

**BRAND MANAGEMENT ATTRIBUTES, CORPORATE IMAGE, CUSTOMER  
CHARACTERISTICS AND CUSTOMER SATISFACTION AMONG  
UNDERGRADUATE UNIVERSITY STUDENTS IN KENYA**

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NAIROBI**

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## DECLARATION

This thesis is my original work and has not been submitted for academic examination in any other university

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## **DEDICATION**

This thesis is dedicated to my wife Fridah and my daughters Milkah, Nicole, Michelle and Natalie for the moral and spiritual support they accorded me during the study period.

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## **ABBREVIATIONS AND ACRONYMS**

<b>BMA</b> s	:	Brand management attributes
<b>CBBE</b>	:	Customer Based Brand Equity
<b>CC</b>	:	Customer Characteristics
<b>CI</b>	:	Corporate Image
<b>CS</b>	:	Customer Satisfaction
<b>CUE</b>	:	Commission for University Education
<b>ECT</b>	:	Expectation Confirmation Theory
<b>EFA</b>	:	Exploratory Factor Analysis
<b>EUT</b>	:	Expected Utility Theory
<b>HE</b>	:	Higher Education
<b>HEI</b>	:	Higher Education Institutions
<b>IMC</b>	:	Integrated Marketing Communications
<b>KMO</b>	:	Kaiser-Meyer-Olkin
<b>KNBS</b>	:	Kenya National Bureau of Statistics
<b>KUCCPS</b>	:	Kenya Universities and Colleges Central Placement Service
<b>MoE</b>	:	Ministry of Education
<b>NACOSTI</b>	:	National Commission for Science, Technology and Innovation
<b>SPSS</b>	:	Statistical Package for Social Sciences
<b>SSS</b>	:	Self Sponsored Students
<b>TIVET</b>	:	Technical Vocational Education and Training Institutions
<b>VIF</b>	:	Variance Inflation Factor

## ABSTRACT

The general objective of this study was to determine the influence of brand management attributes, corporate image, and customer characteristics on customer satisfaction among university students in Kenya. Specifically, the study sought to establish the influence of brand management attributes on customer satisfaction; establish the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction; establish the moderating effect of customer characteristics on the relationship between brand management attributes and customer satisfaction and lastly, determine the joint influence of brand management attributes, corporate image and customer characteristics on customer satisfaction of university students in Kenya. The study was anchored on three theories: Customer based brand equity model, expectation confirmation theory and consumer utility theory. The study adopted descriptive research design, the target population comprised students from all 70 universities registered and accredited to operate in Kenya, with a population of 443,783 students enrolled for various undergraduate degree programmes from which a random sample of 384 students was drawn. Data was analyzed using descriptive statistical analysis, factor analysis, correlation analysis and regression analysis. The study revealed that brand management attributes had statistically significant influence on customer satisfaction among university students in Kenya ( $R^2=0.238$ ;  $p$ -value = 0.000). The study also established that corporate image had a statistically significant mediating effect on the relationship between brand management attributes and customer satisfaction ( $R^2=0.388$ ;  $p$ -value = 0.000). Further, the study revealed that customer characteristics had a statistically significant moderating influence on the relationship between brand management attributes ( $R^2=0.085$ ;  $p$ -value= 0.000). Finally, the study revealed there was a statistically significant joint effect of brand management attributes, customer characteristics and corporate image on customer satisfaction in university students in Kenya ( $R^2=0.308$ ;  $p$ -value= 0.000). Brand management practices were found to influence customer satisfaction more in the private individual owned and private institutional owned than in public universities, with R square of 0.149, 0.312 and 0.423 respectively. Similarly, corporate image was found to have a stronger moderation effect on the relationship between brand management practices and customer satisfaction in private institutional owned universities as compared to the private individual owned and public universities, with  $R^2$  of 0.671, 0.654 and 0.213 respectively. The study recommends that policy can be developed that encourages inculcating brand management practices within universities in Kenya. Policy can be developed to encourage measurement and reporting of performance along brand management attributes as used in this study. To sustain customer satisfaction through branding, the universities should identify ways in which a strong brand can create value to customers. This can be enhanced through quality service delivery, superior technology, positive attitude among the employees (both teaching and non-teaching) as well as reputable professors to enhance university brand positioning in the market.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Brand management attributes comprises brand building initiatives intended to give a product or a service a distinct identity and distinguish it from the competitors' offerings. According to Aaker (1991), a brand identifies one seller's products and services and distinguishes them from those of others. Consumers respond to a company's branding efforts by giving preference to an organization's products, hence giving the company a competitive edge over the others. Vukasovic (2015) argues that a brand becomes the first level interface between the organization and the customer. One of the most important roles of branding is the focus it brings to a product, service or organization.

Binsardi and Ekwulugo (2003) argue that brand image plays a pivotal role in countering the uncertainty in the consumer purchase decision process hence reducing the cognitive dissonance among consumers. Therefore, a strong brand acts as a risk reliever for the consumer during the decision-making process. Additionally, Erdem and Swait (1998) argues that consumer characteristics such as the demographic, psychographic, behavioristic and geographic traits influence consumers' attitude and perception towards a brand, hence influencing their level of satisfaction. Understanding the customer characteristics therefore enables a marketer develop an appropriate brand identity to achieve favorable image which eventually leads to customer satisfaction.



