THE INFLUENCE OF BRAND EQUITY ON CONSUMER CHOICE IN
BRANDED BOTTLED WATER AMONG SUPERMARKET CUSTOMERS IN
NAIROBI CENTRAL BUSINESS DISTRICT, KENYA

BY

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DEGREE OF DOCTOR OF PHILOSOPHY IN MARKETING OF KENYATTA
UNIVERSITY
DECLARATION

This thesis is my original work and has not been presented for a degree in any other university. No part of this thesis should be reproduced without authority of the author or/and of Kenyatta University.

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To my parents Morrison Ngugi and Grace Njuguna; my brother Eric; my sisters Violet and Caroline and my best friend Jane Murungi for their moral support and encouragement all through.
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## ABBREVIATIONS AND ACRONYMS

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<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ANT</td>
<td>Associative Network Theory</td>
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<tr>
<td>BA</td>
<td>Brand Awareness</td>
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<td>BE</td>
<td>Brand Equity</td>
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<td>BL</td>
<td>Brand Loyalty</td>
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<td>CBBE</td>
<td>Customer Based Brand Equity</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>CBD</td>
<td>Central Business District</td>
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<td>EFBW</td>
<td>European Federation of Bottled Waters</td>
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<td>FMCG</td>
<td>Fast Moving Consumer Goods</td>
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<td>IC</td>
<td>Industry Context</td>
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<td>KRA</td>
<td>Kenya Revenue Authority</td>
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<td>KS</td>
<td>Kolmogorov- Smirnova</td>
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<td>LR</td>
<td>Log Likelihood Ratio</td>
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<tr>
<td>LPM</td>
<td>Linear Probabilistic Models</td>
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<tr>
<td>MLE</td>
<td>Maximum Likelihood Estimator</td>
</tr>
<tr>
<td>NCBD</td>
<td>Nairobi Central Business District</td>
</tr>
<tr>
<td>NCST</td>
<td>National Council of Science and Technology</td>
</tr>
<tr>
<td>EFBW</td>
<td>European Federation of Bottled Water</td>
</tr>
<tr>
<td>PQ</td>
<td>Perceived Quality</td>
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<tr>
<td>PR</td>
<td>Public Relations</td>
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<td>RSP</td>
<td>Retail Selling Price</td>
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<td>SKU</td>
<td>Stock Keeping Unit</td>
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SMCG - Slow Moving Consumer Goods
SW - Shapiro Wilk
OPERATIONAL DEFINITION OF TERMS

**Brand Association**  The degree to which a particular brand, in the mind of the consumer, is associated with the general product category.

**Brand Awareness**  The likelihood that consumers recognize the existence and availability of a company's product or service.

**Brand Equity**  The value premium that a company realizes from a product with a recognizable name as compared to its generic equivalent.

**Brand Loyalty**  When consumers become committed to a brand and make repeat purchases over time. Brand loyalty is a result of consumer behaviour and is affected by a person’s preferences.

**Brand**  A name, term, design, symbol or any other feature that identifies one seller's good or service as distinct from those of other sellers.

**Consumer Choice**  A theory of microeconomics that relates preferences for consumption goods and services to consumption expenditures and ultimately to consumer demand curves.
**Spring Water**
To qualify as spring water, this must be collected only at the spring or through a borehole that taps the underground formation feeding the spring.

**Perceived quality**
Consumer opinion in regard to a product ability to fulfil their Expectations.

**Proprietary assets**
These are patents, trademarks, channel interrelationship, and brand association of a product owned by a company.

**Purified Water**
Type of drinking water that has been treated with processes such as distillation, deionization or reverse osmosis.

**Mineral Water**
Mineral water contains not less than 250 parts per million total dissolved solids and is defined by its constant level and relative proportions of mineral and trace elements at the point of emergence from the source. No minerals can be added to the water.
ABSTRACT

Building strong brand equity to attain competitive advantage is a top priority amongst many firms but it is not always an easy task to accomplish. Due to the increased globalization and competition, the management of a brand has become of importance and thus presents an interesting area to study. With the adoption of effective brand equity strategies, many companies may compete effectively and efficiently. This study, therefore, set out to investigate the influence of brand equity on consumer choice in buying branded bottled water, with special focus on the contributory roles of its various elements in influencing consumer choice, as well as the moderating role of the industry context in affecting the relationship between brand equity and consumer choice. The specific objectives of the study were to investigate (i) the influence of brand awareness on consumer choice (ii) the influence of brand loyalty on consumer choice (iii) the influence of perceived quality on consumer choice; and (iv) the influence of proprietary brand assets on consumer choice. Moreover the study sought to determine the moderating influence of the Industry context on the relationship between brand equity and consumer choice. A cross-sectional explanatory design was used. The target population in this study was 264,808 registered customers in supermarkets and procurement employees in the selected supermarkets in the Nairobi Central Business District. The study was conducted in the context of the Kenyan retail supermarkets in Kenya. This context was chosen due to the prominence of the supermarkets in the retail industry in Kenya and on the basis of the limited research conducted on branding in the Kenyan context. Convenient sampling was adopted to select the supermarkets and systematic sampling was conducted to select customers from an ordered sample size from the supermarkets 400 population sample size. Both primary and secondary data were used. Primary data were collected using semi-structured questionnaires and an interview guide. Secondary data were collected through records and documents review. Descriptive statistics were used to summarize the properties of the mass data. Inferential statistics were derived using Pearson’s correlation and logistic regression analysis. Content analysis was carried out for qualitative data. The study used the Statistical Package for Social Sciences (SPSS) 19 and Stata 11 as a tool to process and analyse data. The research results were presented in percentages, tables, charts and graphs. The findings show that all the objectives of the study were significant at 95% confidence level, there was significant impact of brand awareness, perceived quality, brand loyalty and other proprietary brand assets on consumer choice. Furthermore it shows brand loyalty as the most dominant factor established whose platform should be built by the other three dimension of brand equity to enable a firm to influence choice habits amongst consumers. The study recommends that brand equity should be used to play a leading role among product related strategies in establishing a marketing strategy for bottled water manufacturers.
CHAPTER ONE
INTRODUCTION

1.1 Background to the study

Consumers are overwhelmed with a vast array of choices in today’s retail marketing environment. This is especially because they are exposed to so many items in the market and they have to make quick decisions based on the items they ought to buy and which can be catered for by their disposable income. The decision the consumers make determines the item they select and eventually buy. The manufacturers, on their part, have to be innovative and creative to ensure that customers get to pick their items if their firms have to remain competitive in the market. Branding of their items is one the strategies that companies such as supermarkets may adopt to attract consumers to their goods and to ensure these goods get picked and re-picked.

According to Leighton (2012), the average supermarket has over 50,000 Stock Keeping Units (SKUs), while the average retail shopper buys around 50 items in 50 minutes. Therefore, consumers make a decision while facing around 800 items per minute. However, consumers are not able to attend to all of the items on display, let alone weigh up all of the available options; they must decide what to buy from what is presented to them during purchasing. Similarly, Ogbuji, Anyanwu, & Onah, (2011) asserts that for consumers to make fast decisions, they need to use mental shortcuts or heuristics which will guide them in their choices. These cues which are present in the environment will guide the shopper’s attention and aid their decision making while in the store.
The distinction between goods /services provided and products that are in competition in the market is the starting point for brand marketing which is crucial to the success of organizations. In recent years the issue of brand and particular brand equity (BE) has attracted the attention of researchers in the field of marketing and institutions that are evaluating brand equity. Perhaps the most powerful mental shortcut available to the consumer is branding, which accordingly, enables consumers to simplify customer decisions, reduce risk and define their expectations. Branding builds an image on a product which allows consumers to quickly select efficiently from an array of products. The purpose of branding is to draw a consumer’s attention to certain products which allows them to recognize familiar products and serves as a cue for retrieving stored information from memory about those products (Leighton, 2012).

Most brands include intangible assets that are allocated a significant share of this value to self (Aaker & Joachimsthaler 2000). This has been observed differently in different industries and different years, for it is difficult to compare fast moving consumer goods with industrial goods; as such, their characteristics differ greatly. In this regard the creation or development of new products as well as the high refractive index of new products has led manufacturers to brand strategy development.

Moreover, there has been limited theoretical framework that has built upon the original model developed by Aaker (1991; 2004) and Keller (1993; 2001) that has been done to
map the mechanisms underlying customer-based brand equity in delivering customer value. Consumer choice relates to the fact that different outcomes result from the marketing of the product or service because of its brand element, as compared to outcomes, if that same product or service did not have brand identification (Tuominen, 2000). This study assumed that choice would be based on the aspect of branding specifically. According to Stahl, Heitmann, Lehmann, and Neslin, 2012, “the Influence of brand equity on customer acquisition, retention, and profit margin” only analysed the relationship of the value of the brand to the lifetime value of the consumer. So long as the brand is strong, it will lead to consumer purchase but if it is weak, the consumer will most likely seek other alternatives.

Brand equity helps consumers to differentiate between a product and a brand. Keringet, Dasani, Quencher, Aquamist, for example, are all locally branded bottled waters, but what sets them apart is the amount of investment a company has placed on each product. The consumer is likely to make a choice among the above mentioned products since their branding instils confidence in consumers when they are making a purchasing decision. Brand equity instils a level of guarantee that a product will deliver a set of promises that are communicated in the branding of the product. Through this feature, the manufacturers of bottled water are able to stand out and gain a competitive advantage over a less known product. The manufacturers are competing for the disposable income of consumers, and for them to stand out, they need to enhance their image to capture the consumer’s attention in less than a second while they are doing their shopping.
Consumers are generally constrained by both time and money, and for the manufacturers to succeed in influencing consumers’ choice, they have to instil in the consumers confidence in the product the latter wish to purchase. Brand equity in a product may significantly influence a consumer’s decision.

As Kapferer (2005) explains, “brands represent enormously valuable pieces of legal property, capable of influencing consumer behaviour, being bought and sold, and providing the security of sustained future revenues to their owner. The value directly or indirectly accrued by these various benefits is often called brand equity.” Kapferer adds that brand equity provides an important strategic tool which aids in making marketing decisions, and that is why it is very important for marketers to fully understand the sources of brand equity, for instance, how they affect outcomes of interest and how these sources and outcomes change, if at all, over time. The understanding of the sources and outcomes of brand equity provides a common denominator for interpreting marketing strategies and assessing the value of a brand. The managers of fast moving consumer goods (FMCG) need to understand and focus on what drives their brand equity, in which the outcomes of brand equity will help these managers to understand exactly how and where brands add value (Keller, 2003).

Keller (2003) presented a more extended framework in his exposition of strong brands. This includes brand awareness, brand loyalty, perceived quality and distinctive brand associations as the important dimensions of a strong brand. The information provided by
Keller (2003) can possibly give further knowledge about a customer’s willingness to pay for different brands and a better understanding of the competitive situations. How these brand equity dimensions are related, how important they are, and in what order they influence each other, seems to be the distinct questions. Hence it is important to find out the answers to these questions and to make the concept clear.

As a result of globalization, branding and brand equity has become a useful tool, to which academicians are giving an increasing attention in order to establish how to develop a global brand that is appealing to all users. The reasons for this interest is as a result of increased cross border population mobility and electronic mobility which have contributed to faster transfer of ideas and a global convergence in consumer tastes and values (Quelch, 2004). According to Aaker and Joachimsthaler (2000), having a global brand will enhance the positioning, advertising strategy, personality, look, and feel and coordinated marketing strategy in respects to the specific country. Reviewing the top 10 global brands, Quelch identified seven common features: strength in home market; geographical balance; addressing similar consumer needs worldwide; consistent positioning; country of origin; product category focus, and corporate name. From consumers’ perspective, it is important that the brand be marketed in multiple countries and generally be recognized as global in these countries.

According to Alden, Steenkamp, and Batra, (1999) the appeal of global brands arises from different but not mutually exclusive sources which consist of higher perceived
quality, higher prestige, and the psychological benefits of perceived global brand presence. From a manufacturer’s point of view the drivers of global branding are economies of scale, growing consumer segments with similar needs and tastes, risks of time-consuming local modifications, and emerging consumer preferences for brands with global image. Global branding, however, might also be a trap for managers if not handled carefully.

In this context, Aaker (2004) draws attention to three basic points. First, economies of scale may be elusive because of existing cultural differences between foreign markets. Second, top management may face difficulties in forming a successful global brand team. Third, global brands cannot be imposed on all foreign markets in a standard way because of the image differences across these countries. From the foregoing discussions on the importance of branding, marketers and producers alike are developing increasing interest in this strategy. The branded bottled water industry in Kenya is not an exception to this increasing adoption of branding as a strategy for winning the heart of consumers. However, a lot still more research is required to establish whether branding is the major factor influencing consumer choice.

Upon examining over 20,000 shopping representatives, the consumers who selected various books from 33 retailers over 69 days, Klink and Smith (2001) found that even though each retailer offered homogenous products, brand was an important determinant of the consumer’s choice. They went further to state that, the three most heavily branded
retailers held a $1.72 price advantage over more generic retailers in head-to-head price comparisons. In furtherance of their research, they discovered that consumers used brand as a surrogate for retailer integrity in non-contractible characteristics of the products and service packages, such as shipping reliability.

Taking everything into account global brands are strong organisations because of their omnipresence but demand a nuanced perspective when governed in different foreign markets. Given this collection of knowledge on brand equity and global branding, it is evident that the amount of factual research amalgamating the two subjects is limited. By addressing the aforementioned gaps, this study clarifies and validates the dimensions of brand equity influence on consumer choice in Kenya.

1.1. Bottled Water Industry in Kenya

People, since ancient times, have used water from mineral springs, especially hot springs, for bathing due to its supposed therapeutic value for rheumatism, arthritis, skin diseases, and various other ailments. Water can be used to cure different ailments depending on the temperature of the water, the location, the altitude and the climate of the spring. This begun the trend of using mineral water for drinking purpose so as to exploit the therapeutic value of the water. This trend gained momentum in the mid-1970s with large quantities of bottled water being sourced from mineral springs in France and other European countries. The concept of bottled water has become highly
prevalent in western countries due to greater health consciousness and higher awareness about health and hygiene, as reported by ‘Natural Mineral Water Association’ (EFBW, 2012).

The bottled water industry in Kenya started in 1992, with the entry of Keringet mineral water, which was billed as the first natural underground mineral water. In 1992 the concept was relatively new and buying and using bottled water then were seen as indicators of social and economic class. In the subsequent years, many new companies entered the market, and the perception of buying bottled water changed overtime from class to health consciousness.

There exist in the Kenyan Industry, over 100 companies which sell an estimated 424 million litres of bottled water in the country annually, valued at about KES 12 billion (KRA, 2012). The bottled water industry in Kenya continued to perform well in 2011, registering a growth of 10% in total volume terms. Health concerns remain a key driver behind the rising sales of bottled water. There is an increased daily intake of water among consumers: either because they want to follow a healthier diet or because they wish to maintain their fluid intake as part of a weight-loss regime. Consumers also see it as a lifestyle choice - forsaking caffeine and carbonates in favour of water (Euromonitor International, 2012).
Even though brand equity assists to instil confidence in consumers, if all elements are not adhered to, the product can bring unnecessary attention and distaste among consumers. One notable brand is Dasani mineral water by Coca Cola which has gained very few admirers in the market even though its flagship brand Coca Cola is the parent company. This is due to the negative publicity resulting due to the insignificant mineral content in their product led consumers to choose alternative products in the market (Kim, Kim & An 2003). The company, from the outset, seriously underestimated the response of its bottled water competitors as it aimed to come marching in on their market share. The Natural Mineral Water Association (EFBW, 2012) lodged a complaint against it and the news damaged Dasani’s reputation across Europe and America, which has spread to other continents as well (Kim et al., 2003). Dasani had to rely on the marketing muscle of Coca Cola flagship brand, through its distribution networks, and channel relationships, to survive in the European market (Lindgreen, 2009).

