to what extent do you agree with the following statements? *Tick the appropriate box*

1 = Extremely Disagree, 10 = Extremely Agree

Statement	Rating	1	2	3	4	5	6	7	8	9	10
To develop a new brand we survey for features critical to quality											
To alter an existing brand we survey for critical to quality features											
We conduct surveys often to assess customers' image of our brand											
We conduct customer satisfaction surveys often											
We conduct distributor satisfaction surveys often											
We interview distributors of other mills on quality drivers											
We interview customers of other brands on quality drivers											
Feedback got through our frontline staff is used well by our firm											
We use mystery shoppers in satisfaction surveys											

Thank you for taking time to complete this survey

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Questionnaire for Business Customers

Dear Respondent:

This questionnaire is aimed at collecting feedback that can help maize flour mills to serve their customers better with respect to features that influence purchase decision

Section A: Background Information

- 1) Name of the firm (Optional)
- 2) Job Title of Respondent Years worked at firm ...
- 3) Number of employees: ≤ 10 11-20 21- 40 > 40
- 4) Age of firm in years: ≤ 10 11-20 21-30 >30
- 5) Average gross sales/ month (KShm): ≤ 10 11-25 26-50 >50
- 6) Key maize flour brands: a) ----- b) ----- c) -----

Section B: Quality Drivers Importance-Performance Assessment

7) Importance attached to features that influence purchase decisions:

On a scale of 1 to 10 how important are the following features in influencing your choice of maize flour supplier? *Tick the appropriate box*

Feature	1 = Not Important at All					10 = Extremely Important				
	1	2	3	4	5	6	7	8	9	10
Quality of the Flour										
Quality of Service										
Complaints Handling										
Ease of doing Business										
Flour Price										

8) Level of performance of the supplier's quality features:

Based on your experience with flour suppliers, on a scale of 1 to 10 what level of performance relative to your expectation would you give your major maize flour supplier on the following attributes?

Tick the appropriate box

Feature	1 = Extremely Poor					10 = Extremely Good					
	Rating	1	2	3	4	5	6	7	8	9	10
Quality of the flour <i>How good has quality been?</i>											
Quality of Service <i>How good has service been?</i>											
Complaints Handling <i>How good has the supplier been at resolving complaints?</i>											
Ease of doing Business <i>Tick 'Ext. Poor' if it has been extremely hard & 'Ext. Good' if it has been extremely easy</i>											
Flour Price <i>Tick 'Ext. Poor' if it has been extremely unfavourable & 'Ext. Good' if it has been extremely favourable</i>											

9) Please **rate the relative importance** of the following features in choosing your maize flour supplier.

(1= least important, 5= most important)

Service Quality	Product Quality	Complaints Handling	Ease of doing Business	Product Price

Section C: Enabler Features and Customer Perception

10) Influence of senior management's attention to enabler features

Based on your experience with flour suppliers, on a scale of 1 to 10 how good do you feel your major maize flour supplier is on the following attributes?

Tick the appropriate box

Attribute	Performance									
	1 = Extremely Poor					10 = Extremely Good				
Rating	1	2	3	4	5	6	7	8	9	10
Employee attitude <i>(Employees passion for good service to customers)</i>										
Business Agility <i>(Flexibility in supplier's operations and services in meeting customer needs)</i>										
Business Innovativeness <i>(Supplier offering of new, attractive business solutions or options)</i>										

11) Influence of customer perception on the choice of a supplier:

Customer perception refers to the attitude a customer has concerning a product or firm. In your view, to what extent do the following influence your choice of flour supplier?

Tick the appropriate box

1=Contributes Little, 10= Contributes Highly

Feature	Rating	Contribution to the success of quality drivers									
		1	2	3	4	5	6	7	8	9	10
Your desire for flour brand features that are critical to quality											
Your imagery of a flour brand's features											
Your imagery of the flour mill's characteristics											
Reference to competitive flour substitutes											

Section D: Perceived Flour Mill Agility

12) Responsiveness of processes or departments to changes in business environment.
How would you rate the responsiveness of the various processes or departments of your supplier to changes in the business environment?