This study is grounded on consumer behavior theories that focus on consumer utility maximization behaviors which influence brand preference and choice. These theories include the Theory of Buyer Behavior (TBB), the Customer-Based Brand Equity model (CBBE), the Expectations Confirmation Theory (ECT), and the Utility Theory (UT). Effective branding leads to better identity, corporate image, brand equity, brand awareness, impacts on pre-purchase and post purchase decisions and eventually to customer satisfaction (Vukasovic, 2015, Nguyen & LeBlanc, 2001). Keller (1993) conceptualized branding from a consumer perspective, a model he referred to as Customer-Based Brand Equity (CBBE). Keller (2001) argues that creating a strong brand is a long-term journey that involves a step by step series of activities, namely; identifying the appropriate brand identity; establishing a preferred meaning; eliciting positive responses; and establishing mutual relationships with customers. Additionally, Expectations Confirmation Theory (ECT) states that an individual's expectations, combined with their respective perception towards brand performance, may result in post-purchase satisfaction. Finally, Utility Theory (UT) in consumer economics argues that consumers' decision making is highly influenced by their propensity to maximize utility rationally. These decisions must ensure a rational balance between the benefits and the perceived risks and consequences.

According to CUE (2016), universities in Kenya have experienced a tremendous growth in the last five years, from 65 in 2012/2013 to 70 in 2016/17, comprising thirty-three (33) public universities and thirty-seven (37) private universities. Similarly, students' enrolment increased from 251,196 in 2012/2013 to 443,783 in 2014/2015. The older

public universities have had well-known brands and accumulated experiential reputation. Recently, the industry has experienced an emergence of well-organized public and commercially oriented private universities. This shift underscores the need for all universities to craft and maintain enduring brand equities (Kagai, 2014). To respond to stiff growth in competition in the sector, institutions of higher learning are increasingly exploring unique competences that would give them a competitive advantage in the market. Universities have been pushed to develop survival strategies to promote their brand and remain afloat in the market. Universities have shifted focus to customer needs hence more emphasis brand building initiatives that enhance customer satisfaction. These developments provoked the researcher to investigate the extent to which brand management attributes influences customer satisfaction in the Kenyan universities context.

### **1.1.1 Brand Management Attributes**

Brand management is the analysis, planning and implementation of branding strategies intended to influence market perceptions towards a product or service. For effective branding, it is important to establish a cordial relationship with customers. According to Keller (2001), Brand management attributes include brand positioning (the place a product occupies in the mind of consumers relative to substitutes); brand identity (the noticeable elements that give a brand a distinction from the rest; brand personality (the human personality traits or characteristics that are assigned to a brand); and brand recognition (ability of a consumer to identify a brand positively through its logo, tag line, package or design).

According to Kapferer (2008), brand identity refers to the meaning attributed to a brand from the owner's perspective. Similarly, Aaker (1991) contends that brand identity refers to how the organization aims to identify or position itself' whereas brand image represents the way the public perceives the company or its products. Brand image is the outsiders' perception and interpretation of the brand identity. Several brand identity frameworks have been proposed, with several of them sharing the opinion that brand identity is sender based whereas brand image is receiver based. For the purpose of this study, a university brand identity refers to how the institution intends to position itself whereas brand image refers to how the institution is perceived by the outsiders, including but not limited to the customers (students), sponsors, parents, employers, competitors, regulators among others.

According to Kotler and Keller (2012), brand positioning refers to the act of designing a brand to occupy a distinct place in consumers' mind. This may be based on tangible and intangible attributes that are associated with the brand. Keller (2008) argues that brand positioning creates an emotional relationship that enables the consumers to segregate among competing brands and building loyalty. Brand managers focus on generating positive brand equity by promoting awareness, linking the brand to some tangible or intangible abstract in order to distinguish it and generate favorable position in the consumers' mind. Erdem and Swait (1998) contend that satisfied consumers will be willing to spend more money and effort on brands that they perceive to be of high value to them.

Aaker (1997) argues that the strength of a brand will depend on the extent to which a consumer can positively identify a particular product or service without any aid, by just viewing the product logo, slogan, package or advert, a concept referred to as brand recognition. It is measured by the consumers' ability to recall a brand when exposed to some cues such as the name, package, color, design. Samiee, Shimp, and Sharma (2005) argue that the level of brand recognition will influence consumer's choice process and gives a brand a competitive advantage in the market. Those brands that enjoy top of mind recognition stand a higher chance to be chosen compared to less recognized brands. Similarly, Keller (2008) argues that a brand that enjoys a favorable mindshare is likely to translate to a high market share.

Another major element of brand management is brand personality. Keller (2001) points out that if a brand consistently offers positive experiences over many years of regular use, it acquires a human like characteristics. The added values can emanate from experience of using the brand, and character based on the personality of the brand users. This may lead to the belief that the brand will deliver uniform and consistent quality. This can be justified by the physical appearance of the brand, the name, color, texture, shape, and packaging design among other tangible characteristics. Similarly, the manufacturer's name, identity and reputation have a greater likelihood of influencing brand personality of a product or service. Brand personality play a major role in influencing students' choice of the institution as well as the specific programmes offered. In Kenyan context, due to increased competition, stringent regulations and a well-informed population due to technological advancement, most local and foreign universities are investing more in

brand building initiatives to enhance their competitiveness. For example, an observation from the local media indicates that the University of Nairobi has enhanced her marketing and positioning strategy through increased promotion, through advertisement in the local media and online platforms. Other public and private universities have followed suit.