Bottled water is relatively cheap when compared to other beverages. However, interesting to note is that 1,000 litres of tap water in Kenya would cost between Ksh. 18 and 27 to deliver to the end-user while the same amount of bottled water could have a retail price of KES.1200 (Euromonitor International, 2012). The reality that purifying tap water is much less expensive than bottled water options will impact the viability of this industry. However, this might not happen for decades, or more, considering the current Kenyan water predicament (Euromonitor International, 2012). The need for adapting to this option will begin to change as bottling prices go up and perhaps faster than we can imagine under the current national water reality. Currently, there exist in
Kenya four main types of bottled water. They include spring water, mineral water, sparkling water and purified water.

Bottled water in Kenya represents a third of the cost of carbonated water and bottled water with Crown Foods Ltd having leading the category in off-trade value terms in 2011 with a 27% share, thanks to brand loyalty and its longstanding presence in the market. The company also benefits from strong promotional and marketing activities. However, the competitive environment is intensifying, with Aquamist commanding a 24% share and Coca-Cola a 20% share. All three top players have adequate resources for marketing (Euromonitor International, 2012).

1.1.2 Supermarkets in Kenya

According to Neven, Reardon, Chege, & Wang, (2006), Kenya comprises of three tiers of supermarkets. The first tier consists of the two clear market leaders as well as the leading sellers of FMCG among supermarkets: Uchumi supermarkets and Nakumatt. These two supermarket chains represent nearly 50% of the supermarket sector in terms of sales. While Uchumi targets consumers from all socio-economic groups, Nakumatt’s consumer focus has been mostly on the high-income segment (50% of their customers fall in this category). The second tier consists of the Tuskys, Ukwala, Naivas and Chandarana chains. These three chains are competing for middle to low-income urban consumers. The supermarkets are not present in all part of the country, and as such
Nairobi was the preferred location, since it contained the three tier levels of supermarkets.

Kenya has the most advanced retail market network in East Africa, for instance Nairobi, has over 138 autonomous supermarkets. Of these 47 are run by supermarket chains, 12 are hypermarkets, while 7 are in shopping malls, and hundreds of specialty retail stores. The Kenyan supermarkets have approximately 30% of the retail market share in the country (Weatherspoon and Reardon). Nakumatt supermarket is Kenya’s largest supermarket chain which currently has 37 stores operating in Kenya, Uganda, and Rwanda. Uchumi is the second largest supermarket chain with 27 supermarkets in Kenya. Uchumi’s rapid expansion strategy in 2004 got the supermarket chain into trouble in 2006 when it filed for insolvency protection. However since Uchumi was a public entity which was to serve the ordinary Kenyans, the government had to intervene against the insolvency, and sustain the retail chain until its operations improved.

Smaller Kenyan supermarket chains include Tusky’s, Naivas, Ukwala and Chandarana. Foreign retailers have entered the market and they include ShopRite, Metro Cash&Carry, and Woolworths (Weatherspoon et al., 2003). As of 2013 the top five Kenyan supermarket chains represent twenty eight percent share of the retail stores and sixty percent of the sales of the sector which is similar to South Africa, Latin America, and France, hence a fairly concentrated sector. The supermarkets in the third tier consist of small chains and independent (single-store) supermarkets. In terms of geographic
spread, supermarkets have expanded rapidly although the consensus in the sector is that there is much potential for growth (in terms of the existence of a willing consumer base so far unserved by supermarkets). Nairobi, Kenya’s largest urban area, with a population of 3.1 million which represents roughly 25% of the urban population, leads other urban areas in terms of supermarket development. Changes taking place in Nairobi are a good indication of the changes that are taking place in smaller urban areas, the difference mostly being one of scale and a time-lag.

According to Neven et al., (2006), the two greatest motivators for consumers to shop at supermarkets are the lower prices offered and the large assortment of goods. The study found that prices in supermarkets were normally less by 3-4% on average, a significant margin essential for the price sensitive lower middle and low-income consumers. To add to this, the above mentioned retail chains are geographically dispersed in all major estates in Nairobi and are coupled with a high diffusion pattern which is further indicative of the parallel retail development trends between Nairobi compared to other urban areas; making Nairobi the best place to study consumer choice.

1.2 Statement of the Problem

Despite a lot of media publicity on fast moving consumer goods and services, consumers are always faced with uncertainty when making a choice. Furthermore the influence of
brand loyalty, brand awareness, perceived quality and proprietary brand assets remains rudimentary, more so in the Kenyan context.

In the literature on product branding, significant attention has been paid to brand equity in the business value context, but relatively little attention has been paid to the application of the concept of brand equity to the consumers in retail marketing context, especially in Kenya.

The effectiveness of a product in the market can be attributed to brand maintenance that will help a manufacturing company to sustain itself in the marketplace. The eventual failure of a company to build effective brand equity will actually lead to its failure in achieving the desired organizational goals since brand equity plays an important role in maintaining customer loyalty and organizational performance in the market place. Possession of a brand is not enough for a company to have strong brand effectiveness because brand equity has a great influence on consumer choice of a brand (Keller, 2002).

Moreover, there is limited research regarding brand equity influence on consumer choice where most researchers have focused on the relationship between branding and firm performance using brand awareness and image as a moderating effect. Researchers such as Aaker (2000), Keller (2002), Cobb-Walgren, Ruble, & Donthu, (1995), Yoo et al., (2001), Lin and Chang (2003) state that the four dimensions of brand equity on consumers i.e. brand awareness, perceived quality, brand loyalty and
proprietary brand assets, have influence on consumer choice. Well observed is that most producers strongly believe that branding has a very high influence on consumer choice (Ogbuji et al., 2011). Since many elements constitute branding, one is not sure if these elements play equal roles in influencing choice or if some play a greater role than others.

Research documented in Kenya has also failed to establish the importance of the dimensions of brand equity and their influence on consumer choice. Nyambura (2011), for example, focused on branding in the banking service industry, thus the results were limited to one financial institution. Furthermore the study was based on a financial shareholder’s perspective of brand equity; Nyangechi (2011), on the other hand, focused on the role of perception in the buying behaviour of consumers as a result of brand equity. This study was limited to perception of consumers in elements of brand equity, which ultimately focused on the consumer’s motivation for buying from a cognitive value rather than actual participation of consumption patterns and choice. As such, the Kenyan studies of brand equity have failed to address the relative importance of each brand equity variable on consumer choice and the moderating role of the industry context in influencing brand equity and consumer choice.

The above studies have also failed to establish the role of industry context in influencing the relationship between brand equity and consumer choice. Specifically, industry context draws on economic and political theory to develop a consumer based explanation with specific focus on satisfaction, disposition to exit or voice and why
consumers are disposed to act on the basis of their dispositions within a specific industry.

The issue that exists is that there is little evidence of whether a brand equity strategy that is based on a holistic approach to specific industry, which may be used to assist in execution to influence consumer choice and subsequent sales volume, has been conducted in Kenya. As such research into these phenomena will shed more light in order for marketing executives to recognize the need for a multiple-stakeholder focus and provide more evidence on how adopting brand equity with moderating factors such as industry context in business approach can enhance the company’s image, and therefore enhance consumer choice.

1.3 Objectives of the study

1.3.1 General objectives

The general objective of this study investigated the influence of brand equity on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.
1.3.2 Specific Objectives

The specific objectives of this study were to:

i. Investigate the influence of brand awareness on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

ii. Determine the effect of brand loyalty on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

iii. Establish the effect of perceived quality on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.

iv. Investigate the influence of other proprietary brand assets on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.

v. Determine the moderating effect of the Industry context on the relationship between brand equity and consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

1.4 Research hypotheses

i. H0₁: Brand awareness has no statistically significant influence on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.
ii.  H0₂: Brand loyalty has no statistically significant influence on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

iii. H0₃: Perceived quality has no statistically significant influence on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

iv.  H0₄: Proprietary brand assets has no statistically significant influence on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.

v.  H0₅: Industry context has no statistically significant moderating relationship between brand equity and consumer choice, of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

1.5 Significance of the study

This study provides an assessment of brand equity influence on consumer choice, and the role of industry context mitigating this relationship. The study also provides some exposure to the rapidly evolving Kenyan consumer market which in turn provides unique insights into the wants and desires of the various sectors of the population. This type of information is likely be of tremendous value to marketing managers and retailers seeking to gain a competitive edge within a rapidly evolving Kenyan market place. Bottled water has become an integral part of the lives of Kenyan consumers, and has
resulted in over 100 companies vying for sales volume in the marketplace, thus the need for differentiation to direct consumer choice. While most research have been done on branding, this study focused on the extent to which marketers’ perception and consumers’ perception converge with a view to maximizing the mutual benefit to be derived from these strategies. The research methods and approaches adopted in this study will assist future researchers who would wish to investigate similar or related phenomena in this research area.

1.6 Scope of the study

This study concentrated on only registered customers of four big supermarkets in Nairobi Central Business District. There is no doubt that coverage of all consumers in the Kenyan population in all the supermarkets would have produced a better result, but the study was limited to supermarkets which had employed loyalty cards for its customers. The key respondents were registered customers of Tuskys, Nakumatt, Chandarana, and Uchumi supermarkets. Additional respondents were the procurement and store managers of the above mentioned supermarkets, who are involved in the day to day operations of the supermarkets, and make key decisions on the type of products to be stocked in the supermarkets.

1.7 Limitations of the study

The researcher faced the following limitations while carrying out this research project. The scarcity of data and lack of current related studies with respect to brand equity on fast moving consumer goods specifically in bottled water in Nairobi, Kenya. The
researcher mitigated this challenge by comparing research in different industries, both locally and globally to try and infer the research findings.

The accessibility of the respondents was also a challenge in and outside the supermarkets, due to the stringent policies by most of the supermarkets not to allow any form of research within their premises. This challenge was mitigated by using the research permit from the Ministry of Higher Education Science and Technology (Appendix G) and the introduction letter given by Kenyatta University which confirmed that the study was for academic purposes.

1.8 Organization of the study

The study consisted of chapter one which provided the background to the research, the research objectives, the significance of the study, and the limitations experienced. Chapter two represented the literature review of the aspects of Brand equity influence on consumer choice. Chapter three encompasses the research methodology while chapter four represents the findings of the study and interpretation. Finally chapter five comprises the conclusions, recommendations and contribution of the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents review of literature that forms the basis of this study. The chapter discusses the various models in brand equity and the importance of branding especially in retail markets, and what noise (industry factors) reduces or increases the effectiveness in communication or choice among consumers. The chapter aims to build on past studies that have been done, provide new knowledge of how the impact of brand equity on consumer choice can be understood and present a conceptual research framework which forms the basis for the research hypotheses.

2.2 Theoretical review

Brand equity plays a very significant role in the understanding of the objectives, mechanisms and net impact of the holistic impact of marketing (Reynolds & Phillips, 2005). In this circumstance, it is not astonishing that measures capturing facets of brand equity have become part of a set of marketing performance indicators (Ambler, 2003). Brand equity theory and its measurement has an extensive scope of adherents, both from academic and practitioner perspectives, that collectively share what can be described as a “black box” orientation (Reynolds & Phillips, 2005).

The conceptualizations of consumer-based brand equity theory are mainly derived from cognitive psychology and information economics. The dominant stream of research has
been grounded in cognitive psychology- focusing on memory structure (Aaker, 1996; Keller, 2001). Aaker (1999) identified the conceptual dimensions of brand equity theory as brand awareness, brand associations, perceived quality, brand loyalty, and other proprietary brand assets such as patents, trademarks and channel relationships.

As with advertising and other marketing phenomena, a number of different theoretical mechanisms and perspectives have been brought to bear in the study of branding. Although there are a number of industry perspectives that highlight important concepts and relationships with respect to branding and brand management, the three main streams of academic research that have formally defined or conceptualized brand equity are consumer psychology, economics and sociology. The sections below look at these three approaches in detail.

2.2.1 Brand Equity theory

In the late 80’s there was sufficient rise in the value based management philosophy whereby brand equity has been developed as one of the key philosophies throughout management theory and practice (Gonul & Srinivasan, 1996). However the need for a conclusive brand equity innovation has transpired to the various developments of different types of brand equity models. Currently there exists over three hundred different models worldwide (Amirkhizi, 2005). Many of these models have focused attention towards the buyer (Aaker & Joachimsthaler, 2000).
However, this study focused on the consumer-based brand equity by Aaker, (1991) and Keller (1993; 2003), whose study findings indicate the differential effect brand knowledge has on consumer choices. Keller (2003) asserts that marketers need to build a brand in a series of four steps. Firstly, markets ought to comprehend how each and every consumer is able to identify the brand that satisfies their needs, which in most cases is operationalized as awareness.

Consequently, after a brand has been identified, the consumer tends to develop a level of perception based on a product’s performance and thereafter form judgements about quality. Thirdly, the cognitive and emotional attachment by consumers makes them feel a sense of belonging, making them committed and engaged which subsequently translates into loyalty. Although the three processes make sense when brand equity is traced longitudinally, in reality the first three components of brand awareness, perceived quality and brand loyalty, often do not take place sequentially at any one time. They tend to feed back to one another, especially when the consumer is relatively unfamiliar with the type of brand, and eventually are developed onto the fourth stage of proprietary brand assets, which enables one to protect the rights the brand has accumulated over a period of time, so as to gain a competitive edge.

In parallel, brand equity research rooted in information economics draws on the imperfect and asymmetrical nature of markets (Erdem & Swait 2006). Economic agents, in this context, are required to transmit information about their specific characteristics by
means of signals. Brand names, according to Erdem et al., (2006), act as signals to consumers. A brand signal becomes the sum of that brand’s past and present marketing activities. Imperfect and asymmetrical market information produces uncertainty in consumers’ minds. A credible brand signal generates consumer value by reducing perceived risk, reducing information search costs, and creating favourable attribute perceptions (Erdem et al., 2006).

Aaker’s (1991) conceptual definition has usually been used to operationally define brand equity. This model was one of the first published studies that conceptualized brand equity from the customer’s perspective, combining both the attitudinal and behavioural aspects of brand equity. It probably provides the most comprehensive framework for examining brand equity. Aaker’s (1991) theory of brand equity is essential for successful brand management and informed this study by providing a thorough understanding of brand equity from the customer’s point of view.

Brand equity is a multidimensional concept and a complex phenomenon. Keller (2002) divided it into two components: awareness and association. Aaker (1996; 2000) grouped it into five categories: perceived quality, brand loyalty, brand awareness, brand association, and other proprietary brand assets such as patents, trademarks, and channel relationships. Among these five brand equity dimensions, the first four represent customers’ evaluations and reactions to the brand that can be readily understood by consumers (Yoo & Donthu, 2001). Many researchers have widely adapted to measure
customer-based brand equity in previous studies. Strong brand equity, in summary, means that customers have high brand-name awareness, maintain a favourable brand image, perceive that the brand is of high quality, and are loyal to the brand. The lack of market evolution has generated inadequate literature materials to address the phenomenon of brand equity.

Figure 2.1 Brand Equity Model
Source: Aaker (1991, p. 15)

This study made use of one of the most commonly cited brand equity models in the literature: Aaker’s (1991) model. This model has been empirically tested in a number of previous studies (Atilgan et al., 2009; Kim et al., 2003; Yoo et al., 2001) and aids this
study to retest the impact of brand equity on consumer choice in the branded bottled water industry in Nairobi Central Business District.

Figure 2.2: Brand Value model to retailers

Source: Glyn (2004, p. 243)

Although few studies have investigated branding theory from the retailing perspective, it is important to identify some of the key points in this context. First of all, the important role of ‘brand’ in the retailer context has been confirmed by Baldauf, Cravens and Binder (2003), Davis (2003) and Glynn and Brodie (2004). These are consistent with Webster’s (2000) findings, whereby relationship management is a key aspect of brand equity in terms of the inter-organisational exchange from the supply chain perspective.
Davis (2000) showed that brand equity affects supply chain relationships by changing the level of perceived risk in the inter-organisational exchange, as represented in Figure 2.10. Glynn et al., (2004) mentioned ‘relationship variables are outcomes of the branding model in the retailing context, which is relevant to the reseller attitude towards brands’ (p. 241). Some key concepts of relationship quality, such as satisfaction, trust, and commitment, appeared both in Davis, Buchanan-Oliver, & Brodie, (2003) and Glynn et al., (2004) studies.