Tick the appropriate box

1= Not at All Responsive, 10= Extremely Responsive										
Process or department	1	2	3	4	5	6	7	8	9	10
Marketing										
Sales										
Customer service										
After sale service										
Promotional activities										
Finance										
Distribution										
Senior management										

13) What would you like your current major maize flour supplier to improve on relating to the variables listed below?

Variable	Improvement needed
Employee attitude	
Quality of maize flour	
Quality of service	
Complaints handling	
Ease of doing business	
Pricing	
Promotional activities	
Customer satisfaction	
Other	

Section E: Overall Satisfaction

14) Overall satisfaction with your current maize flour supplier.

Tick the appropriate box

1= Extremely Dissatisfied, 10= Extremely Satisfied										
Overall how satisfied are you with your current supplier?	1	2	3	4	5	6	7	8	9	10

15) Likelihood to recommend your current maize flour supplier.

Tick the appropriate box

1= Extremely Unlikely, 10= Extremely Likely										
How likely are you to recommend your current maize flour supplier to a friend or colleague?	1	2	3	4	5	6	7	8	9	10

Thank you for taking time to complete this survey

Appendix 2: Large Maize Flour Mills in Nairobi

Maize flour mill	Main flour brands	Number of active Business customers
Kabansora Millers Ltd	Shujaa	20
Mombasa Maize Millers Ltd (Nairobi)	Ndovu/ Cosmo	40
Pembe Flour Mills Ltd	Pembe	40
Savco Grain Millers Ltd	Savco	10
Osho Millers	Safari	10
Bingwa Millers	Bingwa	10
Dandora Millers		10
Sweet Meal Commodities		10
Unga Group Ltd	Jogoo/ Hostess	10
Nairobi Flour Mills Ltd	Jimbi	15
Premier Flour Mills Ltd	Jembe	15
Kuguru Food Complex Ltd	Cateress	10
Golden Harvest Mills (Uzuri Foods)	Golden/ Mothers Choice	15
Alpha Millers Ltd	Kifaru	10
Total number of business customers		225

(1) Sources of the Maize Flour Mills:

KAM (2012). Kenya Manufacturers and Exporters Directory, 2012, page 95. Kenya Association of Manufacturers. Mwanzi road, Westlands, Nairobi

Kenya Postel Directories (2012). Kenya Telephone Directory, 2012, Nairobi Edition, page 645. Telposta Towers, Nairobi.

(2) Sources of the active business customers:

These were from the respective customer data bases of the various Maize Flour Mills.

Appendix 3: Letter of Introduction to Respondents



UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
SCHOOL OF BUSINESS
DOCTORAL STUDIES PROGRAMME

Telephone: 4184160/1-5 Ext. 204
Email: commerce@uonbi.ca.ke

P.O. Box 30197
Nairobi, Kenya

26th November, 2012

TO WHOM IT MAY CONCERN

RE: KABARE NDUNGU– D80/79020/2009

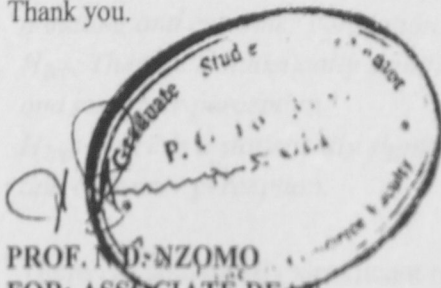
This is to certify that, **KABARE NDUNGU - D80/79020/2009** is a Ph.D candidate at the School of Business, University of Nairobi. The title of his study is: "**Quality Drivers, Managerial Focus, Customer Perception and Customer Satisfaction in Large Maize Flour Mills in Nairobi, Kenya**"

The purpose of this letter therefore, is to kindly request you to assist and facilitate in carrying out the research/study in your organization. A questionnaire is herewith attached for your kind consideration and necessary action.