### **1.1.2 Corporate Image**

Bravo, Montaner and Pina (2009) defined corporate image as the mental picture in the customer's mind as a result of continued interaction with the brand. They are stored in the memory, retrieved to reconstruct image, transformed into either positive or negative meaning, and retrieved when the name of the organization is mentioned. Corporate image consists of a functional and emotional component. The functional components are the tangible characteristics or physical components that are easily measurable, such as brand architecture and brand portfolio (Waithaka, 2014). On the other hand, the emotional component is the psychological feelings, towards an organization that could be attributed to consequences from past accumulated experiences and associations with the organization (Kandampully & Hu, 2007).

Nguyen and Leblanc (2001) argue that due to the intangibility nature of services, management of corporate image is a challenging task. A positive corporate image can add value to a firm in many ways that gives a firm a competitive edge in the market place. On the other hand, a negative image can destroy an organization's reputation and influence the customers' perception towards the brand. They further pointed out that there is a strong relationship between corporate image and the physical and behavioral attributes of a firm, such as the business name, architecture, product portfolio,

tradition, ideology and the impression of quality communicated by each person interacting with an organization 's clients. In general, corporate image is a critical factor in the overall evaluation of an organization's strength and attractiveness in the industry.

Extant literature points to the role of corporate image as a mediating variable that directly or indirectly contributes to customer satisfaction. Vidari (1993) explains that manufacturing the product is not enough and that a good image helps in marketing process implying that corporate image is important in marketing a company's products and hence influences performance. Similarly, Keller (2001) points out that customers' intention to buy is highly influenced by the tangible and intangible assets associated with the brand. A favorable image can boost a firm's sales, by attracting potential investors, quality workforce, as well as discouraging the competitors from directly attacking its immediate target market, giving an organization an opportunity to achieve higher profits (Kim & Kim, 2004).

### **1.1.3 Customer Characteristics**

Kotler and Keller (2012) argue that a customer is the boss in the organization, hence making him/her the most important element in any business. The strength of an organization in the industry is determined by the number of customers that one serves compared to the competitors. Organizations that are more customer oriented are likely to create strong brand loyalty, which positively contributes to the overall corporate brand equity. Keller (1993) noted that consumers exhibit different buying behavior based on target market characteristic, which differ from one segment to another. In order to adapt

their marketing strategy to specific customer groups and segments, marketers must clearly define their markets based on various characteristics. This study will focus on basic demographic characteristics such as age, gender, ethnicity, occupation, education level, household size, religion, generation, nationality, social class among others (Keller, 1993).

It has generally been observed that the relationships between brand attributes and overall satisfaction could be influenced by certain characteristics of customers. The theory of consumer behavior (Holbrook, 1995) predicts that different personal characteristics of customers influence their purchasing behavior in any shopping environment. This has also been verified empirically. For example, factors such as gender, education and income have been found to affect purchase behaviour of customers (Slama & Tashchian, 1985). Similarly, Dewan and Mahajan (2014) suggests that situational factors such as years of relationship and frequency of purchase play a critical role in influencing the level of customer satisfaction.

The knowledge of various higher education institutions and their corporate brands increases the students' position on awareness and loyalty. Additionally, the students' social economic situation influences the purchase decision (Mourad, 2010). Some customer characteristics that are critical in reaching a decision to apply for higher education service include influence of the peers, parental/guardian advice, high school suggestions, gender and occupational interest or aspirations (Keller, 1993). Service brands and especially the higher education institutions, carry certain unique complexities

in that there is an inherent perceived risk since potential customers have to evaluate intangible service in advance of purchase (Vukasovic, 2015).

#### **1.1.4 Customer Satisfaction**

Customer satisfaction refers to the feeling of contentment after a customer compares between the perceived performance and expectation. The level of satisfaction depends on the extent to which the performance matches the expectations (Kotler & Keller, 2012). Similarly, Juran (1991) argues that the level of satisfaction depends on the extent to which the product/service features matches the customer needs. When performance exceeds the expectation, the customer is said to be delighted, whereas, if the performance is less than the expectations, the customer becomes dissatisfied. Whereas Bolton and Drew (1991) contend that it is a judgment made on the basis of a specific service encounter, Oliver (1997) views it as an emotional reaction which influences attitude and is consumption specific. In the university education context, Elliot and Shin (2002) observe that customer satisfaction in higher education institutions is as a result of a short evaluation of the overall education experience by the students during their campus life. In this regard, consumer satisfaction is an evaluation process with a fulfillment response, affective response, psychological state and overall evaluation (Fornell, 1992).

Owino (2013) argues that customer satisfaction measurement should include the ability to understand the gap between expectation and performance of the HEIs. From a students' vantage position, branding does solve many purchase decisions, serving to deliver a promise to help facilitate decision making and final selection of the university to apply and attend (Makgosa & Molefhi, 2012). However, due to the intangibility nature of



education services, it is difficult to measure the level of satisfaction in before consumption occurs (Makgosa & Molefhi, 2012). Higher Education sector provides rich context for research on branding as Kenyan institutions are becoming increasingly marketing oriented and students increasingly being perceived as more informed consumers (Mourad, Ennew & Kortam, 2011). The increased competition has pushed the universities to identify a unique selling point on which to position their brands. For the purpose of this study, customer satisfaction was defined as the resultant effect achieved when students (customers) evaluates their overall encounter with the university as they receive the services.

#### **1.1.5 Universities in Kenya**

Maslen (2012) forecasted that demand for university education internationally is expected to grow exponentially, at the rate of approximately 3% between the period of 2005 and 2025. This will see the student population grow to 262 million by 2025, with the highest growth expected in the third world countries especially in India and China. Such growth is expected to pose more challenges to the universities as they compete in attracting quality students from across the world.