Figure 2.3: Brand equity in supply chain management.

Source: Davis (2003, p. 373)

Brand preference of the consumer (or consumer based brand equity) was one of the two dimensions of firm brand equity which is highly correlated to trade based brand equity in Davis’ (2003) theoretical model and is another important source of brand equity from
the retailer’s perspective. This consumer brand preference is an important aspect of the value proposition between trade partners, often opening the door to new relationships or providing staying power to existing relationships. Brand preference, according to Glynn (2004), was considered as the source of brand value that represents the resellers’ expectations of their customers’ behaviour with respect to the brand. In relation to the products value (Keller, 2003) the channel activities moderate the linkages between the marketing strategies and the customer, which will eventually affect the performance of the product or service brand. The evidence of Glynn & Brodie (2004) shows that resellers ensure they have taken into consideration the manufacturers brand support resources as well as the service that the product/brand is offering.

Baldauf et al., (2003) consider consumer value as the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given. This is a trade-off between benefits and sacrifices (cost) perceived by consumers. In summary, what consumers think about manufacturers’ brands does affect the brand’s value from the retailer’s perspective. This is consistent with Webster’s (2000) model of brand value in the three-way relationship among brands, resellers and consumers.

2.2.2 Consumer Utility theory

Merwe, Berthon, Pitt, and Barnes, (2007) assert that consumers augment the anticipated utility of individual benefit into preferences through the structuring of decisions. The consumer utility theory indicates the selected act between various options of preferences
in decision making which is paramount given that selecting various preferences involves risk. Some theories such as Bernoulli utility function (1738) and Von Neumann-Morgenstern utility function (1947) associated expected utility theory through analysis of risk alternatives in the context of choice.

However, the model of risky choice behaviour by the Expected Utility Theory has been criticized on several grounds. It does not explain the consistency of the individuals’ decision behaviour according to familiarity with the decision weight and the level of complexity (Hartinger, 1999) and has limitations in describing and predicting consumer behaviour that involves several and or alternative choices.

The theoretical and empirical research of non-expected utility theory, obtain the criticisms of the expected utility theory as weighted utility theory suggests an approach to determine variations of individual’s weight and utility function. Random utility models apply the mapping of attributes of the alternatives and decision makers in choice models (Baltas & Doyle, 2001). In turn, utility theory is acknowledged as a theory of consumers’ behaviour (Schumpeter, 1954). Utility occurs while consumers compare one product with others to increase their satisfaction and complete their enhancement of feeling by providing the material goods. That is, they are more likely to choose alternatives relying on specific cues and attributes, thus form consumer preferences. One of the models of consumer behaviour in economics is developed by Kotler, (2001).
Utility theory in consumer economics assumes that consumers will think about the choices in order to maximize the utility rationally. Consumer attains decisions account for perceived risks and consequences under conditions of uncertainty in purchase decision making (Baker, 2001). However, this economic vantage cannot fully explain purchasing behaviour in terms of choice between two or more products (Kotler, 2001). It broadly captures psychological concerns that people have but does not consider cost and benefit in terms of consumer attitudes. Utility theory in psychology states that consumer choice behaviour is predicted whether it is rational or irrational (Fishburn, 1968). On the other hand, Brown, Brownlie, Crosier, Drayton, Kennedy, Kinsey, and Parkinson (1995) claim the concern in psychology pertains to the process of preference construction for decision choices. Clearly a consumer’s decision is based upon a set of motives and alternative chains of action (Parvatiyar & Sheth, 2001). Accordingly a study can be conducted to develop a framework of purchase intention in terms of utility theory based upon psychological and economic perspectives whist integrating this into the retail marketing domain through measuring consumer purchase intentions.

2.2.3 Psychology Based Approaches

Researchers such as Krishnam (1996), Henderson, Iacobucci, and Calder (1998) and Lassar et al., (1995), who have studied branding effects from a cognitive psychology perspective, have frequently adopted associative network memory models to develop theories and hypotheses, in part because of the comprehensive and diagnostic value they
offer. The brand is seen as a node in the memory with a variety of different types of associations, varying in strength, linked to it. Prior research in relation to this has also often adopted a categorization perspective to memory representations of branding (Boush & Barbara, 1991). This approach assumes that consumers see brands as categories that, over time, have come to be associated with a number of specific attributes based in part on the attribute associated with the different products that represent individual members of the brand category (Loken & Roedder, 1998).

Researchers such as Aaker and Joachimisthaler (1996,2000) have relied on numerous concepts and principles of social psychology and social cognitional developing models for consumer brand related decisions such as affect referral mechanisms, attribution processes, accessibility diagnosticity considerations, expectancy value formulation, and so on. A number of researchers, also, have fairly extensively used models of consumer inference-making. Teas and Grapentine (1996), for example, constructed a framework of the role of brand names in consumer purchase decision making processes from a marketing research perspective that highlights some of these considerations.

Aaker (1991, 1996) and Aaker & Joachimsthaler (2000), in three books and various papers, have approached brand equity largely from a managerial and corporate strategy perspective but with a consumer behaviour underpinning. Prior research has addressed a number of managerial branding challenges and developed a number of distinct and useful concepts related to brand identity, brand architecture and brand marketing.

Keller (1993, 2003) has approached brand equity more from a consumer behaviour perspective. He defines ‘customer-based brand equity’ as the differential effect that brand knowledge has on the consumer or customer response to the marketing of that brand. According to this model, a brand is said to have positive customer based brand equity when customers react more favourably to a product and the way it is marketed when the brand is identified, as compared to when it is not (for example, when it is attributed to a fictitiously named or unnamed version of the product). Customer-based brand equity occurs when the consumer has a higher level of awareness and familiarity with the brand and holds some strong, favourable, and unique brand associations in memory. Keller views brand building in terms of a series of logical steps: establishing the proper brand identity, creating the appropriate brand meaning, eliciting the right brand responses and forging appropriate brand relationships with customers (Keller, 2001).

Achieving these four steps, according to his model, involves establishing six core brand values – brand judgments, brand performance, brand imagery, brand feelings and brand resonance. He also develops a number of different concepts and considers a number of different managerial applications (Keller, 1993; 1999b; 2000).
The Aaker and Keller models, despite their somewhat different foundations, have much in common with each other, as well as with other psychologically based approaches to brand equity, representing the ‘add value’ component endowed to a product as a result, in part, of past investments in the marketing of the brand. Notably, the Aaker and Keller models rely to some extent on spreading activation processes from an associative network model of memory. Janiszewski and Cunha Jr, (2004) offers some evidence to suggest that a connectionist model of brand-quality association may provide a more robust explanation of consumer reactions to various branding strategies than a spreading activation account, under certain conditions. Consumers, with this model, are assumed to be adaptive learners who are ‘learning to value’ as opposed to the spreading activation perspective, which they argue is more relevant for consumers who are learning to recall.

2.2.4 Economics based Approaches

Although behavioural models have perhaps been the dominant basis of studying branding effects and brand equity, other valuable viewpoints, as noted above, have also emerged: for example, Erdem et al., (2006) takes an information economics perspective in the value (or equity) ascribed to brands by consumers. Erdem’s (1998) approach, based in part on a premise of the imperfect and asymmetrical information structure of markets, centres on the role of credibility as the primary determinant of what she dubs as ‘consumer based brand equity’. When consumers are uncertain about product attributes, according to Erdem (2006), firms may use brands to inform consumers about product positions and to signal that their product claims are credible.
Similarly, Rao et al., (2000) have argued that a brand name can credibly convey unobservable quality where false claims would result in intolerable economic losses, due to losses of reputation, sunk investments, or losses of future profits in a brand alliance application with hypothetical television brands. They showed that consumers’ evaluations of the quality of a product with an important unobservable attribute were enhanced when the brand was allied with a second brand that was perceived to be vulnerable to consumer sanctions.

This thesis adopted the economic and psychological based approaches in undertaking the survey and developed a new model to determine the influence of brand equity on consumer choice. Factors such as perceived quality and brand loyalty are closely related to the psychological approach whereas brand awareness and proprietary brand assets are tied to economics based approach in lifestyles and classes of the consumers.

2.4 Empirical Literature Review

2.4.1 The relationship between Brand Equity and Consumer choice

Prior research of brand equity and consumer choice studies from researchers such as Mittal, and Lassar, Mittal, & Sharma, (1995) identified five constructs. These include performance, social image, value, trustworthiness, and attachment. Yoo et al., (2001)
integrated these five, and used three measures to test brand equity and consumer choice. The researchers measured brand loyalty, brand awareness, perceived quality and other proprietary brand assets in consumer product study. Yoo et al., (2001) did acknowledge marketing strategy (marketing mix elements), or marketing efforts as precursors of brand equity, and operationalized the marketing mix as store image, distribution intensity, price and promotional spending. Pappu and Cooksey (2005) questioned amalgamating brand awareness and brand association. Pappu et al., (2005) initially utilized and used two products, whereby both studies successfully tested the four dimensions for brand equity influence on consumer. These studies were dissimilar to Yoo et al., (2001). Neither Pappu et al., studies (2005) tested the marketing mix, brand equity and consumer choice relationship. Their findings supported the hypothesised four dimension model of consumer-based brand equity across two product categories and six different brands. Brand associations, proprietary brand assets and brand awareness were found to be two distinct dimensions of brand equity. The principal contribution of their research was that they provided empirical evidence of the multidimensionality of consumer-based brand equity, supporting Aaker’s and Keller’s conceptualisation of brand equity.

In a study by Ruchan and Huseyin (2007) on customer choice based brand equity in the hotel industry, the researchers explored interrelations of the four brand equity components; brand awareness, brand loyalty, perceived quality and brand image in hotel industry. The findings of their research paper supported the three-dimensional model of
brand equity and consumer choice in the hotel industry, but brand awareness dimension was not found significant in the tested model for hotels. Ruchan et al., (2007) acknowledged that further research should attempt to examine brand equity across many different product categories, as this will give the opportunity to make comparisons between different industries, and products.

Christodoulides & Chenatony (2010) (2013) study on the influence of brand equity on consumer responses, investigated the effects of this construct on consumers’ responses using data from two European countries. The results of their study indicated that brand equity dimensions inter-relate. Brand awareness positively impacts perceived quality and brand associations. Brand loyalty is mainly influenced by brand association and finally that perceived quality, brand associations and brand loyalty are the main drivers of overall brand equity. Their findings also corroborate the positive impact of brand equity on consumers’ responses. In addition, the general framework proposed in their study found to be empirically robust across the studied countries with only a few differences being observed.

2.4.2 Brand loyalty and consumer choice

The Taylor, Celuch, & Goodwin, (2004) study on "The importance of brand equity to customer loyalty" involved a nation-wide sample of industrial customers of heavy equipment manufacturers. Their findings suggested that brand equity and trust are
consistently the most important antecedents to both behavioural and attitudinal forms of customer loyalty. They also evidenced that the models underlying the formation of behavioural versus attitudinal forms of customer loyalty may vary across research settings. Their results suggested that industrial equipment marketers may consider moving beyond a focus on satisfaction in relationship marketing strategies toward integrated strategies that foster brand equity and trust in their customer base as well.

The Macintosh (1997) study on ‘retail relationships and store loyalty: A multi-level perspective’ findings reveal that for those with an interpersonal relationship, trust and commitment to the salesperson are directly linked with purchase intention as well as indirectly through store attitude. For customers without a salesperson relationship, trust in the store leads to loyalty indirectly through store attitude, but does not have a direct impact on purchase intention. The results illustrate the existence of multi-level relationships between customers and stores and how those relationships link to loyalty. Their research expounds on the complexity of relationship retailing, while providing further evidence of the value of generating and maintaining interpersonal relationships as a retail strategy.

Hanzaee and Andervazh, (2012) investigated the relationship between factors affecting brand loyalty and purchase intention in the cosmetic industry in Iran. He or [or She] investigated the antecedent elements that lead to brand loyalty and purchase intentions.
The research results showed that there was a positive and significant relationship between factors of brand loyalty and cosmetics purchase intention.

Malik (2012) explored the effect of brand awareness and brand loyalty on purchase intention. The results of this study indicated that purchase intentions have a strong positive association with brand awareness and brand loyalty, and concluded that purchase intentions can be enhanced by brand awareness and brand Loyalty as a result of their strong positive association, thus managers all over the world should strive to promote the brand awareness along with brand loyalty as both of them contribute towards positive purchase intentions.

Knox and Walker (2001) developed a measure in which both brand commitment and brand support were found to be necessary and thus sufficient conditions for loyalty to exist. Based on this measure, four consumer purchasing styles were identified and characterized after identifying the purchase behaviour and its elements because post purchase behaviour is one of the factors which affects brand equity. They are: ‘loyal’, ‘habitual’, ‘variety seekers’, and ‘switchers’.

Quester and Lin (2003) examined the link between product involvement and brand loyalty. Furthermore, the link between product involvement and brand loyalty was found to involve different aspects of product involvement for each of the products concerned. Hence, future researchers in the area should be mindful that product involvement and
brand loyalty were not universal constructs; they should be examined within specific consumer and product parameters.

Atilgan, Aksoy & Akinci (2009) examined the practicality and application of a customer based brand equity model based on Aaker’s well-known conceptual framework of brand equity. The study employed structural equation modelling to investigate the causal relationships between the dimensions of brand equity measuring the consumers’ perceptions of the dimensions of brand equity. Specifically, it measured the way in which consumers’ perceptions of the dimensions of brand equity affected the overall brand equity evaluations. Data was collected from a sample of university students in Turkey. The study concluded that brand loyalty was the most influential dimension of brand equity. Weak support was found for the brand awareness and perceived quality dimensions. Subsequent to identifying that the brand loyalty was the most influential dimension of brand equity, there was naturally, a need to find the factors involved in the brand awareness and perceived quality order to strengthen their influence on brand equity.

Gil, Andres, & Salinas, (2007) analysed the source of consumer based brand equity and its dimensions by evaluating information of a brand provided by both the family and the firm (via price, promotion and advertising spending). Results prove that positive brand information provided by the family was higher than those of the marketing variables studied. Results also showed that brand loyalty was much closer to the concept of
overall brand equity than brand awareness associations and perceived quality. Hence there was a need to study the impact of purchase decision on post purchase behaviour.

Audhesh et al., (2007) focused on the feeling associated with being rejected by the preferred service brand, and its effect on consumer assessment of the alternate brand. The findings revealed that while the consumers who manage to get their preferred service brand tend to be more satisfied with the features of the obtained brand and exhibit higher levels of brand loyalty towards that brand, consumers who end up with a service brand that is not their first choice seemed to have lower levels of satisfaction with, and loyalty towards, the obtained brand.

2.4.3 Brand Awareness and consumer choice

The Seitz, Razzouk and Wells (2010) study on ‘the importance of brand equity on purchasing consumer durables: an analysis of home air-conditioning’ findings indicated that having a brand name facilitates the communication of quality to the customers, but was not an important choice criterion. However, consumers were willing to pay more for an air-conditioner with a reputation for quality. Their results also indicated that consumers searched for product information from friends and family, manufacturers’ websites and brochures. However, dealers were highly influential during the decision-making process by helping consumers to refine their choice criteria and choose systems that satisfied their end goals. This study asserted that if the consumers are better
informed about the important attributes of a particular brand (reliability, serviceability and energy efficiency), they would be willing to pay more for it. They concluded that to raise brand awareness, manufacturers should use broadcast media that include television and radio frequently and seasonally, and supplement them with outdoor or print to gain brand awareness and knowledge, thus increasing the likelihood that brand becomes a criterion in the decision-making process. They also added that those consumers who are unaware of the different brands tend to assume homogeneity and shop for price.

The Hakala, Svensson, & Vincze, (2012) study on ‘consumer-based brand equity and top-of-mind awareness: a cross-country analysis’ focused on dimensions of consumer-based brand equity, and especially the recall level of brand awareness. The purpose was to identify any statistically significant differences in brand recall in various product categories and different national contexts. The findings showed that the four dimensions of brand equity co-vary depending on the cultural context. The results also revealed a relationship between top of the mind and the national context that was generalizable in the three product categories. However, the findings of this study should be replicated with non-student samples in other product categories and cultural contexts.