Data and information obtained through this exercise will be used for academic purposes only. Hence, the respondents are requested not to indicate their names anywhere on the questionnaire.

We look forward to your cooperation.

Thank you.


PROF. ND. NZOMO
FOR: ASSOCIATE DEAN
GRADUATE BUSINESS STUDIES
SCHOOL OF BUSINESS

Appendix 4: Hypotheses for the variables and their constructs

Full list of hypotheses for the variables and their constructs:

H₁: There is a statistically significant relationship between quality drivers and customer satisfaction.

Separate hypotheses for the five constructs within quality drivers were of the following form, where pq refers to product quality:

H_{1pq}: There is a statistically significant relationship between product quality and customer satisfaction.

H_{1sq}: There is a statistically significant relationship between service quality and customer satisfaction.

H_{1ch}: There is a statistically significant relationship between complaints handling and customer satisfaction

H_{1eb}: There is a statistically significant relationship between ease of business and customer satisfaction

H_{1pp}: There is a statistically significant relationship between product price and customer satisfaction

H₂: There is a statistically significant relationship between quality drivers and customer perception.

Separate hypotheses for the five constructs within quality drivers were of the following form, where pq refers to product quality:

H_{2pq}: There is a statistically significant relationship between product quality and customer perception.

H_{2sq}: There is a statistically significant relationship between service quality and customer perception.

H_{2ch}: There is a statistically significant relationship between complaints handling and customer perception.

H_{2eb}: There is a statistically significant relationship between ease of business and customer perception.

H_{2pp}: There is a statistically significant relationship between product price and customer perception.

H₃: There is a statistically significant relationship between customer perception and customer satisfaction.

Separate hypotheses for the four constructs within customer perception were of the following form, where bi refers to brand image:

H_{3bi}: There is a statistically significant relationship between brand image and customer satisfaction.

H_{3fi}: There is a statistically significant relationship between firm image and customer satisfaction.

H_{3cf}: There is a statistically significant relationship between critical features and customer satisfaction.

H_{3cs}: There is a statistically significant relationship between competitive substitutes and customer satisfaction.

H₄: Customer perception has a statistically significant mediating (intervening) effect on the relationship between quality drivers and customer satisfaction.

H₅: There is a statistically significant relationship between managerial focus and customer satisfaction. *Simple hypotheses:*

H_{5ea}: There is a statistically significant relationship between employee attitude and customer satisfaction.

H_{5fa}: There is a statistically significant relationship between firm agility and customer satisfaction.

H_{5fi}: There is a statistically significant relationship between firm innovativeness and customer satisfaction.

H₆: Managerial focus has a statistically significant moderating effect on the relationship between quality drivers and customer satisfaction.

H₇: Quality drivers, customer perception and managerial focus collectively influence customer satisfaction.

Appendix 5: Simple and Stepwise Regression Analyses

Table 5.1: Simple Regression: Quality Drivers Predicting Satisfaction

	Product Quality	Service Quality	Complaints Handling	Ease of Business	Price
R	.207	.441	.338	.127	.2000
R ²	.043	.194	.114	.016	.040
F	3.521	19.038	10.169	1.290	3.308
Sig (p)	.064	.000	.002	.260	.073
Constant	6.340	5.105	6.545	7.455	6.908
B	.193	.358	.196	.070	.132
standard error	.103	.082	.061	.061	.073
β (beta)	.207	.441	.338	.127	.200
T	1.876	4.363	3.189	1.136	1.819
Sig (p)	.064	.000**	.002**	.260	.073