In Kenya, university education has experienced an expansion from only one university in 1970 to 70 universities as at 2017. In the year 2012, the Universities Act No. 42 was enacted to govern university education in Kenya. The Act brought out issues of governance and administration of universities. Other issues brought out were upgrading of Public University Constituent Colleges to fully pledged universities. A rapid growth has continued to be witnessed in the number of HEIs and the students' population

(Waithaka, 2014). Kenyan universities can be classified into two broad categories: Public and private universities. Public universities are owned by the government while private ones are owned by institutions and individuals. For the purpose of this study, universities will be classified into three categories, namely, Public, Private individual-owned and private-institutional owned. Public universities are those which are partially financed by the government. Private universities are divided into two categories; those owned by individuals and those owned by institutions such as the churches or corporates.

According to the Commission for University Education [CUE], (2015), the number of universities in both public and private increased tremendously, from 65 in 2012/2013 to 70 in 2014/15, with a total students' population of 443,783. The high student population and the number of universities have led to increased competition not only among the Kenyan universities but globally. As a survival mechanism, universities have focused on improving customer service, creating and implementing new and innovative academic programs, education quality and research output. This makes the universities more competitive and attractive to the students' and stakeholders (Waithaka, 2014; Bourner & Flowers, 1997). Key to these developments is faculty members who need continuous character development, professional development, orientation towards quality teaching, applied research and student engagement (Waithaka, 2014).

The universities have been chosen for this study because the sector forms a key pillar towards achievement of Kenya's Vision 2030. As universities continue to develop

strategies to be more globally competitive, the institutions need to enhance competitiveness through branding and building a strong corporate image by understanding the customer needs and satisfying them more effectively and efficiently than the competitors. Both local and international universities have continuously embraced brand management attributes as well as building a strong corporate image to gain a competitive advantage in the industry. This has been characterized by the increased number of local universities advertising in the local media, increased public relations activities and event sponsorships, increased use of personalities such as chief executives, musicians, comedians, and politicians among others in brand endorsements. Some of the universities constantly appearing in promotional media include: The University of Nairobi, Kenyatta University, Zetech, KEMU, JKUAT, Strathmore, Mount Kenya University, USIU, and Daystar University among others. This study sought to establish the effects of these brand building initiatives on students' overall satisfaction with the university services.

## **1.2 Research Problem**

Effective branding creates a unique value proposition that forms the basis on which the positioning strategy is built. A strong brand is an asset to the company. The value of a brand is determined by its ability to generate revenue in future and maximize the shareholders' value. Mahrous and Hussein (2012) asserts that modern organizations that are market-oriented consider satisfaction as the end result rather than profitability. Such institutions believe in identifying customer needs and offering value through branding. Due to increased competition organizations have faced growth challenges, forcing them to shift from price-based to non-price-based competition strategies, hence, making brand

management practice a priority. Lamboy (2011) asserts that branding initiatives enhance customers' perceived corporate image hence giving an institution a competitive advantage in the market.

There is a notable gap in research on the role of branding in higher education. Most of the existing studies have generally focused on branding policies and initiatives in specific institutions or focused on external aspects of branding (Bulotaite, 2003). Herr (2001) explains that in today's higher education landscape, college and university leaders may well consider the principles of brand management to assure their positions vis-à-vis their competitors. This is evident through the use of trademarks to market and promote an institution to the public. Moore (2004) states that institutions have to differentiate themselves depending on the core attributes of the category in which they operate, and makes them different from others in the same category. Differentiation helps an institution get a niche in the market place. For a college or university, the name and all the symbolism attached to it represent the brand.

Although a number of studies have focused on the role of branding on customer satisfaction. However, very few have interrogated the influence of customer characteristics on the relationship between brand management attributes and customer satisfaction. For example, Gensch (1978) found a positive relationship between brand image and consumer purchase intention. Similarly, Graeff (1996) established that whenever a consumer's self-image was similar to the perceived brand image, satisfaction level was enhanced. In a study targeting catering business in Taiwan, Chien-Hsiung

(2011) established that customer satisfaction is enhanced if a brand is perceived to be of high value, has favorable characteristics and positive associations. Rory (2000) also concluded that positive brand image leads to increased customer satisfaction and encourage positive recommendations by the users. Similarly, Romaniuk and Sharp (2003) concluded that brand image directly influences consumer decision making process and brand choice. These studies have shown a correlation between brand management attributes and customer satisfaction, though none has emphasized on the moderating effect of customer characteristics in influencing the relationship.

In the universities' context, various studies have been done both globally and locally. Globally, Nguyen and LeBlanc (2001), in a cross-sectional research involving both the students and faculty members, found out that institutional image influenced faculty and students' loyalty in United States. In a similar study in California, Lamboy (2011) established that brand management promotes the identity of an institution by generating positive memories and linkages with the corporate brand, hence enhancing its distinct competencies. In yet another study, Pinar, Trapp, Girard and Boyt (2011) found a strong correlation between branding initiatives and increase in institutions enrollment in universities in United States. Similarly, Kotecha (2003) established that branding plays a critical role in influencing consumer perception and brand performance in South Africa. Binsardi and Ekwulugos (2003) found out that faculty members and learning facilities critically influenced the students' overall perceptions on the image or reputation of a higher learning institution in United Kingdom.