Brand awareness refers to the strength of a brand’s presence in consumers’ minds and is an important component of brand equity (Aaker, 1991; Keller, 2000). Aaker mentioned several levels of brand awareness ranging from mere recognition of the brand to
dominance, which refers to the condition where the brand involved is the only brand recalled by a consumer. Aaker (1991) defines brand awareness as “the ability of the potential buyer to recognize and recall that a brand is a member of a certain product category.” According to Keller (2000), brand recall refers to consumers’ ability to retrieve the brand from memory, for example, when the product category or the needs fulfilled by the category are mentioned. Keller (2001) argued that “brand recognition may be more important to the extent that product decisions are made in the store.”

Customer based brand equity occurs when the consumer has a high level of awareness and familiarity with the brand and holds some strong, favourable, and unique brand associations in memory.

Yoo et al., (2001) explored the cross cultural generalizability of brand equity creation process model. The results revealed which marketing efforts and brand equity dimensions had invariant effects on brand equity. While brand loyalty and perceived product quality do not have an invariant effect on equity, brand awareness and association had an equivalent effect. Hence, it is essential to evaluate the brand awareness characteristics and explore the brand loyalty and perceived quality attributes.

Kim et al., (2003) conducted a study with the aim of testing four elements of brand equity namely; brand awareness, brand image, brand loyalty, and perceived quality. The results found that of those attributes, brand awareness had the strongest direct effect on revenues, while loyalty had the least effect.
Baldauf et al., (2003) evaluated the consequences of brand equity management as one of the most important measurement issues for intangible assets in the new economy. Results indicated strong support for measures of brand awareness as antecedents of firm performance, customer value and willingness to buy.

Yi & La (2004) extended the concept of brand awareness to ‘awareness sensitivity and bias’ using signal detection theory. The effect of divided attention on the extended components was investigated in three laboratory experiments. Findings showed that, in the attended mode compared with the unattended mode, consumers perform better in preserving favourable brand awareness and have a conservative reaction tendency. The effects of attention occur in building brand awareness and have conservation reaction tendency. This effect of attention occurs in building brand awareness for short presentations, but not for long presentations. These findings may serve as guidelines for a strategy formulation for enhancing customer mind set brand equity.

2.4.4 Perceived quality and consumer choice

Kamakura and Russell (1999) proposed three measures of brand equity, each based on the value that the consumer places on a product: perceived value, dominance ratio and intangible value. Perceived value estimates the value consumers assign to the brand, after discounting for situational factors such as price and promotions. Dominance ratio
evaluates the brand’s ability to withstand price competition, an important indicator of a brand’s value to the firm. Intangible value isolates the component of quality perceptions that cannot be directly attributed to the physical product. The findings revealed that from a theoretical perspective, perceived value and the dominance ratio appeared to be equivalent concepts: brands perceived to be of high quality were also the strongest price competitors. Intangible value, in contrast, highlights brands that were unusually strong (or weak) competitors relative to the brands objective determined quality. A product or service comprises of tangible and intangible attributes. Apart from the quality factors, intangible things are also to be identified and the same thing may be tested to show how it affects the price of a brand.

Heller, Geursen, Carr, and Rickard (2003) developed a general service sector model of repurchase intention from the consumer theory literature. A key contribution to the structural equation model was the incorporation of customer perceptions of equity, value and customer brand preference into an integrated repurchase intention analysis. The model described the extent to which customer re-purchase intention was influenced by seven important factors: service quality, equity, value, satisfaction and expected switching cost. The results found that although perceived quality does not directly affect customer satisfaction, it does so indirectly via customer equity and value perceptions. The study also found that past purchase loyalty was not directly related to customer satisfaction or current brand preference and that brand preference is an intervening factor between customer satisfaction and re-purchase intentions. The main factor
influencing brand preference was perceived value with customer satisfaction and the expected switching cost having less influence.

Bamert & Wehrli (2005) conducted a study assessing the quality dimension in consumer based measures of brand equity in the context of services and compared it with consumer goods. Nine different brands were tested in a consumer based experimental online survey. Each participant was randomly assigned to a brand. The findings indicated that in consumer goods, customer service can be considered as a marketing instrument while in the services market, customer service was part of the perceived quality of a service. Therefore, there is a need to identify the impact of other building blocks of brand equity through further research.

Anselmsson et al., (2006) developed a framework for understanding what really drives price premium and customer based brand equity for consumer packaged groceries. While the findings of the study indicated that quality attributes (taste, texture, appearance, and packaging) are very important for developing customer based brand equity, it is essential to know the other factors which lead to improve the elements of quality.

Bartikowski et al. (2010) noted that in the short run, higher quality perceptions lead to increased profits due to premium prices and in the long run, to effective business growth, involving both market expansion and market share gains. Similarly, Nguyen,
Barrett, and Miller, (2011) posit that there are positive relationships between perceived quality and brand loyalty, between brand awareness and perceived quality (apart from other allied relationships like advertising attitudes and brand awareness), and between distribution intensity and brand awareness in emerging markets like Bangkok, Thailand, Hanoi, and Vietnam. Such studies have a huge gap where products are unbranded, in the sense that consumer awareness is low, they can have a short lifetime, and they are not strongly related to consistent quality. The product, in such cases, will not be a strong cue in the formation of quality experience, and consumers will still rely to a large extent on other cues such as other proprietary brand assets, brand loyalty, awareness and associations.

2.4.6 Consumer Choice

The study of Meyers (2013) aimed to provide an understanding of the consumer uncertainty and risk that affect consumer choice and purchase intention. They focused on the psychological dimensions of risk to examine consumer uncertainty as it relates to consumer choice. This study showed that consumers largely associate the uncertainty and risk involved with making purchases. The study concluded that by understanding the uncertainty and risk these consumers feel regarding consumer choice and purchase intentions, these fears can be alleviated by companies hoping to engage this audience through advertisement, to reinforce belief and conviction to aid them in decision making.
The Norberg and Maehle (2011) study on antecedents and outcomes of consumer choice asserts that it is important for marketing managers to understand which factors influence consumers’ purchase intentions and their willingness to pay a premium price. They stated that special attention should be paid to building consumers’ trust in a brand label which is an important factor influencing consumers’ attitude toward the label. It is also crucial to create positive expectations regarding the quality of the labelled product among consumers. However, it is important to avoid creating expectations that are too high. If the product quality does not meet high consumer expectations, it can lead to dissatisfaction and decreased repurchase rates.

White (2005) developed and refined the framework underpinning consumer satisfaction emotions and re-examined the emotions and behavioural choice link. The study suggested that satisfaction emotions were best conceptualized as a three-dimensional construct that included positive, negative and “bi-directional” emotions. The findings of the study indicated a statistically significant positive relationship between emotions and consumer purchasing behaviour when the underlying products establish satisfaction, and as a consequence if a product is referred, or is experienced, consumers are ingrained to purchase from their satisfaction levels.

The Prieto and Caemmerer (2012) study on factors influencing car purchasing decisions results showed how employment can generate substitution in car purchasing behaviour. These findings underline the importance of economic and financial variables in
explaining choice between car segments not only by car model, but also by the differentiation whether the car is new or used. However it should be noted from Prieto et al., (2012) that choice cannot generalized in other markets, and thus there is need for specific research in consumer purchasing decisions in every market.

Lawson (1997) demonstrated that consumer decision making requires three types of information which consist of appropriate evaluative criteria for the solution of the problem, existence of appropriate alternative solutions and performance level or attributes of each alternative on each evaluative criterion. Lawson stressed that a great variety of information of potential interest to consumers exists in the external environment.

John et al., (1998) identified alternative perspectives on consumer choice, which indicated three perspective in consumer behaviour; the traditional decision making perspective, the experimental perspectives, and the behavioural influence perspective. The traditional decision making perspective holds that a consumer evaluates various options based on beliefs about brand attributes leading to attitude formation. According to the experimental perspective, consumer choice making is dominated by the effect or emotion side of the individual. The key aspect of behavioural influence perspective is that environmental contingencies play a dominant role in how consumers behave.
Nyer et al., (1999) stated that moods were transient to feelings that were generally unrelated to a specific event or object. Unlike emotions, moods tend to lack intensity and may operate without an individual’s awareness. Moods both affect and get affected by the consumption process. They also influence the consumers’ decision processes and the purchase and consumption of various products.

Miranda, Konya, & Havrila, (2005) examined consumers’ perception of the difference between customized/modified products and brand stereotypes, and the extent of a brand’s impact on consumers’ decisions to customize their choices. The results show that factors, other than the motive of, and the satisfaction from, customizing the product with a significant influence on the perceived difference between customized items and brand stereotypes, had little in common with factors that impel consumers to customize their purchases based on the imagery of brands. A significant reason why consumers engaged in composing their product choice was to satisfy their desire for quality and genuinely believe that their compositions were appreciably different from brand stereotypes thus vindicating the theory of self-congruency. According to Miranda et al., (2005) the extent to which brand influences customers to tailor their purchases, depends on the stores from which consumers make their purchases.
2.4.5 Effect of Proprietary Brand Assets on Consumer choice

While evaluating a brand, Keller (1993, 2001) noted that consumers link the performance of the functional attributes to the brand (Lassar et al., 1995). The brand’s failure to perform the functions for which it is designed results in the brand having a low level of brand equity. Performance is defined as a consumer’s judgment about a brand’s fault-free and long-lasting physical operation and flawlessness in the product’s physical construction (Lassar et al., 1995).

Lassar et al., (1995) limit the reference of the image dimension to the social dimension, calling it social image since social image contributes more to brand equity. Social image is defined as the consumer’s perception of the esteem in which the consumer’s social group holds the brand and includes the attributions a consumer makes and a consumer thinks that others make. A consumer’s choice of a brand depends on a perceived balance between the price of a product and all its utilities (Lassar et al., 1995). A consumer is willing to pay premium prices due to the higher brand equity.

Thakor and Lavack, (2003) argue that the brand’s country of origin must also be considered. They define brand’s origin as “the place, region or country to which the brand is perceived to belong by its customers.” Country of origin is known to lead to associations in the minds of consumers (Keller, 2001). The country of origin of a product is an extrinsic cue (which, similar to brand name, is known to influence consumers’ perceptions). Furthermore, less concern should be given to the place where
brands manufacture their products, and more to the place where people perceive the brand’s country of origin to be. Therefore, country of origin in the proposed framework referred to the brand’s country of origin.

Organizational associations include corporate ability associations. These are associations related to the company’s expertise in producing and delivering its outputs and corporate social responsibility associations which include the organisation’s activities with respect to its perceived societal obligations (Chen 2001).

According to Aaker (2001), consumers consider the organization, the people, values, and programmes that lie behind the brand. ‘Brand-as-organisation’ can be particularly helpful when brands are similar with respect to attributes, when the organisation is visible (as in a durable goods or service business), or when a corporate brand is involved.

Corporate social responsibility (CSR) must be mentioned as yet another concept that is influencing the development of brands nowadays, especially corporate brands as the public wants to know what, where, and how much brands are giving back to society. Both branding and CSR have become crucially important now that the organisations have recognized how these strategies can add or detract from their value (Blumenthal and Bergstrom, 2003). CSR can be defined in terms of legitimate ethics or from an
instrumentalist perspective where corporate image is the prime concern (McAdam & Leonard, 2003).

More empirical studies need to be done on the dimensions of the brand equity. Different dimensions of brand equity are likely to have interactive effects and it would be a challenge to focus on only ‘other proprietary brand assets’. For example, some dimensions might function as antecedents to consequences with respect to other dimensions.

2.4.7 Industry Context and consumer choice

Industry contextual factors have a significant influence on satisfaction-loyalty relationships. Often, this influence is construed in one of two ways. First is the level of distribution. Communication is thought to vary depending on the involved, an approach that has been recently popularized by the Consumer Satisfaction Index studies in Sweden, the United States, and other countries (Fornel et al., 1996). Secondly, industry and or product/service categories are posited to moderate the relationship between satisfaction and loyalty. Jones and Sasser (1995) have provided evidence that satisfaction loyalty relationships are consistently stronger in less competitive markets. Likewise, Johnson & Auli (1998) identified industry context as an important moderator of satisfaction loyalty relationships. Garbarino and Johnson (1999) reported that satisfaction assumes a relatively more dominant role in determining loyalty for transactional consumers. In contrast, consumers who are under the high efficacy
condition are more likely to be relationally oriented. As a result, for them trust is more important aspect than satisfaction in determining their choice as they tend to reciprocate trust by being more loyal to the specific firm.

Industry context is guided by extant research by Iacobucci and Ostrom (1996) and Wish, Deutsch and Kaplan (1976), who identified two key dimensions of consumer dispositions: valence, referring to the overall positivity or negativity of judgments (Johnson and Auh, 1998) and marketplace efficacy, referring to the perceived control that consumers feel that they have relative to sellers in the marketplace (Otnes, Lowrey and Shrum (1997) and Allison (1978)). These dimensions have been identified as core facets of commercial relationships with both providing a more balanced understanding of industry context dispositional mechanisms.

Likewise, in industries where consumers are disposed toward voice and feel empowered, satisfaction levels may be high as well because sellers are likely to be wary of the wrath of angry consumers who may engage in boycotts and organized protest. However, when consumers’ disposition toward voice and exit is curbed either because consumers feel powerless to exit and/or lack efficacy, Hirschman posited that satisfaction levels would suffer. As a moderating variable, this study will try and measure to what extent the consumers of bottled water, are empowered to act on their disposition on a brand of bottled water, and, furthermore, how resellers can ensure that there is a continuous cycle of purchase by consumers.
2.5 Summary of literature and Research Gaps

While the majority of research has been conducted on conceptualizing brand equity from the consumer perspective, there are a few empirical studies that mention how to actually measure brand equity (Aaker 2000; Farquhar 1999; Feldwick 1996; Kapferer 1992; Keller 1993; Shocker & Weitz 1988). The main research method used among the 22 studies to measure brand equity from an individual consumer perspective is the survey method (Kim et al., 2003; Nguyen et al., 2011; Park & Srinivasan 1994; Washburn & Plank 2002; Yoo et al., 2001).

Consumer-based brand equity, as mentioned above, is a multidimensional construct consisting of various attitudinal and behavioural components (Anantachart 1998). However, most customer-based brand equity models are measured by attitudinal aspects. For example, the most common constructs of measurement models are brand awareness (Holden & Lutz, 1992; Nguyen et al., 2011; Washburn & Plank 2002; Yoo et al., 2001); brand image or brand association (Kim et al., 2003; Martin & Brown 1990; Pappu et al., 2005; Washburn et al., 2004; Yoo et al., 2001); and brand preference (Anantachart 1998).

Although all of the above are based on Aaker’s (1991) model for measuring consumer-based brand equity, there are some different findings among these research results. For
example, Yoo et al., (2001) found that brand association and brand awareness were not significantly discriminant: these two concepts were added to others factors called perceived quality, Brand loyalty, and other proprietary brand assets awareness. However, this finding is challenged by other results, which show a distinction between brand awareness and brand association (Washburn & Plank 2003; Pappu et al., 2005). Moreover, the measurement of each component of brand equity has been treated differently in the empirical tests of Aaker’s model. For example, brand awareness was measured using a single measure in the Pappu et al., (2005) study, while it was treated as a multidimensional scale in other studies by Yoo et al., (2001) and Kim et al., (2003). This illustrates one of the gaps in the literature on branding, which has not yet reached a consensus definition and measurement of customer-based brand equity. Therefore, this measurement model needs to be replicated in different contexts in order to increase the validity and reliability of the measurement scale (Baldauf et al., 2003; Washburn & Plank 2002; Yoo et al., 2001).

The literature shows that most studies on customer-based brand equity have approached the subject from the perspective of the consumer, even though the ‘customer’ might be an individual or an organisation (Atilgan et al., 2005). Therefore, the question ‘Does customer-based brand equity from the consumer perspective apply to the context of business while business marketing is still being developed?'
The major limitation of the Yoo and Donthu (2001) three factor consumer-based brand equity scale is that brand awareness and brand associations- two theoretically distinct underlying constructs of brand equity, collapsed into one dimension. The question of whether or not brand awareness and brand associations should be collapsed is critical. Although the two constructs are clearly correlated, both Aaker (1999) and Keller (2002) distinguish between brand awareness and associations. According to Aaker’s (1999) conceptualization, brand awareness must precede brand associations.