Satisfaction refers to Customer Satisfaction. Source: Primary Data

Table 5.2: Stepwise Regression: Quality Drivers Predicting Satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.441(a)	.194	.184	1.06071
2	.496(b)	.246	.227	1.03262
3	.496(c)	.246	.217	1.03920
4	.496(d)	.246	.207	1.04596
5	.509(e)	.259	.210	1.04396

a Predictors: (Constant), Service Quality

b Predictors: (Constant), Service Quality, Complaint Handling

c Predictors: (Constant), Service Quality, Complaint Handling, Product Quality

d Predictors: (Constant), Service Quality, Complaint Handling, Product Quality, Price

e Predictors: (Constant), Service Quality, Complaint Handling, Product Quality, Price, Ease of Business. CS= Customer Satisfaction

ANOVA(f)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.419	1	21.419	19.038	.000(a)
	Residual	88.883	79	1.125		
	Total	110.302	80			
2	Regression	27.130	2	13.565	12.721	.000(b)
	Residual	83.172	78	1.066		
	Total	110.302	80			
3	Regression	27.147	3	9.049	8.379	.000(c)
	Residual	83.156	77	1.080		
	Total	110.302	80			
4	Regression	27.157	4	6.789	6.206	.000(d)
	Residual	83.146	76	1.094		
	Total	110.302	80			
5	Regression	28.563	5	5.713	5.242	.000(e)
	Residual	81.740	75	1.090		
	Total	110.302	80			

a Predictors: (Constant), Service Quality

b Predictors: (Constant), Service Quality, Complaint Handling

c Predictors: (Constant), Service Quality, Complaint Handling, Product Quality

d Predictors: (Constant), Service Quality, Complaint Handling, Product Quality, Price

e Predictors: (Constant), Service Quality, Complaint Handling, Product Quality, Price, Ease of Business

f Dependent Variable: Customer Satisfaction

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.105	.663		7.703	.000
	Service Quality	.358	.082	.441	4.363	.000
2	(Constant)	4.532	.691		6.558	.000
	Service Quality	.307	.083	.377	3.694	.000
	Complaint Handling	.137	.059	.236	2.314	.023
3	(Constant)	4.464	.885		5.045	.000
	Service Quality	.301	.094	.371	3.216	.002
	Complaint Handling	.137	.060	.237	2.302	.024
	Product Quality	.013	.104	.014	.124	.902
4	(Constant)	4.438	.933		4.758	.000
	Service Quality	.302	.095	.371	3.194	.002
	Complaint Handling	.133	.073	.230	1.831	.071
	Product Quality	.012	.106	.012	.110	.913
	Price	.008	.081	.012	.096	.924
5	(Constant)	4.542	.935		4.856	.000
	Service Quality	.343	.101	.422	3.395	.001
	Complaint Handling	.145	.073	.250	1.976	.052
	Product Quality	.007	.106	.008	.068	.946
	Price	.010	.081	.016	.127	.900
	Ease of Business	-.071	.062	-.127	-1.136	.260

a Dependent Variable: Customer Satisfaction

Table 5.3: Simple Regression: Customer Perception Predicting Satisfaction

	Critical Features	Brand Imagery	Firm Imagery	Competitive Substitutes
R	.259	.513	.152	.075
R2	.067	.263	.023	.006
F	5.678	28.194	1.878	.449
Sig (p)	.020	.000	.174	.505
Constant	7.049	5.570	7.639	7.635
B	.131	.302	.061	.043
standard error	.055	.057	.045	.064
β (beta)	.259	.513	.152	.075
T	2.383	5.310	1.370	.670
Sig (p)	.020	.000	.174	.505

Table 5.4: Stepwise Regression: Customer Perception Predicting Satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.513(a)	.263	.254	1.01439
2	.520(b)	.270	.251	1.01609
3	.529(c)	.280	.252	1.01537
4	.535(d)	.286	.248	1.01808

a Predictors: (Constant), Brand Imagery

b Predictors: (Constant), Brand Imagery, Critical Features

c Predictors: (Constant), Brand Imagery, Critical Features, Firm Imagery

d Predictors: (Constant), Brand Imagery, Critical Features, Firm Imagery, Substitutes