Locally, Owino (2013) and Waithaka (2014) found that corporate image positively influenced the relationship between service quality and customer satisfaction. However, although these studies focused on the customers as the main unit of analysis, there is no clear indication that the branding initiatives led to customer satisfaction or preference towards the institutions of higher education.

From the above analysis, it is clear that there are gaps that range from contextual, conceptual and methodological. Most studies have been conducted in a different environment hence posing a contextual gap. Additionally, none has focused on the influence of brand management attributes on customer satisfaction. Lastly, most of them have used the university as the unit of analysis in addition to using different research designs and data collection procedures. A critical review of existing literature established that the influence of brand management attributes on customer satisfaction in higher education institutions has not received sufficient attention. This study therefore intended to establish the role of brand management attributes in influencing customer satisfaction in universities in Kenya, with corporate image and customer characteristics as the mediating and moderating variables respectively. The study sought to answer the question; To what extent does Brand management attributes, corporate image and customer characteristics influence customer satisfaction among universities in Kenya?

### **1.3 Objectives of the Study**

The general objective of the study was to determine the influence of Brand management attributes, corporate image, and customer characteristics on customer satisfaction in universities in Kenya. The specific objectives of the study were to:

- i. Establish the influence of brand management attributes on customer satisfaction among undergraduate university students in Kenya.
- ii. Establish the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction among undergraduate university students in Kenya.
- iii. Establish the moderating effect of customer characteristics on the relationship between brand management attributes and customer satisfaction among undergraduate university students in Kenya.
- iv. Determine the joint influence of brand management attributes, corporate image and customer characteristics on customer satisfaction among undergraduate university students in Kenya.

### **1.4 Value of the Study**

The study will have significant contributions on the body of knowledge in the area of branding. The integration of brand management attributes, customer characteristics, corporate image and customer satisfaction provides a managerial tool that enables managers to adapt modern brand management attributes as they seek to satisfy their customers as well as developing competitive strategies to counter both global and local competition. The study will shed light on critical factors to consider in building and maintaining strong brands in the market place. Further, it would enhance the

understanding of the moderating effect of corporate image and customer characteristics in influencing the relationship between brand management attributes and customer satisfaction.

Higher education sector will greatly benefit from this study. For example, education has been identified as one of the economic pillars in the Kenyan vision 2030 development blueprint demonstrating the pivotal role played by universities towards economic growth of nations. The government agencies and institutions that regulate higher education such as the Commission for University Education (CUE), will use the findings of this study to set out policies and guidelines to enhance quality service, hence improving the employability of graduates. The universities are expected to be globally competitive in terms of quality education, training and research for development. Therefore, a need arises for university managers to intervene by improving their institutions corporate image through brand management attributes such as brand identity, brand recognition, brand personality and brand positioning, in order to improve their preference among the employers both locally and internationally.

Finally, a greater understanding of the overall effect of brand management attributes and corporate image on customers' satisfaction can assist management in redesigning their brand architecture to enhance organizational performance. It would also equip the university management with knowledge on the appropriate brand building customer-driven strategies that enhance competitiveness in the higher education sector. Locally, some universities have already specific offices that deal with brand building initiatives.



For example, the University of Nairobi established an advancement directorate whose main mandate is to enhance the university brand both locally and internationally. The findings of this study will assist the leadership of such initiatives in designing customer-based branding strategies for their universities.

### **1.5 Structure of the Thesis**

This thesis is organized into six chapters. Chapter one outlines the study background information with a brief description of the independent and dependent variables, research problem statement, research objectives as well as the value of the study. Chapter two outlines the theoretical orientation, with three theories presented. The empirical literature is also presented, with a critical review of the relationship between the dependent (customer satisfaction) and the independent variables (brand management attributes, corporate image, and customer characteristics). The concept of the study has been summarized using a conceptual model in line with the study objectives and the conceptual study hypothesis. Chapter three presents the philosophy that guided the study, the research design, target population, sampling design and procedure, data collection procedure and instrument, data collection methods as well as the analytical model used to guide this study.

Chapter four presents the descriptive data analysis, key findings and interpretation of results. The results presented include; diagnostics tests, descriptive analysis, correlation analysis, factor analysis and regression analysis. Chapter five presents the tests of hypothesis and discussion. Lastly, chapter six presents the summary of findings, conclusion and recommendations as well as suggestions for further studies.

### **1.6 Chapter Summary**

The chapter presented a background of the study, with a brief discussion of the main variables: brand management attributes; corporate image; customer characteristics and customer satisfaction. The chapter also reviewed the context in which the study is conceptualized. Finally, the research problem statement, the research objectives and questions as well as the value of the study were also discussed.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews the previous empirical literature available and discusses the brand management attributes (BMA) that underpins the ongoing heightened branding activities among universities in Kenya. The chapter looks at the theoretical orientation on which the study is anchored. Further, the chapter provides an empirical review exploring the role of brand management attributes, corporate image and customer satisfaction in influencing customer satisfaction in universities in Kenya. The chapter also presents the conceptual model, the conceptual study hypothesis and the operational framework that were adopted in carrying out this study. Finally, a summary of knowledge gaps identified is presented, clearly highlighting how the current study contributes to the body of knowledge in filling these gaps,

#### **2.2 Theoretical Foundation**

The study was guided by three consumer behavior theories; the customer-based brand equity model, the expectation confirmation theory and the consumer utility theory. Specifically, the study was anchored on the CBBE model, with an emphasis on the role of brand management attributes in shaping the consumers' mental processes and decisions.