Nonetheless, the two dimensions are not synonymous since one can be aware of a brand without having a strong set of brand associations linked to memory. Pappu et al., (2005) achieved a distinction between the dimensions of brand awareness and brand associations. However, their confirmatory factor model suffers from a serious limitation. Two of brand equity’s dimensions: brand awareness and brand loyalty are operationalized by one and two indicators respectively, making the psychometric properties of their scale questionable (confirmatory factor analysis requires a minimum of three indicator variables for each exogenous construct). Another limitation is related to the exclusive reliance on student samples to develop and validate their brand equity scale. Students are generally not effective surrogates of consumers.

2.6 Conceptual Framework

Brand equity is defined as the value that consumers associate with a brand (Aaker 1999) and is the consumers’ perception of the overall superiority of a product carrying that
brand name when compared to other brands. The conceptual framework for measuring customer-based brand equity is developed by using the conceptualization of Aaker’s dimensions of brand equity.

The model below bears a figure that elaborates how industry context affects the relationship between brand equity and consumer choice. To ensure conclusive results, the study captured how industry context affects brand equity, consumer choice and the relationship between both dependent (consumer choice) and independent (brand equity). Therefore, the moderating variable which is the core of our study, will describe the positive or negative influence it has on the independent and dependent variables. Furthermore, the model will also describe the relationship between brand equity and consumer choice, and as such will enable retailers and brand managers to understand the relationship, importance of brand equity and how it relates to continual product purchases.
The model represents four dimensions of brand equity. They include: brand awareness, brand loyalty, perceived quality and other proprietary brand assets, which will be measured individually on how they affect consumer choice. Furthermore, this model seeks to establish the strength of each element, the brand equity effect on consumer choice and the moderating effect of industry context on the relationship between brand choice and consumer choice.
equity and consumer choice. The dependent variable is consumer choice while the independent variable is Brand equity.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, the empirical model, measurement, definition and operationalization of variables. The target population, sample size, determination of the sample size and the sampling techniques are explained. There is a description of the data collection instruments, reliability and validity. This chapter also discusses data analysis procedure and ethical considerations observed during the study.

3.2 Research Design

The research design used in this study was explanatory research using cross-sectional survey design. The explanatory research was ideal to describe the characteristics of the variables and at the same time investigate the cause effect relationship between variables (Malhotra, Birks, Palmer, & Koenig-Lewis, 2003). The choice of cross-sectional allowed collection of quantitative data from a population in an economical way (Mugenda & Mugenda 2003; Saunders, Saunders, Lewis, & Thornhill, 2009). This design was archetypal because of its suitability in elaborating the characteristics of a particular individual or group of individuals (Kothari, 2004).
3.3 Empirical Model Formulation and Estimation

From the conceptual framework, consumer choice (Y) is a function of the composite variable brand equity whose components are brand awareness (BA), brand loyalty (BL), perceived quality (PQ) and proprietary brand assets (PB). Hence:

\[ Y = f(BA, BL, PQ, PB) \]…………………………………………………………………3.1

Consumer choice Y is a latent or unobserved variable. However, it is made concrete when purchasing decisions are made. To this end Y is estimated using consumer purchase decision. To achieve the study objectives a variety of choice models such as linear probability model (LPM), probit and logit models have been used. Logit and probit models yield similar and robust results and may be used interchangeably. However, the linear probability model is weak in that there is no guarantee that the probability will lie between zero and one (Gujarati, 1999). Therefore, the study used a simple binary logit model

Purchasing decision, Y can be categorized as follows:

…………………………………………………………………………………………………….. 3.2

Assuming Y follows a logistic distribution, it follows that:

\[ Y_i = \frac{e^{\beta_0 + \beta_1 BA_i + \beta_2 BL_i + \beta_3 PQ_i + \beta_4 PB_i + e}}{1 + e^{\beta_0 + \beta_1 BA_i + \beta_2 BL_i + \beta_3 PQ_i + \beta_4 PB_i + e}} \]…………………………………………………………………3.3
Where: $\beta_i$ represents a vector of parameter estimates for each independent variable defined in the latent regression model in equation 3.1.

Equation 3.3, the logistic regression model, is non-linear in parameters. $\beta_i$ Coefficients measure the natural logarithm of predicted probabilities odds ratio rendering $\beta_i$ coefficient difficult to interpret. To establish the marginal effects of independent variables on the purchasing decision, the following equation was estimated:

$$\frac{\partial P}{\partial X_i} = \beta_i P(1-P)$$  \hspace{1cm} \text{Equation 3.4}

Where: $\beta_i$ is the corresponding coefficient and $P$ is the probability that one moves from no purchase category to purchase.

To establish whether industry context moderate between consumer choice and the explanatory variables three models were estimated. First model 3.3 was estimated as the base model to determine the relationship between the dependent variable and the independent variables. Secondly, Keppel and Zedeck (1989) suggested that moderation is captured by estimating multiple regression models as specified. Model 3.6 included industrial context (IC) as an explanatory variable.

$$Y_i = \frac{e^{\beta_0 + \beta_{BA} + \beta_{BL} + \beta_{PQ} + \beta_{PB} + \beta_{IC} + e}}{1 + e^{\beta_0 + \beta_{BA} + \beta_{BL} + \beta_{PQ} + \beta_{PB} + \beta_{IC} + e}}$$ \hspace{1cm} \text{Equation 3.5}

In addition, model 3.7 was estimated to give the direction and effect of the moderator on the independent variables and its total effect on the dependent variable.

$$Y_i = \frac{e^{\beta_0 + \beta_{BA*IC} + \beta_{BL*IC} + \beta_{PQ*IC} + \beta_{PB*IC} + e}}{1 + e^{\beta_0 + \beta_{BA*IC} + \beta_{BL*IC} + \beta_{PQ*IC} + \beta_{PB*IC} + e}}$$ \hspace{1cm} \text{Equation 3.6}
According to MacKinnon (2002) if $\beta_1$ to $\beta_4$ in model 3.6 are not significant but $\beta_5$ in model 3.5 is significant then industrial context is an explanatory variable. However, if $\beta_1$ to $\beta_4$ in model 3.6 are significant then industrial context is a moderator whose effect and direction are given by the $\beta_i$'s.

### 3.3.1 Operational Definitions and Measurements of Variables

To achieve the study objectives as guided by literature review, the following definition and measurement of dependent and independent variables was adopted.
<table>
<thead>
<tr>
<th>Category</th>
<th>Variable</th>
<th>Indicators</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent</td>
<td>Consumers choice of branded bottled water</td>
<td>Consumers purchase decision</td>
<td>1 if there is a purchase 0 no purchase</td>
</tr>
<tr>
<td>Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>Brand Awareness</td>
<td>Knowledge of the manufacturer and ability to distinguish between the brands</td>
<td>Consumer based brand equity= value perception + brand preference + brand awareness</td>
</tr>
<tr>
<td>variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brand Loyalty</td>
<td>Willingness to switch brands and referring other customers to the preferred brands</td>
<td>Validating Aakers conceptualization. Difference in overall referals, preference and product objections</td>
</tr>
<tr>
<td></td>
<td>Perceived Quality</td>
<td>Satisfying brand performance and quality</td>
<td>Product attribute + perception + brand choice</td>
</tr>
<tr>
<td></td>
<td>Proprietary brand assets</td>
<td>Associated class and brand visibility</td>
<td>Intrinsic Brand strength, extrinsic brand strength, performance, choice intention, performance, social image.</td>
</tr>
<tr>
<td>Moderating</td>
<td>Industry context</td>
<td>Supermarkets procurement practices, distribution networks and customer efficacy</td>
<td>Brand channel relationships, brand accessibility</td>
</tr>
<tr>
<td>Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author, (2013)
3.4 Target Population

The list of supermarkets with smart card systems located in NCBD served as the sampling frame. As of April 2013 there existed a total 264,808 smart card users in NCBD area. The supermarkets that are located in the NCBD include Nakumatt, Uchumi, Tuskys, and Chandarana, which were conveniently sampled. The four supermarkets had a total number of 264,808 customers which was distributed as shown on table 3.2.

Table 3.2 Distribution of Target Population

<table>
<thead>
<tr>
<th>Institution</th>
<th>Registered Customers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nakumatt</td>
<td>172,350</td>
<td>66%</td>
</tr>
<tr>
<td>Uchumi</td>
<td>56,900</td>
<td>21%</td>
</tr>
<tr>
<td>Tuskys</td>
<td>33,200</td>
<td>12%</td>
</tr>
<tr>
<td>Chandarana</td>
<td>2,358</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>264,808</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Selected Supermarkets in NCBD (2013)

Nakumatt Holdings had the highest number of registered customers at 172,350 while, Chandarana commanded a relatively small number of registered customers at 2,358 customers. The other included supermarkets were Uchumi (56,900 registered customers), and Tuskys (33,200 registered customers).
3.5 Sampling Design

The study uses convenient and systematic sampling technique to select the required sample size. The sample size will be determined by use of Yamane (1967) formula for calculating sample size.

The formula is  \( n = \frac{N}{1+N(e)^2} \)

Where \( n \) = sample size, \( N \) = population size, \( e \) = error term

\[ N = 264808, \ e = .05 \] hence,

\[ n = \frac{264808}{(1 + 264808)(.05)^2} \]

\[ = 400 \]

**Table 3.3 Sampling and sample size**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Frequency</th>
<th>Multiplier</th>
<th>Sample Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nakumatt</td>
<td>172350</td>
<td>0.0015</td>
<td>260</td>
<td>65</td>
</tr>
<tr>
<td>Uchumi</td>
<td>56900</td>
<td>0.0015</td>
<td>85</td>
<td>21</td>
</tr>
<tr>
<td>Tuskys</td>
<td>33200</td>
<td>0.0015</td>
<td>50</td>
<td>13</td>
</tr>
<tr>
<td>Chandarana</td>
<td>2358</td>
<td>0.0015</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>264808</strong></td>
<td><strong>0.0015</strong></td>
<td><strong>400</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source (Author, 2013)

Table 3.3 shows that 65% respondents were from Nakumatt, 21% respondents were from Uchumi, 13% from Tuskys and 1% from Chandarana supermarket. The respondents were systematically sampled, and weighted to a 0.0015 to have a representative sample weight respective to the supermarkets in question.
3.6 Data Collection Instruments

3.6.1 Survey Instrument

The study used mainly primary data, through the use of a semi-structured questionnaire administered to the sampled customers, and employee interviews in the supermarkets. The use of a semi-structured questionnaire enabled the researcher to collect both qualitative and quantitative data. Moreover, this study also used secondary data, which was obtained through industry reports, and marketing journals.

The questionnaire begins with a brief introduction revealing the purpose and importance of the study in addition to the statements allaying fears regarding participation and confidentiality of their responses in the survey. This study adopted one of the most authoritative brand equity scales by Yoo and Donthu (2001). Yoo and Donthu (2001) used the four elements of customer-based brand equity entrenched by Aaker (1991) and Keller (1993) in developing a multifaceted scale to evaluate brand equity. The Yoo et al., (2001) scale is perhaps the most robust scale in the literature due to the fact that they used a comprehensive approach to scale development (Christodoulides and de Chernatony, 2010). Furthermore the Lassar et al., (1995) Iacobucci and Ostrom (1996) scales for consumer choice and industry context respectively were adopted in this study. They used samples from diverse cultures making their scale culturally valid. Also, their scale are applicable to various product categories unlike other scale developments. Third, the scale are parsimonious and easy to administer which makes it easy for brand
managers to find out the equity of their brands quickly and efficiently. Finally, the scale measures brand equity at the individual level and have gone through rigorous validation.

The questionnaire used dichotomous, multiple choice, and five point Likert scale type statements, and open ended questions. The questionnaire has been divided into three parts: part-A, part- B, & part-C. Part- A consists of questions connected to respondents’ socio-economic, demographic and geographic characteristics. The responses are measured using nominal and interval scales. The second part – B consists of questions relating to consumers brand awareness factors covering values such as brand name recognition, sales promotion, and advertising and shopping motives. The third part consists of questions relating to brand loyalty, brand attitude and repeated purchase selection. All items are measured using five-point Likert scale. The fourth and fifth part consist of perceived quality and proprietary brand assets questions; they are also measured using a five point likert scale. Finally the moderating variable industry context was also measured with a five point likert scale as well as a dichotomous scale.

Appendix F shows the coding and scales adopted in this study, BA1 to BA4 represents codes for brand awareness scales, whereas BL represents brand loyalty scales from 1 to 4 (BA1 to BA4), PQ represents perceived quality of scales 1 to 4 (PQ1 to PQ4), IC represents industry context scales 1 to 4 (IC1 to IC4) and finally consumer choice is coded as CC (CC1 to CC4).
3.6.2 Interview Schedule

Malhotra et al., (2003) argue that interviews enable researchers to get more information, which would not be feasible in a questionnaire. Thus, for this study, a semi structured interview was administered to customers and select few senior employees (see appendix B and C). The interviews enabled the assessment of issues relating to the industry context and the supermarkets decision to stock certain brands of bottled water. Furthermore interviews enabled this study to make comparison between research findings, and triangulate the present research. This is evidenced by Saunders, et al., (2009) that key interviews can be used to cross validate research findings to improve confidence in research conclusions.

3.6.3 Validity of the data collection instruments

The content validity in this research was measured in the following ways. First, all of the scales were borrowed from previous studies on the same subject, and were adapted to the specifics of the research. A pilot test was carried out in a group of conveniently selected respondents totalling 23, among them 10 male and 13 female respondents. In the results of the unstructured questionnaire, which was asking about the preferred brand, an anomaly became apparent, with the respondents feeling that their choices were limited. Consequently question was revised to address the main popular brands of water stocked in the popular supermarkets in Nairobi Central Business district.
3.6.4 Reliability of the data collection instruments

Reliability of the instruments was obtained by drawing from literature such as Baldauf (2003) on brand equity and performance of small businesses, in which the variables have been tested for reliability by other researchers, and was adapted for this study (Hammond 2008). Furthermore, Cronbach alpha was used to estimate internal consistency, by determining how items of the instrument related to each other and to the entire instrument. A reliability of 0.7 was enough on predictor tests or hypothesized measures of a construct (Ehlers, 2000). The higher the score, the more reliable the generated scale is, but it was noted that a threshold of 0.5 and above is adequate to ensure the data is reliable (Lassar, 1995). The table 3.4 below shows the results of the reliability tests.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Variable</th>
<th>No of items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Awareness</td>
<td>Brand name</td>
<td>2</td>
<td>0.674</td>
</tr>
<tr>
<td></td>
<td>Sales Promotion</td>
<td>2</td>
<td>0.568</td>
</tr>
</tbody>
</table>
In the table 3.5 above the results were obtained using SPSS 19.0 software, majority of the questions met the threshold of 0.5 and above as indicated by Sharma (2007) and Shindler (2003). The communication factors fell well below the acceptable reliable threshold of 0.5, and also competitive advantage failed with a Cronbach’s alpha value of 0.313 and 0.112 respectively, as such these variables were excluded in the data analysis.

3.7 Data Collection Procedures

The data collection process involved getting the approval letter from the National Council of Science and Technology (NCST), and a letter of introduction from Kenyatta University, the research was carried out in Nairobi Central business district where the respondents were intercepted after they had finished their shopping. The criteria selected for an individual shopper, to be included in the sample, are that he/she must be a smart
card holder. Furthermore interviews were conducted on procurement managers and store managers of the supermarkets. The survey team formally approached 400 respondents with questionnaires, in four different supermarkets, in the central business district of Nairobi, with every customer approached systematically after every fifth smart card shopper as they finished their shopping, and whereas the selection of the supermarkets in the NCBD were conveniently selected.