ANOVA(e)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.012	1	29.012	28.194	.000(a)
	Residual	81.291	79	1.029		
	Total	110.302	80			
2	Regression	29.772	2	14.886	14.419	.000(b)
	Residual	80.530	78	1.032		
	Total	110.302	80			
3	Regression	30.917	3	10.306	9.996	.000(c)
	Residual	79.386	77	1.031		
	Total	110.302	80			
4	Regression	31.529	4	7.882	7.605	.000(d)
	Residual	78.773	76	1.036		
	Total	110.302	80			

a Predictors: (Constant), Brand Imagery

b Predictors: (Constant), Brand Imagery, Critical Features

c Predictors: (Constant), Brand Imagery, Critical Features, Firm Imagery

d Predictors: (Constant), Brand Imagery, Critical Features, Firm Imagery, Substitutes

e Dependent Variable: Customer Satisfaction

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.750	.430		13.387	.000
	Brand Imagery	.302	.057	.513	5.310	.000
2	(Constant)	5.833	.441		13.227	.000
	Brand Imagery	.341	.073	.580	4.655	.000
3	Critical Features	-.054	.063	-.107	-.858	.393
	(Constant)	5.691	.461		12.354	.000
	Brand Imagery	.341	.073	.579	4.651	.000
4	Critical Features	-.064	.064	-.126	-1.002	.319
	Firm Imagery	.042	.040	.104	1.054	.295
	(Constant)	5.900	.536		11.013	.000
	Brand Imagery	.342	.073	.582	4.660	.000
	Critical Features	-.042	.069	-.084	-.609	.544
	Firm Imagery	.041	.040	.101	1.026	.308
	Substitutes	-.049	.064	-.086	-.769	.444

a Dependent Variable: Customer Satisfaction

Table 5.5: Simple Regression: Managerial Focus Predicting Satisfaction

Dependent Variable	Statistic	Independent Variable ..		
		Employee Attitude	Firm Agility	Innovative Culture
Customer Satisfaction	R	.279	.057	.119
	R2	.078	.003	.014
	F	6.693	.259	1.138
	Sig (p)	.012	.612	.289
	Constant	6.749	7.739	7.289
	B	.159	.029	.083
	standard error	.061	.058	.078
	β (beta)	.279	.057	.119
	T	2.587	.509	1.067
	Sig (p)	.012	.612	.289

Table 5.6: Factor Analysis

(a) Quality Drivers

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.578
Bartlett's Test of Sphericity	Approx. Chi-Square	75.195
	Df	10
	Sig.	.000

Rotated Component Matrix (a)

	Component	
	1	2
Product Quality	.763	-.042
Service Quality	.855	.133
Complaint Handling	.162	.872
Ease of Business	.597	.286
Product Price	.063	.869

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Total Variance Explained

Component	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.110	42.194	2.110	42.194	42.194	1.701	34.014	34.014
2	1.208	24.150	1.208	24.150	66.344	1.617	32.330	66.344
3	.829	16.573						
4	.481	9.611						
5	.374	7.472						

Extraction Method: Principal Component Analysis.

(b) Customer Perception

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.625	
Bartlett's Test of Sphericity	Approx. Chi-Square	65.378
	Df	6
	Sig.	.000

Component Matrix(a)

	Component
	1
Critical Features	.889
Reference to Substitutes	.713
Firm Imagery	.307
Brand Imagery	.806

Extraction Method: Principal Component Analysis.
a 1 components extracted.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.042	51.057	51.057	2.042	51.057	51.057
2	.960	23.994	75.051			
3	.669	16.713	91.763			
4	.329	8.237	100.000			

Extraction Method: Principal Component Analysis.