##### **2.2.1 Customer Based Brand Equity Model**

Brand equity can be conceptualized from the consumer's point of view. Aaker (1991) and Keller (1993) argue that consumers' responses to marketers' offerings differ from one

consumer to another depending on their level of knowledge, attitude, and overall perception towards the brand. As consumers interact with a brand, they develop both positive and negative associations with the brand, which culminates in assets and liabilities that generates value to a firm or its customers (Aaker, 1997). CBBE model is based on the assumption that the value of a brand is determined by the consumer rather than the brand proprietor. Consumer judgment is based on various cues name, package, color, design, prior experience, and word of mouth among other internal and external brand attributes.

CBBE model is based on the premise that the customer determines the strength of a brand based on their knowledge and experience (Kotler & Keller, 2012). It is the responsibility of the marketers therefore to develop appropriate marketing strategies that will give the customers positive experiences by positively influencing their thought processes, feelings, images, beliefs, perceptions and opinions. De Chernatony et al. (2004) argue that measuring customer satisfaction was instrumental in understanding the CBBE model. This study will seek to determine the extent to which brand management attributes (as perceived by the students) influences customer satisfaction.

### **2.2.2 Expectation Confirmation Theory**

Oliver (1997) posits that satisfaction is directly influenced by the rate at which product/service perceived performance meets customer expectations. The consumer evaluates the overall performance to confirm whether or not their expectations are met. From this evaluation, a consumer will be either satisfied or dissatisfied (Spreng et al.,

1996). Jiang and Klein (2009) argue that this theory can be applied in different contexts where satisfaction is a dependent variable.

Churchill and Suprenant (1982) contend that Expectation Confirmation Theory is based on four main dimensions; Expectations, Performance, Disconfirmation, and Satisfaction. To form a judgement that is disconfirmation in nature, consumers use their expectations as a standard to compare and evaluate the brand performance. If the disconfirmation is positive, the customer becomes satisfied and vice versa. Satisfaction is widely believed to be an important factor in enhancing customer retention. It is suggested that customer retention is the singular most important element of business loyalty (Reichheld, 1996). From a branding perspective, consumers who form a positive disconfirmation about a brand are more likely to remain loyal and develop a positive or a negative association towards a brand. In the context of universities in Kenya, students may form disconfirmation based on their perceived expectations before they joined the university.

### **2.2.3 Consumer Utility Theory**

Before making a purchase decision, consumers tend to compare all available alternatives in order to maximize their satisfaction. Both visible and invisible product attributes are the basis on which these decisions are based. Consumers seek to make rational decisions taking into consideration the perceived risks and consequences due to the uncertainty nature of consumer buying decision making (Baker, 2001). However, Kotler, Bloom and Hayes (2002) argue that this economic behavior cannot exhaustively explain how consumers make a choice between two or more competing brands. 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 behavior by the Expected Utility Theory has been criticized on several grounds. It does not explain the consistency of the individuals' decision behavior according to familiarity with the decision weight and the level of complexity. Further, Hartinger (1999) argues that EUT has limitations in describing and predicting consumer behavior 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.

Utility theory 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, 1970). On the other hand, Baker (2001) 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). Brand positioning is believed to enhance consumers' perception and attitude towards a brand. It enables them develop a mindset, hence giving the brand a preference above the competitor brands, based on certain attributes or characteristics. Similarly, enhanced brand equity is likely to psychologically influence consumers' choice as they strive to maximize on brand utility.

According to Parvatiyar and Sheth (2001), there are a number of motives and alternative lines of action that influence consumer's decision. Brand positioning enhances consumers' perception and attitude towards a brand. It enables them develop a mindset, hence giving the brand a preference above the competitor brands, based on certain attributes or characteristics. Similarly, enhanced brand equity is likely to psychologically influence consumers' choice as they strive to maximize brand utility. As discussed earlier, brand equity (awareness, loyalty, association and perceived quality) play a critical role in influencing the consumer behavior in order to maximize product utility. Similarly, brand positioning focuses on maximizing consumer utility by focusing on certain benefits that gives a consumer a reason to buy a product (Parvatiyar & Sheth, 2001).

### **2.3 Brand Management Attributes and Customer Satisfaction**

Branding is a core concept in marketing (Menon & Barani, 2016, Vukasovic, 2015). It is the management process in marketing of creating a unique name, symbol, images or design to a service or product. The combination of all branding strategies singly or integrated can rightly be referred to as brand management attributes. Effective branding

leads to better identity, corporate image, brand equity, brand awareness, impacts on pre-purchase and post purchase decisions and eventually to customer satisfaction (Vukasovic, 2015, Nguyen & LeBlanc, 2001). Organizations position and reposition themselves and compete on the basis of perceived service quality, corporate image and competitive advantage. To attain sustainable competitive advantage, organizations have to innovate, improve in general and upgrade their competitive advantage through effective brand equity management (Porter, 1990).

The purpose of any brand positioning strategy is to give a brand a “unique selling proposition” that acts as a motivating factor to encourage the consumers buy a particular brand (Keller, 1993). These distinct characteristics can be communicated explicitly through direct comparisons with competitor brands or implicitly without stating a competitive point of reference. This makes the application of this branding strategy ideal in the higher education sector.