The interviews were conducted with procurement and store managers through face to face method by the researcher. This enabled the researcher to clarify question which were not well understood by the respondents as per Sekaran (2000) assertion. In addition a face to face interview allowed the researcher to explore issues raised by the informants which would not have been possible through telephone, mail or online interviews, Sekaran (2000).

The secondary data was used to gain insight into the nature and extent of consumer choice offering, the extent of work carried out on the phenomena and the availability of data on the phenomena, in order to commence research. Moreover, “examination of secondary data is a prerequisite to the collection of primary data” (Malhotra, 2007).
3.8 Data Analysis.

The study objective was to establish the influence of brand equity on consumer choice of brand bottled water in the NCBD. This objective was empirically analysed using a mean measure of consumer choice frequencies across the set of brand equity variables. Descriptive statistics was conducted to provide salient features and characteristic of each variable of interest. According to Mugenda and Mugenda (2003) descriptive statistics assist in evaluating participant’s attitudes, value judgments and other distinctive patterns. It therefore provides meaningful information for policy formulation. To this end, the mean, standard deviation and variance of each of the key variables were obtained and evaluated. In addition, normality test was also conducted to ensure that data was fit for further statistical analysis. For the purpose of data cleaning and analysis, a coding file was created with a distinctive code assigned to each variable. To clean the data, analysis for outliers and tests for violations of assumptions was conducted. To establish the composition and distribution of the respondents’ with respect to gender, age and income frequency polygons and histograms were used.

Prior to testing the fit of the logit model, multicollinearity was tested using the tolerance and variance inflation factors (VIF), as recommended by Field (2009) to establish the possibility of a collinearity problem of the predictor variables. Multicollinearity poses a problem for multiple regression models since as collinearity increases the standard error of coefficients also increases making them less trustworthy.
As noted by Field (2009) empirical analysis was crucial in drawing meaning of the population of study, which was accomplished through a logistic regression model. The overall fit of the model was tested using the log-likelihood and Chi-square as recommended by Field (2009). The contribution of each predictor variable was analysed using the Wald statistic.

To address the objectives, a logistic regression model specified in equation 3.7 was estimated using Maximum likelihood estimator (MLE). Given that the logit distribution is nonlinear, MLE is the most suitable estimator as it still yields asymptotically unbiased, efficient and consistent results (Wooldridge, 2003). Given a large data sample, asymptotic properties of MLE makes it possible to estimate unbiased and efficient estimators even when important Gauss Markov assumptions are violated. However, it is important to note that MLE does not resolve endogeneity and therefore correct specification of the model is indispensable (Greene 2003).

The following diagnostic tests were conducted to measure the predictive strength of the logistic regression models; Pseudo R square and log likelihood tests. The former were used to test the goodness of fit while the later was used to test whether the coefficients are jointly significant. Lastly, link test was used to test whether the model was correctly specified. Therefore in the presentation of results on the various objectives diagnostic tests are discussed before discussing the study findings.
To address the thesis objectives binary logit models as provided in model 3.3 and 3.4 were estimated. Marginal effect and coefficients significance were used to draw inferences relevant to the study. In establishing the moderating effect of the industry context on the relationship between brand equity and consumer choice in the branded bottled water among supermarkets customers in Nairobi Central Business District, data from section B and interview schedule were used. Further, decision making criteria in table 3.1 which involves estimation of model 3.3, 3.5 and 3.6 were to be estimated to establish whether there is moderation.

Content analysis was conducted on the open ended questions where the researcher grouped common themes together to draw inferences from the findings. Cooper & Schindler (2003) assert that content analysis assists in bringing to the fore issues that would not have been captured through the use of structured questions in the questionnaire. The results are reported in chapter four, followed by the summary, conclusions and recommendations.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1. Introduction

This chapter presents the findings of this study. It encompasses the demographic characteristics of the respondents, descriptive and inferential statistics, and the
investigations of the relationship between brand equity and consumer choice as well as level of involvement.

4.2 Analysis of the response rate and descriptive statistics

A total of 400 questionnaires were distributed, 373, were correctly filled and returned, and in addition 13 managers and employees of supermarkets were interviewed. This represented a 96.5% response rate which was above the adequate 50% as recommended by Mendenhall et al., (2003). Figures 4.1, 4.2 and 4.3 represents the demographic profile of respondents based on gender, age and income.

Figure 4.1 Distribution of Respondents by Gender

Source: Survey data (2013)
Figure 4.1 shows that the data was fairly distributed across gender. There were marginally more female than male respondents with a ratio of 53.1 percent female to 46.9 percent male. This is consistent with the fact that there are generally more women shoppers than men.

Figure 4.2 Distribution of Respondents by Age
Figure 4.2 shows that the distribution approached a normal distribution curve but was slightly skewed to the left and slightly peaked than normal. Age distribution had a mean of 1.93 and standard deviation of 0.823 showing that on average the respondents were aged between 26 to 40 years. Therefore, majority of shoppers are relatively young an observation that is consistent with the average age group of shoppers within the Nairobi Central Business district (Euromonitor International, 2012).

Source: Survey (2013)
Figure 4.3 Distribution of Respondents by Income

Source: Survey (2013)

Figure 4.3 shows that the respondents’ income was disparately distributed. It is worth noting that more than 100 respondents did not disclose their level of income. This may be explained by the fact that ordinarily people shy from revealing their income. However, this does not affect the analysis since majority of the respondents disclosed their level of income. The mean and standard deviation were 2.39 and 1.845 respectively. This means on average the respondents level of income lies between
KES20, 000 to KES39, 999, however, it is worth noting that the standard deviation of 1.845 underscores the fact that income is heterogeneously distributed.

4.3 Qualitative Data Analysis

The study incorporated semi structured questionnaires which were summarized into five factors of brand equity, in table 4.1.

Table 4.1: Qualitative Data Analysis

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Awareness</td>
<td>The employees believe that it is very important to stock branded products whose values are aligned to the supermarkets chain and location, perhaps the most significant role bottled water companies can play in promoting positive awareness of their brands is through dissemination of communication. Thus, effective brand communication has the power to motivate retailers into retaining the brands on their shelves. The most popular brands from the supermarkets are Keringet, Dasani, Quencher, Aquamist and Grange Park, they are visible in all supermarkets. Most store managers and procurement officers were not concerned with awareness. Their ultimate goal was to ensure that the consumers may be willing to purchase the product.</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>The general feeling among employees of supermarkets is that they see customer loyalty towards a brand as behaviour that results in consistent repurchasing of the same brands, despite other competitors marketing efforts to promote their bottled brands of water. From their experience with smart card holders they see the</td>
</tr>
</tbody>
</table>
customers who express their dissatisfaction in a constructive way are very important for a company to recover a failed product, however if customers are not committed in their relationship with a company they find it especially easy to end the relationship after service failure. However the retailers are not ultimately concerned with brand loyalty, as long as bottled water is purchased from the supermarkets shelves.

<table>
<thead>
<tr>
<th>Perceived Quality</th>
<th>The employees feel that even though perceived quality emerges as a driver for specific brand preferences, many consumers purchase products as a result of their personal uniqueness. This was the most important factor among supermarket stores who are less willing to store low quality products.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Brand Assets</td>
<td>The respondents believe this as one of the important aspects of a product, for example the trademark or logo is seen as a form of security protecting brand equity from competitors who might want to confuse customers by using a similar name, symbol, or package. Furthermore they believe the distribution channel can be controlled by a brand because of a positive history of brand performance. A case in point is Keringet which has over 30% market share.</td>
</tr>
<tr>
<td>Industry context</td>
<td>The employees feel that limited shelf space means that branded goods are usually placed well in stock compared to less branded products. Since this brands are considered profitable for the supermarkets: their promotion costs can be carried as part of their corporate overhead, while the close supermarket control over their own brand suppliers helps to reduce direct costs as well. The employees believe that the additional branded products of bottled water do not usually represent consumer choices. Rather it is the</td>
</tr>
</tbody>
</table>
relationship between the supplier and the retailer and the product power that a brand possesses which may translate to lesser costs of stocking the items on the shelves.

Source: Survey (2013)

4.4 Salient Characteristics of key variables

This section deals with the adjacency and spread of the endogenous and exogenous variables. In addition, normality test was carried out to determine whether parametric or nonparametric diagnostic and significance tests may be used for further statistical analysis. It's noteworthy that the endogenous variable, consumer choice, is a dichotomous variable. The table in appendix E shows that 23.3 percent of the respondents do not purchase branded bottled water while 76.7 percent of the respondents do. The succeeding subsections show features of brand equity components and industrial context.

Table 4.2: Adjacency and Spread of exogenous variable

<table>
<thead>
<tr>
<th></th>
<th>Brand Awareness</th>
<th>Brand Loyalty</th>
<th>Proprietary Brand Asset</th>
<th>Perceived Quality</th>
<th>Industrial Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>373</td>
<td>373</td>
<td>373</td>
<td>373</td>
<td>373</td>
</tr>
<tr>
<td>Mean</td>
<td>4.1421</td>
<td>3.5114</td>
<td>3.8706</td>
<td>3.9705</td>
<td>3.8365</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.2136</td>
<td>0.0978</td>
<td>0.2128</td>
<td>0.1876</td>
<td>0.0966</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.5042</td>
<td>3.7777</td>
<td>4.3094</td>
<td>4.2494</td>
<td>4.2144</td>
</tr>
</tbody>
</table>

Source: Survey data (2013)

Table 4.1 shows that the mean and standard deviations for brand awareness are 4.14 and 0.2136 respectively. This means that on average the respondents agreed that they take special initiative to know the manufacturers of the bottled water brands, that their bottled water brand is fixed in their mind, that they can distinguish one bottled water brand from another and that the amount of advertising directed at bottled water helps consumers recognize these brands. The mean and standard deviation of brand loyalty were 3.51 and 0.0978 respectively. Given the significantly small standard deviation, the results imply that respondents view on loyalty was homogenous and that on average, they are somewhat indifferent with regards to loyalty.

The mean and standard deviations of proprietary brand assets were 3.87 and 0.2128 respectively and the same statistics for perceived quality were 3.97 and 0.19 respectively. With regards to proprietary brand assets, this implies that respondents agreed that class, array of brand line extension, association and visible trademark influence their choice of branded water. On the other hand, perceived quality scores show that on average, respondents agreed that performance, product quality and service offered influence consumer’s choice. Lastly, industrial context had a mean and standard deviation of 3.84 and 0.09 respectively. Given that standard deviation was relatively small, majority of respondents were of the view that lack of alternatives, supermarket
procurement practices, distribution network and access and the type or Name of the supermarket influence purchasing behaviour.

4.5 Logistic regression results and interpretation

4.5.1 Multicollinearity test

To draw inferences on the population of study, there was need to empirically analyse the data using the Logit model. However, it was important to determine whether multicollinearity existed. The collinearity test was conducted using correlation analysis, tolerance, and variance correlation analysis. The collinearity results are presented in table 4.3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>Level of tolerance (1/VIF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary brand assets</td>
<td>1.71</td>
<td>0.585354</td>
</tr>
<tr>
<td>Brand loyalty</td>
<td>1.62</td>
<td>0.617247</td>
</tr>
<tr>
<td>Income</td>
<td>1.33</td>
<td>0.749715</td>
</tr>
<tr>
<td>Age</td>
<td>1.29</td>
<td>0.777798</td>
</tr>
<tr>
<td>Brand awareness</td>
<td>1.23</td>
<td>0.813946</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>1.1</td>
<td>0.910997</td>
</tr>
</tbody>
</table>
Table 4.3 shows the VIF for proprietary brand assets = 0.585, brand loyalty = 0.617, income = 0.749, Age = 0.813, perceived quality = 0.910 and gender = 0.933. The mean VIF for the variables is 1.34. The predictor variables were less than 5 and tolerance values were more than 0.2, which ruled out any possibility of multicollinearity among the explanatory variables (Field, 2009).

Hypotheses H0₁, H0₂, H0₃, and H0₄ were estimated using stepwise and forced entry method to test the influence of brand awareness on consumer choice, brand loyalty influence on consumer choice, perceived quality influence on consumer choice and finally the influence of proprietary brand assets on consumer choice.

H0₁: Brand awareness has no significant influence on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.

H0₂: Brand loyalty has no significant influence on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.
H0₃: Perceived quality has no significant influence on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

H0₄: Proprietary brand assets has no significant influence on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.

H0₅: Industry context has no significant moderating relationship between brand equity and consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

Table 4.4 presents the study findings based on logistic regression. Firstly, relevant diagnostic tests are discussed in order to show the reliability of the model. Thereafter, the discussion is structured thematically based on study objectives. The variables used in the model were as follows; age of the respondents, gender, income, brand awareness, brand loyalty, proprietary brand assets, and perceived quality.
Table 4.4: Results of logistic regression

<table>
<thead>
<tr>
<th>Goodness of fit</th>
<th>Test Statistic</th>
<th>Marginal effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood</td>
<td>-190.384</td>
<td></td>
</tr>
<tr>
<td>LR test: Chi(df)</td>
<td>24.43</td>
<td>(df=7)</td>
</tr>
<tr>
<td>Prob&gt; chi2</td>
<td>0.001***</td>
<td></td>
</tr>
<tr>
<td>Pseudo R square</td>
<td>0.06</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dep Var. = Consumer choice</th>
<th>Logistic regression</th>
<th>Marginal effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficients</td>
<td>Wald Stat</td>
</tr>
<tr>
<td>Sex</td>
<td>-0.536</td>
<td>3.98</td>
</tr>
<tr>
<td>Age</td>
<td>-0.279</td>
<td>2.73</td>
</tr>
<tr>
<td>Income</td>
<td>0.178</td>
<td>4.73</td>
</tr>
<tr>
<td>Brand Awareness</td>
<td>2.528</td>
<td>13.33</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>3.628</td>
<td>5.46</td>
</tr>
<tr>
<td>Proprietary Brand Assets</td>
<td>1.861</td>
<td>5.6</td>
</tr>
<tr>
<td>Perceived Quality</td>
<td>2.665</td>
<td>8.54</td>
</tr>
<tr>
<td>Constant</td>
<td>0.005</td>
<td>7.11</td>
</tr>
</tbody>
</table>

** significant at 5 percent
*** significant at 1 percent

Source: Survey (2013)

The log-likelihood of -190.38 and Log-likelihood ratio test (LR test) statistic of 24.34 with a probability value of 0.001 was significant at 1 percent. This indicates that all the independent variables jointly influence the dependent variable. Scrutiny of the
coefficients of the individual independent variables shows that all the coefficients were significant at 5 percent with the exception of the coefficient of age.

Demographic variables were included as control variables in the model since attributes such as gender, age and income level influence consumer choice. Table 4.4 shows that of the three, the coefficient of age is insignificant at five percent. The coefficient for gender was -0.536 with p-value of 0.046 meaning that it is significant at five percent. Its associated marginal effect was -0.091 meaning that apart from being a significant predictor of consumer choice a change from female to male decreases the probability of purchasing branded bottled water by approximately 9 percent. This implies that female customers prefer branded bottled water more than their male counterparts.

Income level was a significant predictor of consumer choice with a corresponding marginal effect of 0.03. Therefore, an improvement from one income group to another increases the probability of purchasing branded bottled water by 3 percent. The succeeding discussion is based on the influence of brand equity components on consumer choice.

4.5.1 Test of hypothesis one

The first objective sought to investigate the influence of brand awareness on consumer choice in branded bottled water among supermarkets customers in Nairobi CBD. A hypothesis was formulated with the assumption of no significant effect. The results in
Table 4.3 shows that the coefficient of brand awareness was 2.528. The Wald statistic and corresponding p value were 13.33 and 0.000 respectively. Therefore, at one percent level of significance, the null hypothesis is rejected implying that brand awareness has a significant contribution to prediction of consumer choice. The associated marginal effect is 0.42. Therefore, it can be inferred that a unit increase in brand awareness score increases the probability of choice by 42 percent.

This model shows that 1 unit increase in brand loyalty will increase the purchase intentions by 0.42 units and vice versa. The results of data analysis clearly indicate that consumer choice has a strong positive association with Brand Awareness. Thus, it is concluded that purchase intentions can be enhanced with enhancement in the Brand Awareness. The study is in line with the findings of Hakala et al., (2012) who concluded that brand awareness plays a positive role in consumer choice and purchase decisions. Although the results agree with Kim et al., (2003) that brand awareness influences consumer choice, the results of the study do not assert that it is the strongest predictor among the brand equity elements.