(c) Managerial Function

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.502	
Bartlett's Test of Sphericity	Approx. Chi-Square	28.525
	Df	3
	Sig.	.000

Component Matrix(a)

	Component
	1
Employee Attitude	.540
Firm Agility	.754
Innovative Culture	.865

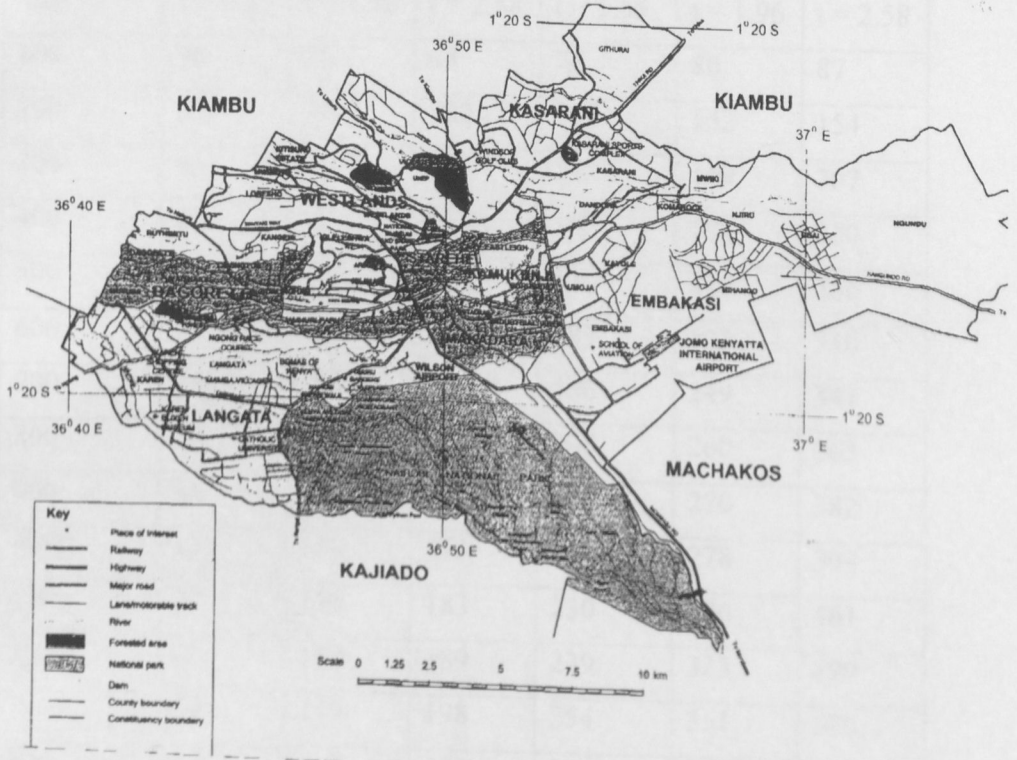
Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.609	53.624	53.624	1.609	53.624	53.624
2	.924	30.815	84.439			
3	.467	15.561	100.000			

Extraction Method: Principal Component Analysis.

Appendix 6: Map of the Study Area (Nairobi)



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Appendix 7: Table for determining sample size

Population size	Sample size					
	Continuous data (margin of error = .03)			Categorical data (margin of error = .05)		
	$\alpha = .10$ $t = 1.65$	$\alpha = .05$ $t = 1.96$	$\alpha = .01$ $t = 2.58$	$p = .50$ $t = 1.65$	$p = .50$ $t = 1.96$	$p = .50$ $t = 2.58$
100	46	55	68	74	80	87
200	59	75	102	116	132	154
300	65	85	123	143	169	207
400	69	92	137	162	196	250
500	72	96	147	176	218	286
600	73	100	155	187	235	316
700	75	102	161	196	249	341
800	76	104	166	203	260	363
900	76	105	170	209	270	382
1000	77	106	173	213	278	399
1500	79	110	183	230	306	461
2000	83	112	189	239	323	499
4000	83	119	198	254	351	570
6000	83	119	209	259	362	598
8000	83	119	209	262	367	613
10000	83	119	209	264	370	623

Source: Bartlett J.E., Kotrlik J.W., and Higgins C.C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research. *Information Technology, Learning, and Performance Journal*, 19 (1), page 48.