Branding does not only elevate an institution’s corporate image but also impacts positively on customer satisfaction. An institution’s positioning sets out what, who, and where the brand is and what it offers. Ultimately it is the differentiation, the unique benefits, quality of service and the positive history of the brand that the customer remembers (Harsha & Shah, 2011). Makgosa and Molefhi (2012) argue that for the customer (student), branding helps in serving as a promise that once they enroll and study in the university, their expectations and future aspirations will be met. Furthermore, branding facilitates the overall evaluation of the university brand by the student. This is



important because education services are intangible and experiential in nature, making their evaluation before purchase complex. In addition, the perceived value is also associated with accompanying perceived risk (Vukasovic, 2015). Branding thus plays an important part of risk relieving, reinforcing the customer's confidence, trust and initial satisfaction (Erdem & Swait, 1998).

According to Grewal and Levy (2010), branding serves to differentiate service offerings from those of competing institutions. It is a management function that involves creating a distinct name and image in order to occupy a unique position in the consumer's mind, attract and retain such customers. A good brand can evoke and engender acceptance, feelings of trust, confidence, attract premium price value, and associate the brand with security. This can be achieved by enhancing the brand architecture. It involves integrating all the brand building processes to develop positive relationships within the competitive environment. Brand architecture depends highly on the management's past decisions in relation to the competitive challenges in the marketplace (Kapferer, 2012). To enhance customer satisfaction, university branding would normally take the form of dual branding whereby the process captures not only the university name but also the academic programmes offered (Peter & Donnelly, 2009).

#### **2.4 Brand Management Attributes, Corporate Image and Customer Satisfaction**

Corporate image refers to the beliefs and impressions that the community and other stakeholders make about an organization. It is a notion held by others about a particular organization, which helps the institution obtain superior status in a competitive

environment (Kotler & Armstrong, 2008). According to Owino (2013), corporate image in a university is the overall feelings, thoughts, attitudes, impressions and knowledge held by stakeholders about the institution. Marketers of these institutions employ brand building activities such as brand identity, positioning and associations help in shaping the corporate image in the mind of the consumer (Keller, 1993). He further argues that the overall judgment of the brand performance is highly influenced by the prior knowledge and expectations that are formed through branding, hence influencing the overall satisfaction.

The marketing and branding activities carried out by universities as well as publicity and word of mouth communication among the students and other stakeholders increases the brand awareness of the institution (Mourad et al., 2011). In this respect, institutions of higher learning are willing to allocate substantial resources branding and promoting their products and services in an effort to create awareness and build a competitive advantage. Vukasovic (2015) further notes that promotional activities cover all promotions done by higher education institutions with an aim of creating a favorable image and goodwill among the students. A study carried out by Andreassen and Lindestad (1998) established that corporate image plays a critical role in influencing customer overall evaluation of quality and satisfaction with a brand. The attributes related to quality of university education, such as class size, faculty qualification, library services, access to learning materials among others, have been used as determinant of brand equity among the institutions of higher learning and thus the main strategy adopted by the universities to attract students.

According to Mourad, Gaese and Jabarin (2010) the brand quality attributes can be categorized into three components; provider, product and symbolic attributes. Provider attributes represents the internal publics, institution location, student faculty ratio among others. Product attributes refers to those specifically related to quality of the service such as tuition fees, customer service, courses offered, duration of study, admission criteria, graduate employability among others. Lastly but not the least, symbolic attributes refers to the associations related to the brand identity, overall image, innovation, institutional linkages among others (Vukasovic, 2015), This implies that brand management initiatives that are directed towards building a strong corporate image are likely to lead to customer satisfaction. For example, a brand with a unique identity, unique positioning or positive association translates to positive corporate image, hence satisfaction.

## **2.5 Brand Management Attributes, Customer Characteristics and Customer**

### **Satisfaction**

According to Mourad et al. (2011), there is a high correlation between customer characteristics and satisfaction based on customers' own socio-economic characteristics and experience with the brand. The trio established that academic qualification, motivations, occupational interest and previous experience with the service provided played significant roles in influencing customer satisfaction in higher education sector in Egypt. In another study conducted in the higher education sector in Silvenia, Vukasovic (2015) established that customer characteristics such as gender, family life cycle stage, income, customer experience with the service provided and education level, greatly

influence customer satisfaction. In a similar study in USA, Mittal and Kamakura (2001) noted a great variation in customer levels of satisfaction based on numerous customer demographic characteristics and the situational characteristics, Additionally, Baumann, Suzan and Greg (2005) established that customer age strongly moderates the relationship between loyalty and satisfaction. In particular, they concluded that satisfied consumers from the older generation were likely to be more loyal to a particular brand than their counterparts from the younger generation. Conversely, in a different study among grocery consumers, Magi (2003) was of a contrary opinion that age did not have any moderating effect on the relationship between customer satisfaction and loyalty.

Homburg and Giering (2001) established that customer income level inversely affects the relationship between customer satisfaction and loyalty. Consumers in high income market segments are willing to commit more time and resources in favor of a brand with less evaluation effort. Mittal and Kamakura (2001) noted that consumers who are highly educated and are more informed and have a likelihood of lower loyalty levels and less satisfied. Similarly, Farley (1964) argues that highly educated individuals are associated with high income levels and lower levels of loyalty. This may be attributed to the freedom to choose from variety of products and services.

The term customer satisfaction is used to describe the level of gratification by a customer after comparing the product/service performance and their expectations prior to consumption (Fischer & Suwunphong, 2015). They observed that customer satisfaction is a summative evaluation of the outcome after consumption has occurred. Organizations

use customer satisfaction to optimize their service quality by focusing on capabilities such as time, finances, employees, production process among other. In the long run, customer satisfaction becomes a fundamental determinant of consumer purchase behavior (Cooil, Keiningham, Aksoy & Hsu, 2007). They considered age, income and education in relation to satisfaction where an increase in age led to increase in satisfaction while an increase in income and education led to decrease in satisfaction. This indicates a relationship between customer characteristics and satisfaction.