The null hypothesis was rejected based on results showing that when brand awareness is present in an initial choice, task subjects will significantly be more likely to base their decision on known brands. Moreover, it appears that when inexperienced consumers are faced with a brand choice situation in which known brands compete with unknown brands, they are considerably more likely to choose the known brand. This is in agreement with Yoo & Donthu (2002), Baldauf et al., (2003) that brand awareness is a
strong antecedent to consumer choices. Yi et al., (2004) asserts that consumers are more conservative and will most likely choose a familiar product, and as such will be biased towards products which are familiar to them.

Overall, these results suggest that first time buyers may rely on awareness as a cue for choosing a brand when a clear distinction between brands exists. However, when no brands are known, other criteria such as packaging, ingredients, and price (in combination with other factors) are likely to be employed. The results reported in Table 4.4 also reveal the differences in choice criteria between awareness-condition and no-awareness-condition subjects for the final choice. A significantly higher proportion of subjects in the awareness condition continued to report awareness as the basis for their decision. The results also suggest that the influence of awareness may persist across a series of choices and trials.

From the results of the respondents it is possible to infer that among the four factors listed above, three of them (brand name, sales promotion and parent company) do not affect consumer choice in bottled water in Nairobi. Advertising as a factor of brand awareness was the only significant factor. The questions were formulated in a way so that it is possible to see how the different factors are related to each other and which of them customers attach the highest value to and vice versa. The interrelation illustrated in table 4.6 shows the significance value received when consumers are asked to assess to what extent they agree that a particular factor contributes to higher consumer choice in
the brand of bottled water. Hence, a higher mean value indicates that the particular factor is more important than the others. This result is consistent with the study of Aaker (1991), who stated that having a brand name alone does not guarantee success for an organization. This thesis shows that brand awareness is seen to be a dimension that bears influence on a consumer’s choice of brand.

4.5.2 Test of hypothesis two

The second objective sought to determine the effect of brand loyalty on consumer choice in the branded bottled water. A hypothesis was formulated with the assumption of no significant effect. The results in table 4.3 show that the coefficient of brand loyalty was 3.628 with the Wald statistic and corresponding p value as 5.46 and 0.019 respectively: the null hypothesis was rejected. Thus, at five percent level of significance that brand loyalty has a significant contribution to prediction of consumer purchasing decision. The associated marginal effect is 0.61, which means that an increase in brand loyalty score by one unit increases the probability of purchasing by 61 percent. Using table 4.4 as a reference, 61% of consumers claim that they always buy a particular brand of bottled water, which is the highest statistic among the three other variables of brand equity. This finding is similar to Atilgan et al., (2009) who regards brand loyalty as the most crucial element in enhancing brand equity amongst consumers.

The results obtained from the questions formulated in order to test this hypothesis indicate that the null hypothesis was rejected since consumers agree with the statement that they, to a great extent, buy their bottled water from the same manufacturer.
However, it is important to keep in mind that phenomenon of behaviour, like brand loyalty should be classified into shifting loyal, split loyal and hardcore loyal since it can be difficult to assess just one form of loyalty through a questionnaire because people sometimes want to act in a particular manner but may be inconsistent at the actual time of purchase. Brand loyalty is an important component especially in fast moving goods that have little differentiation such as bottled water. For bottled water manufacturers to ward off competition, they need to invest in building brand loyalty to maintain their market share and repeated purchases.

Brand Loyalty demonstrated the strongest impact, indicating the essential role of building brand equity in the bottled water industry in the Nairobi Kenya market. This result affirms other research findings, such as Steven et al., (2004) and Atilgan, Eda, Serkan, Safak, Erdeney (2009), to the effect that brand loyalty is the strongest element of brand equity as far as influencing consumer choice is concerned. To add to that this model’s results also share similar findings with Gil et al., (2007), Hanzaee (2012) and Malik (2012) that showed significant positive relationship of brand loyalty on consumer choice.

### 4.5.3 Test of hypothesis three

The third objective sought to determine the effect of perceived quality on consumer choice in the branded bottled water. A hypothesis was formulated with the null assumption of no significant effect. The results in table 4.4 show that the coefficient of
perceived quality was 2.67 with the Wald statistic and corresponding p-value being 8.54 and 0.004 respectively. Therefore, the null hypothesis was rejected at one percent level of significance implying that perceived quality makes a significant contribution to consumer choice. The associated marginal effect of 0.44 show that an increase in perceived quality score by one unit increases the probability of purchasing branded bottled water by 44%.

According to the results of the model perceived quality turns out to be the second most important factor for respondents who consider it as an important factor in influencing choice. These findings is consistent with Kamakura et al., (1999), Bamert et al., (2005) Anselmsson et al., (2006). However even though the findings of perceived quality indicate a positive relationship with consumer choice, the results are not completely consistent with Heller et al., (2003) who state that perceived quality is the most dominant factor influencing brand choice.

Other non- product related attributes that appear to enhance the overall impression of the manufacturer are: bottled water company is perceived as innovative; clear and consistent marketing activities which ultimately build on brand value and perception amongst consumers. The respondents’ rating of perceived quality attributes have demonstrated that the perceived quality is important for the consumer’s perception of brand. Similar results that are in support of this study have been reported by Barmet & Wehrli (2005) and Anselmsson (2006).
The big brands in the market help consumers form valid expectations about quality through experiencing and learning the quality characteristics of the branded product. This findings is in support of the assertions by Heller et al., (2003) that perceived quality preference is a factor that influences consumer choice, and as a consequence consumer expectations formed from previous encounters with the product, or beliefs based on information about bottled water taste or other attributes, play a profound role in consumers’ responses to sensory properties of bottled water. However it should be noted that perceived quality is closely associated to other factors of brand equity, and as such should not be utilised alone.

4.5.4 Test of hypothesis four

The fourth objective sought to determine the effect of proprietary brand asset on consumer choice in the branded bottled water. The associated null hypothesis adopted the assumption of no significant effect. The results in table 4.4 show that the coefficient of proprietary brand assets is 1.861. The Wald statistic and corresponding p-value were 5.6 and 0.018 respectively. Therefore, the null hypothesis was rejected at five percent level of significance implying that proprietary brand assets makes a significant contribution to consumer choice. The associated marginal effect of 0.31 shows that an increase in proprietary brand assets score by one unit increases the probability of purchasing branded bottled water by 31%.

The hypothesis originates from the statement in the theoretical model that other
proprietary assets have no significant effect on consumer choice. This hypothesis serves to find out whether bottled water consumers consider other types of brand assets in their purchase of bottled water, which include channel relationship, trade mark or logo and brand association. Respondents who bought bottled water of their choice depended on the channel relationship and the trademark logo, since they were attracted to a certain chain of supermarkets where they knew their preferred brand would be stocked. On the other hand, respondents did not perceive brand association as a great factor in influencing consumer choice.

From the questions formulated in order to test this hypothesis, it is possible to reject the null hypothesis since consumers agree with the statement that they, to a great extent, choose their bottled water from the same manufacturer as a result of influence from proprietary brand assets.

However, it is important to keep in mind that the phenomenon of brand association can be difficult to assess through a questionnaire since people in general sometimes want to act in a particular manner/class but are not consistent with this at the actual time of purchase. This result is consistent with the findings of Lassar et al., (1995), Thakor et al., (2003) and Keller (2001) which stated that the competitive edge of a trademark in a specific country is very important to brands over time. This is evidenced by Keringet which prides itself as a local product and seems to be the premier choice amongst
consumers in the supermarkets. The results of these study aim to strengthen this supposition.

4.5.5 Test of hypothesis five

The fifth objective sought to determine the moderating effect of the Industry context on the relationship between brand equity and consumer choice in the branded bottled water. To establish whether industrial context was a moderating variable, two models namely model 3.6 and 3.7 were estimated. The results are given in tables 4.5 and 4.6 respectively.

<table>
<thead>
<tr>
<th>Goodness of fit</th>
<th>Test Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood</td>
<td>-190.27</td>
</tr>
<tr>
<td>LR test: Chi(df)</td>
<td>24.67 (df=8)</td>
</tr>
<tr>
<td>Prob&gt; chi2</td>
<td>0.0018***</td>
</tr>
<tr>
<td>Pseudo R square</td>
<td>0.0609</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Coefficients</td>
</tr>
<tr>
<td></td>
<td>-0.54</td>
</tr>
</tbody>
</table>
The results in table 4.5 show that inclusion of industrial context marginally improves pseudo R and log likelihood scores when compared to table 4.4. However, the results in table 4.5 show that industrial context is not a significant explanatory variable of consumer choice.

**Table 4.6: Logistic regression results of moderating effect**

<table>
<thead>
<tr>
<th>Goodness of fit</th>
<th>Test Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood</td>
<td>-192.76</td>
</tr>
<tr>
<td>LR test: Chi(df)</td>
<td>19.69</td>
</tr>
<tr>
<td>Prob&gt; chi2</td>
<td>0.0063**</td>
</tr>
<tr>
<td>Pseudo R square</td>
<td>0.0486</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients</td>
<td>Wald</td>
<td>P Value</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.47</td>
<td>3.23</td>
</tr>
<tr>
<td>Age</td>
<td>-0.354</td>
<td>4.15</td>
</tr>
<tr>
<td>Income</td>
<td>0.187</td>
<td>4.97</td>
</tr>
<tr>
<td>Brand Awareness* Industrial Context</td>
<td>0.595</td>
<td>13.04</td>
</tr>
<tr>
<td>Brand Loyalty*Industrial Context</td>
<td>0.154</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Table 4.6 shows that diagnostic and goodness of fit can be relied on for analysis. The log likelihood of -192.76 and LR test statistic of 19.69 with a probability value of 0.006 was significant at 1 percent. This shows that all the interacted independent variables are jointly significant and influence the dependent variable. To address the fifth objective, the decision making criterion provided in section 3.3 was used where results in table 4.4 and 4.5 were compared. The following observations were inferred from the tables. Interaction between industrial context and proprietary brand assets and interaction between brand loyalty and industrial context are insignificant at 10 percent level or above. This may be explained by the fact that proprietary brand assets and brand loyalty are independent of industrial context.

The results show that the interaction between brand awareness and industrial context and the interaction between perceived quality and industrial context are significant at 10 percent. The marginal effect associated with interaction between brand awareness and industrial context is 0.11 meaning that the interaction between industrial context and brand awareness increases probability of purchasing bottled branded water by 11
percent. The marginal effect associated with interaction between perceived quality and industrial context is 0.064 meaning that the interaction between industrial context and perceived quality increases the probability of purchasing bottled branded water by 6.4 percent.

This findings are consistent with Iacobucci et al., (1996) Fornel et al., 1996, Jones et al., (1995) who showed that industry context helps to moderate relationships, between satisfaction and loyalty as evidenced by the results of the study, where all the elements of brand equity show interaction when industry context is moderated. The findings of the moderating context support Otnes et al., (1997) whereby consumers are disposed towards a product and feel empowered on making choices based on the level of information at their disposal. This is evidenced by brand awareness having the highest impact on consumer choice after being moderated.

Therefore, given that the coefficient of industrial context in table 4.4 was insignificant, and that two interaction terms have significant coefficient and positive marginal effect, the study concludes that industrial context is a positive moderator but not an explanatory variable, and therefore we reject the null hypothesis.
### Table 4.7 Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0₁</td>
<td>Hypothesis was rejected.</td>
</tr>
<tr>
<td>Brand awareness has no significant influence on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya.</td>
<td></td>
</tr>
<tr>
<td>H0₂</td>
<td>Hypothesis was rejected.</td>
</tr>
<tr>
<td>Brand loyalty has no significant influence on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.</td>
<td></td>
</tr>
<tr>
<td>H0₃</td>
<td>Hypothesis was rejected.</td>
</tr>
<tr>
<td>Perceived quality has no significant influence on consumer choice of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.</td>
<td></td>
</tr>
<tr>
<td>H0₄</td>
<td>Hypothesis was rejected.</td>
</tr>
<tr>
<td>Proprietary brand assets has no significant</td>
<td></td>
</tr>
</tbody>
</table>
influence on consumer choice of branded bottled water among supermarket customers, in Nairobi Central Business District, Kenya

H05 Industry context has no significant moderating relationship between brand equity and consumer choice, of branded bottled water among supermarket customers in Nairobi Central Business District, Kenya.

Hypothesis was rejected.

Source: Author (2013)

The above table 4.7 summarises the drawn conclusions of the five hypothesis that guided this thesis. All the five hypothesis were rejected, thus all the brand equity variables and moderating variable have a significant influence on consumer choice.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, conclusions, and contributions of the study to knowledge, recommendations and areas for further research.

5.2 Summary

Earlier studies of brand equity influence on consumer choice have shown contradicting findings based on the country of origin and industry context. In addition, studies on Brand equity in Kenya have not specifically focused on the bottled water industry in the fast moving consumer goods (FMCG) industry. The current study sought to establish the influence to which brand equity has on consumer choice, and analysed the strength of each of the factors of brand equity on consumer choice in the bottled water industry in Kenya.
This was achieved through the use of a cross-sectional explanatory research design. The data was collected using a semi-structured questionnaire and an interview. The collected data were analysed using descriptive, inferential statistics. The descriptive statistics were used to describe and summarize the data, while inferential statistics, particularly the Logit model estimation was used to predict the effects of the determinants of Brand equity factors on consumer choice in the bottled water industry, and also used to test the moderating variable of industry context on the dependent and independent variable. The overall fit of the model was tested using the log likelihood and associated chi-square statistics.

From the analysis and interpretation it is found that brand loyalty is a prominent factor which creates brand equity. Brand loyalty is at the heart of equity and is one of the important brand equity assets. Earlier brand loyalty was viewed from the angle of a customer’s response or behaviour. But now behavioural angle is combined with attitudinal dimensions in defining loyalty. When a customer continues to buy a particular brand for a period of time, where loyalty is created then the brand will be popular as they have a base of loyal customers. Brand loyalty is useful concept for fast moving consumer goods, rather than durables because the fast moving consumer goods are purchased repeatedly and customers show loyalty towards the brand by maintaining differentiation. The analysis part of the study reveals that brand awareness, perceived quality and proprietary brand assets are the main building blocks of brand loyalty and brand loyalty is a major contributor of creating brand equity.
The study also found that bottled water companies have utilized the use of brand equity, whose strength in their products is exhibited by the consumers brand awareness, brand loyalty, perceived quality and proprietary brand assets. Most companies have invested in ensuring that once a consumer purchases their product, they will continue practicing the same repurchasing habits, over a period of time, while delivering satisfaction to consumers. It should be noted that even though most of the bottled water exhibit aspects of brand equity, not all of them invest in ensuring building a brand, rather they emphasize on sales promotion only an aspect of brand awareness, which ultimately builds on a short term gain for the product.

Seven factors were found to significantly predict the influence of brand equity on consumer choice. Those that had a positive influence include; income, brand awareness, brand loyalty; perceived quality and industry context. Only gender had a negative significance influence on consumer choice.

5.3 Contributions of the study to Knowledge.

This study investigated the influence of brand equity on consumer choice of branded bottled water in NCBD, Kenya. Whereas there exists strong affirmation that brand equity has been adopted by many firms and individuals, but it should be noted that this is limited to mostly developed countries. The current study focused on the relatively
unknown phenomena in the area of FMCG in Kenya, which will be beneficial to marketing managers in the utilisation of brand equity influencing consumer choice in Nairobi, Kenya.

Furthermore the thesis contributes to the literature and adds to the immense discussion on current conceptualizations and quantification of brand equity influence on consumer choice. The proposed set of factors may be helpful to both practitioner and academic researchers in the marketing industry with interest in brand equity. It is worthy to disclose that while previous studies have provided results of consumer-choice and brand equity however most of them originate from different industries and countries globally. This is the first study that expounds on brand equity influence on consumer choice of branded bottled water among supermarkets customers in NCBD, Kenya.

In considerations to theoretical ramifications, this thesis fulfils as the building block for measuring consumer choice, consumer-based brand equity. The thesis benefits brand research in several ways. First, brand equity’s potential antecedents brand awareness, brand loyalty, perceived quality, sales promotion activities, brand name, brand association, and economic factors such as income can be used to see how brand equity results. Also, this new consumer perceived brand equity scale can be used to investigate the consequences of brand equity and see if they change using new dimensions. In specific, the impact of each dimension of this scale on consequent variables needs to be identified.
Furthermore, this new measure of brand equity can be used to aid in studies of brand value, brand extensions, and marketing activities, to name a few. Therefore, we can use this scale to re-assess and measure the equity of brands now seen from the perspective of consumers. For instance, the thesis demonstrates that brand awareness exerts influence on choice in the NCBD area in Kenya, but should be noted that the consumers will repurchase a familiar brand over a period of time, and as subsequent the aspect of awareness built upon on brand loyalty, which ultimately results on choice. This study has shown that brand awareness as an aspect of brand equity is a prevalent choice tactic among inexperienced consumers facing a new decision task.

To add to that the thesis enhances the theoretical understanding of brand loyalty influence on repeated purchase and product referrals by consumers of bottled water, however it should be noted this aspect of brand equity had the highest rating, and as a subsequent most of the three other aspect of brand equity built upon the consumers perception towards a particular brand, and ultimately brings forth loyalty, when they experience satisfaction. The first major contribution pertains to understanding the intervening processes that underlines repeated purchases as an aspect of brand loyalty. Although the literature generally suggests a direct impact of brand loyalty attitude on reciprocal repeated purchases, this study is among the first empirical attempts to decompose this effect in the bottled water industry in Kenya. It is observed that repeated
purchases are as a consequence of value perceptions of a particular brand of bottled water and the product referrals due to inherent causality among brand associations.

The quality of a brand of bottled water is in the mind of the consumer. Whereas some aspects of the product are perceived as good, others are bad. These convictions may be wrong but may constitute reality for the consumer who perceives quality and makes choices. Secondly, consumers differ in terms of importance of perceived quality whereby these differences lead to different patterns of quality perception and bottled water choice.

Proprietary brand assets can help consumers process and recall information, serve as the basis for dissimilarity and extensions, and provide a reason to purchase and create positive feelings toward the brand. This research revealed that the bottled water brand act as facilitators in the creation of meaning to the resellers in channel relations. Whereby the outcome of this relationship is increased confidence among the supermarkets franchises to commit themselves in stocking familiar brands, and it enables them to trust the manufacturers.

In terms of the brand equity influence on consumer choice, industry context moderates the linkages between the relationships of the two. This study has shown that the supermarkets take into account the manufacturers brand equity resources as a tool to build trust and commitment that will enable the supermarkets to sell their products
easily, and as such will only stock items that are well familiar. Important to note is that satisfaction and loyalty are connected by two distinct pathways; satisfaction has a direct effect on consumer purchase intentions, and secondly satisfaction indirectly affects consumer choice via its effect in building brand equity.

Finally, it is inferred from the findings that consumers perceive consumer choice-based brand equity to include five dimensions: brand awareness, brand loyalty, perceived quality, proprietary brand assets and a moderating factor of the industry context. The consumers want a brand of bottled water to have high quality and preference in order to be loyal and subsequently purchase it. They want the product to be a positive influence on their class, social life, as well as the economic environment.

Finally, this thesis integrates psychological and economic perspectives in studying consumer choice in terms of utility theory through linking this to key brand equity variables in the purchase act.

5.4 Conclusions

Brand equity is an important aspect of consumer choice for a fast moving consumer good, in this study; the researcher examined the brand equity influence on consumer choice and the following conclusions were inferred in the study. Brand awareness was found to be statistically significant in this study as an aspect that influences consumer choice. Brand loyalty was found to be the most positive and statistically significant
factor of brand equity in influencing consumer choice, whose findings had the highest indicator. The growth of brand loyalty emerges as a result of the marketing transformation of awareness, knowledge, and perception of quality, purchase situation and satisfaction of the product. The predominant factors of these elements bring out the process of customer perceptions, attitude formation and level of satisfaction in a brand of bottled water

Perceived quality was found to be also positive and statistically significant factor contributing to consumer choice in the branded bottled water. Proprietary brand assets was found to be positive and significant, and finally, industry context were found to be positive and significant thus partially moderating the relationship between brand equity and consumer choice.

5.5 Policy and Recommendations

The outcome of this research has given precious assessment which can be used for designing disparate strategies to beguile consumers with emphasizing on brand equity in fast moving consumer goods. Marketers should remember that there are some factors influence consumer’s choice towards brand equity. Based on the results from this research finding, marketers should prioritize brand equity constructs as their strategy to attract potential customers because it does show significant direct and indirect relationships between the dimensions of brand equity and brand equity.
In conclusion the result of this thesis shows that customer based-brand equity has a great importance on consumers’ choice of brand and the lack of brand equity will weaken consumers’ perception. Therefore there should be a continuous effort by bottled water marketers to enhance customer based brand equity. Bottled water manufacturers should bear in mind that old familiar brands die as a result of poor management of the brand, overextension and lack of investment in developing brand equity and values.

5.6 Areas for further Research

The researcher recommends that future research should be directed towards validating the results of this study by conducting a similar research in other sectors in Kenya by collecting data from different sources. In addition, future research should consider using a longitudinal survey.

Furthermore this study can also be extended to other types of products and services which have different decision process and purchase intentions amongst consumers, it might merit further investigation to demonstrate the effect of brand equity influence on consumers in terms of short, mid and long term benefits and in the context of return on brand equity investments.
REFERENCES


**Appendix A: Cover letter**

Reuben Njuguna  
Department of Business Administration  
School of Business, Kenyatta University  
P.O Box 43844 – 00100  
Nairobi –Kenya  
Email: njuguna.reuben@ku.ac.ke

**Dear Sir/Madam,**

I am a student of Kenyatta University, pursuing a Doctorate in Business Administration specializing in Marketing. In partial fulfillment of the requirements for this degree, I am required to carry out a research project in my area of study.

I kindly request you to provide the required information to the best of your knowledge by filling out the attached interview guide. The information is strictly for academic purposes only and will be treated in the strictest of confidence. A copy of the research project will be made available to you on request. Your kind assistance will be highly appreciated.

Yours faithfully,
Appendix B: Research Questionnaire

General Instructions: the purpose of this questionnaire is to collect data regarding “The influence of brand equity on consumer choice in the bottled water industry in Nairobi Central Business District, within Kenya.” the questionnaire consists of three sections. Ensure you respond to all the statements

Instruction: Please tick the appropriate box or complete the answer. There is no right or Wrong answer. Please choose the answer which represents your opinion.

QUESTIONNAIRE 1: CONSUMERS OF BOTTLED WATER

SECTION A. Background Information

Section A: Demographic factors

1. Sex
   - male
   - Female

2. What is your age?
   - 25 or under
   - 26 – 40
   - 41 – 55
   - 56 – above

3. What is your current household income in KES?
   - Under 10,000
   - 20,000 - 39,999
- 40,000 - 59,999
- 60,000 – 79,000
- Over 80,000
- Would rather not say

SECTION B. Brand Equity Variables
Please mark the suitable scale.

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

<table>
<thead>
<tr>
<th>Brand Awareness S. No</th>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>I take special initiative to know the manufacturers of the bottled water brands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>My bottled water brand is fixed on my mind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I can distinguish from one bottled water brand from another</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The amount of advertising directed at bottled water helps consumers recognize this brands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand Loyalty S. No</th>
<th>Statement</th>
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<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>The performance of a brand satisfies me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I am satisfied with the quality of the brand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>The brand offers better service to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I believe that products quality influences the choice of bottled water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proprietary Brand Assets S. No</th>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>I believe that class plays a role in the choice of brand of bottled water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I purchase a particular brand of bottled water due to brand associations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>The array of brand line extensions and choices of the same manufacturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
enables me to be loyal to one brand

19 I believe that a highly visible trademark may influence my product choice

Industry Context

<table>
<thead>
<tr>
<th>S. No</th>
<th>Statement</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Lack of sufficient alternatives affects choice of brand of bottled water?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Supermarkets procurement practices may limit you into purchasing your preferred bottled water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>The distribution network and access to the type of bottled water enables consumers to choose a brand of bottled water, since it’s found in most areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>The type or Name of the supermarket instills confidence on the array of bottled water on their shelves</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section C

24. Which is your preferred branded bottled water? ...........................................

25. How many times have you repurchased this brand?
   o None
   o Once
   o 2-5 times
   o More than 5 times

26. When you saw your preferred bottled water being advertised, where you compelled to buy? *
   - Yes
   - No

27. When you saw your preferred bottled water being advertised, where you compelled to buy?
   - Yes
28. Do you consider yourself as a loyal consumer in a preferred brand?
   - Yes
   - No

29. Shoppers often base their decisions to choose a product on the base of popularity of a particular brand?
   - Yes
   - No

30. I believe that quality enables me to choose my preferred brand of bottled water?
   - Yes
   - No

---

**Appendix C: Interview Schedule**  
(For Procurement and Store Managers)

**General Questions**

1. Informants Role...........................................................................
2. Organization Name........................................................................
3. How do the organisational factors, individual factors, and external environmental factors influence the stocking of brands of bottled water?
4. Which is the top three bottled water brands that are popular among consumers and what are the main reasons behind their success?

5. In comparison with other retailers, is your organization stocking the same type of brands of bottled water?

6. Do you have channel relationships with leading brands of bottled water?

7. How do these factors (brand loyalty, brand awareness, quality and proprietary brand assets) influence the consumer choice of brands of bottled water in supermarkets?

8. Do you only stock items that are well promoted and advertised in your supermarkets?

9. Who has a higher bargaining power, consumer or producers in demanding what type of product to be sold?

10. Have you ever discontinued a brand of bottled water being sold in your supermarkets, and what were your reasons?

11. With your smart card system in the supermarkets, data do you think that consumers are loyal to a specific brand of bottled water?

12. Do you believe that brand awareness is the key for bottled water brands to have a short lifespan on the shelves of the supermarkets, and what else should bottled water manufacturers invest to ensure increased sales?

13. In your opinion does quality of bottled water play a role, and in what aspect?
Appendix D: Frequency Distribution for Consumer Choice

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not purchase branded bottled water</td>
<td>87</td>
<td>23.3</td>
</tr>
<tr>
<td>Purchase branded bottled water</td>
<td>286</td>
<td>76.7</td>
</tr>
<tr>
<td>Total</td>
<td>373</td>
<td>100.0</td>
</tr>
<tr>
<td>Author</td>
<td>Study</td>
<td>Findings</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Carol J. Simon and Mary W. Sullivan (1992)</td>
<td>Measurements and determinants of brand equity</td>
<td>Their methodology was useful in finding the objective value of a company’s brands and relating this value to the value of the firm’s assets.</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>---</td>
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</tr>
<tr>
<td>2.</td>
<td>Keller (2000)</td>
<td>Customer Response to a brand name</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Kamakura and Russel (1999)</td>
<td>Components of Brand Equity</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>James. B</td>
<td>Effect of brand</td>
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<td></td>
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<td></td>
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<td></td>
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<td>---</td>
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</tr>
<tr>
<td>1</td>
<td>Faircloth, Louis M. Capella and Bruce Alford (2001)</td>
<td>attitude and brand image on brand equity</td>
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<tr>
<td>5</td>
<td>Girish N. Punj and Clayton Hillyer (2004)</td>
<td>A cognitive model of Customer Based Brand Equity for Frequently purchased Products</td>
</tr>
<tr>
<td>6</td>
<td>Cathy J. Cobb, Cynthia Ruble, Naveen Donthu (1995)</td>
<td>Brand Equity, Brand Preference, and Purchase Intent</td>
</tr>
<tr>
<td>7</td>
<td>Edo Rajh and Privredna Kretanja (2005)</td>
<td>Effects of Marketing Mix on Brand Equity</td>
</tr>
</tbody>
</table>

The research findings in this study underline the importance of the strategic approach for brand management, with creation of brand equity.
of brand equity, and not just brand sales being a criterion for deciding on the application of the specific marketing mix. price- indicating the positive impact of the marketing mix on brand equity, which if adopted in different product categories may lead to failure. approach to brand management.

Companies using brand sales as the only indicator of the successfulness of brand management may be in danger of reducing the equity of their brands.

Appendix F: Coding and Scales of Items of the survey

<table>
<thead>
<tr>
<th>Brand Awareness</th>
<th>CODE</th>
<th>Original Items in the survey</th>
<th>source</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA1</td>
<td>BA1</td>
<td>I take special initiative to know the manufacturers of the bottled water brands</td>
<td>Yoo &amp; Donthu 2001; Sweeney &amp; Soutar 2001</td>
</tr>
<tr>
<td>BA2</td>
<td>BA2</td>
<td>My bottled water brand is fixed on my mind</td>
<td></td>
</tr>
<tr>
<td>BA3</td>
<td>BA3</td>
<td>I can distinguish from one bottled water brand from another</td>
<td></td>
</tr>
<tr>
<td>BA4</td>
<td>BA4</td>
<td>The amount of advertising directed at bottled water helps consumers recognize this brands</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand Loyalty</th>
<th>CODE</th>
<th>Statement</th>
<th>Yoo &amp; Donthu 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQ1</td>
<td>PQ1</td>
<td>The performance of a brand satisfies me</td>
<td></td>
</tr>
<tr>
<td>PQ2</td>
<td>PQ2</td>
<td>I am satisfied with the quality of the brand</td>
<td></td>
</tr>
<tr>
<td>PQ3</td>
<td>PQ3</td>
<td>The brand offers better service to me</td>
<td></td>
</tr>
<tr>
<td>PQ4</td>
<td>PQ4</td>
<td>I believe that products quality influences the choice of bottled water</td>
<td></td>
</tr>
</tbody>
</table>

Proprietary Brand Assets
<table>
<thead>
<tr>
<th>CODE</th>
<th>Statement</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBA1</td>
<td>I believe that class plays a role in the choice of brand of bottled water</td>
<td>Atilgan et al., 2009; Yoo &amp; Donthu</td>
</tr>
<tr>
<td>PBA2</td>
<td>I purchase a particular brand of bottled water due to brand associations</td>
<td></td>
</tr>
<tr>
<td>PBA3</td>
<td>The array of brand line extensions and choices of the same manufacturer enables me to be loyal to one brand</td>
<td></td>
</tr>
<tr>
<td>PBA4</td>
<td>I believe that a highly visible trademark may influence my product choice</td>
<td></td>
</tr>
</tbody>
</table>

### Industry Context

<table>
<thead>
<tr>
<th>CODE</th>
<th>Statement</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC1</td>
<td>Lack of sufficient alternatives affects choice of brand of bottled water?</td>
<td>Iacobucci &amp; Ostrom 1996</td>
</tr>
<tr>
<td>IC2</td>
<td>Supermarkets procurement practices may limit you into purchasing your preferred bottled water</td>
<td></td>
</tr>
<tr>
<td>IC3</td>
<td>The distribution network and access to the type of bottled water enables consumers to choose a brand of bottled water, since it’s found in most areas.</td>
<td></td>
</tr>
<tr>
<td>IC4</td>
<td>The type or Name of the supermarket instils confidence on the array of bottled water on their shelves</td>
<td></td>
</tr>
</tbody>
</table>

### Consumer choice

<table>
<thead>
<tr>
<th>CODE</th>
<th>Statement</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC1</td>
<td>When you saw your preferred bottled water being advertised, where you compelled to buy?</td>
<td>Lassar et al., 1995</td>
</tr>
<tr>
<td>CC2</td>
<td>Do you consider yourself as a loyal consumer in a preferred brand</td>
<td></td>
</tr>
<tr>
<td>CC3</td>
<td>Shoppers often base their decisions to choose a product on the base of popularity of a particular brand?</td>
<td></td>
</tr>
<tr>
<td>CC4</td>
<td>I believe that quality enables me to choose my preferred brand of bottled water?</td>
<td></td>
</tr>
</tbody>
</table>