## **2.6 Brand Management Attributes, Corporate Image, Customer Characteristics and Customer Satisfaction**

The overall purpose of branding is to give a brand a distinct identity that distinguishes it from other competing brands (Aaker, 1991). It stimulates creation of awareness to enable consumers recognize and distinguish a brand from others. Branding adversely influences the consumer decision making process by bringing three advantages; choice advantage; consideration decision, and learning advantage (Keller, 2001).

The primary step in building brand equity is by creating awareness about the brand through informative communication as a first entry point into the consumers' mind. It helps create a favorable position in consumer's memory, enhancing familiarity hence giving a reason for the consumer to buy the brand. Simply, it enhances the possibility of the brand to be included in the consumer's consideration set (Gil, Andrés & Salinas, 2007). Tse (2001) observes that corporate image directly or indirectly influences consumer brand evaluation hence affecting the level of satisfaction with the band.

Brand management attributes contribute to creating clearer and more reliable image in customer mind which gradually, result in increased attraction towards an organization's offering. In the long run, such practices influence consumers' judgment towards the brand. The level of satisfaction will depend on the customers' interpretation of the extent to which they perceive the brand has met their expectation. Mitchell (1999) argues that any inconsistency between the promised benefit and the actual benefit will lead to dissatisfaction.

In a different study, Cooil et al., (2007) established that customers' social economic characteristics significantly influenced the relationship between satisfaction and behavioral outcomes such as brand loyalty. A survey of automobile customers on how differences in customer characteristics affects satisfaction threshold was investigated by Mittal and Kamakura (2001) and found out that different consumer groups as determined by their characteristics had different satisfaction thresholds. Similarly, Rachna and Shaw (2002) compared customer characteristics and satisfaction. After a series of analysis, they found that satisfaction ratings did not differ significantly on the basis of consumer characteristics. They established a significant relationship between satisfaction level and customer characteristics.

## **2.7 The Knowledge Gaps**

From the reviewed literature several knowledge gaps were identified as summarized in Table 2.1.

**Table 2.1: Summary of Knowledge Gaps**

<b>Author(s)</b>	<b>Study Focus</b>	<b>Research Design and Major Findings</b>	<b>Knowledge Gaps</b>	<b>Current Study Focus</b>
Menon, V. P., & Barani, G. (2016)	Analysis of key success factors in higher educational institutions in India. The study focused on the role of brand building process in building brand equity.	<p>The study used a cross sectional survey, focusing on 635 first year engineering students from Tamilnadu university, in India.</p> <p>The study found out that the success of higher educational institutions depends on the integration of all the dimensions of brand. The findings were useful for comparing the relationship among the brand equity dimensions and between dimensions of brand equity and overall brand equity.</p>	<p>This study focused on first year students. Branding is a long-term process and not an activity. The study shows some biasness since new customer (first year students) may not have interacted with the brand for them to form a conclusive opinion. This reveals a contextual and methodological gap.</p>	<p>The current focusses on the role of branding in influencing customers' satisfaction. It focusses on all students both in public and private universities distributed across all programmes and years of study.</p>

<p>Vukasovic, T (2015)</p>	<p>Understanding and utilization of Consumer Based Brand equity in HE sector in Slovenia. A self-completion online survey.</p>	<p>Self – completion survey approach to collect quantitative data. The study found that service, symbolic and financial attributes were the major drivers of brand equity in HE.</p>	<p>The study focused on developing and maintaining determinants of brand equity from the institutional point of view. This is both a contextual and methodological gap.</p>	<p>This study focused on determining how branding initiatives influenced customer satisfaction and the role of corporate image and customer characteristics in this relationship.</p>
<p>Williams, R. L., &amp; Omar, M. (2014)</p>	<p>The article presented a general review of literature on how branding process activities impact brand equity within Higher Education Institutions across the world, with more focus on studies on American universities.</p>	<p>The article involved a desk analysis of various studies focusing on branding in HEI. The article concluded that brand image, brand identity, and brand soul all work together to create worth and define brand equity. Ongoing brand management within a service organization is critical to guarantee that the brand identity is indeed consistent with the brand image held by the stakeholders, and the brand soul lived by the employees.</p>	<p>The authors were evaluating the role of branding process in building brand equity for HEIs. The study assumed that all universities deliberately engage in brand building activities. The review did not consider the institutional based characteristics that can influence the branding process.</p>	<p>This study focusses on students as the primary consumers of university services. The findings are based on the students’ point of view to test the perceived role of branding in influencing their satisfaction with university services.</p>



Waithaka T.W(2014)	Relationship between corporate identity and performance of Kenyan Universities	Descriptive cross-sectional survey. The study established existence of a strong relationship between corporate identity management practices and brand performance of universities in Kenya.	The study focused on the brand performance as a terminal variable. There is a conceptual and methodological gap.	This study focused on customer satisfaction as a terminal variable.
Owino E (2013)	Focused on the relationship between service quality and customer satisfaction among university students in Kenya	Descriptive cross-sectional survey was used. The study established a strong relationship between service quality and the level of satisfaction among the students, though there was a significant difference between public and private university students.	Study was only limited to student's perception on service quality dimensions. This creates a conceptual gap hence the need to study other areas such as branding.	The current study focused on the moderating effect of corporate image and customer characteristics on the relationship between Brand Management Attributes and Customer Satisfaction among university students.

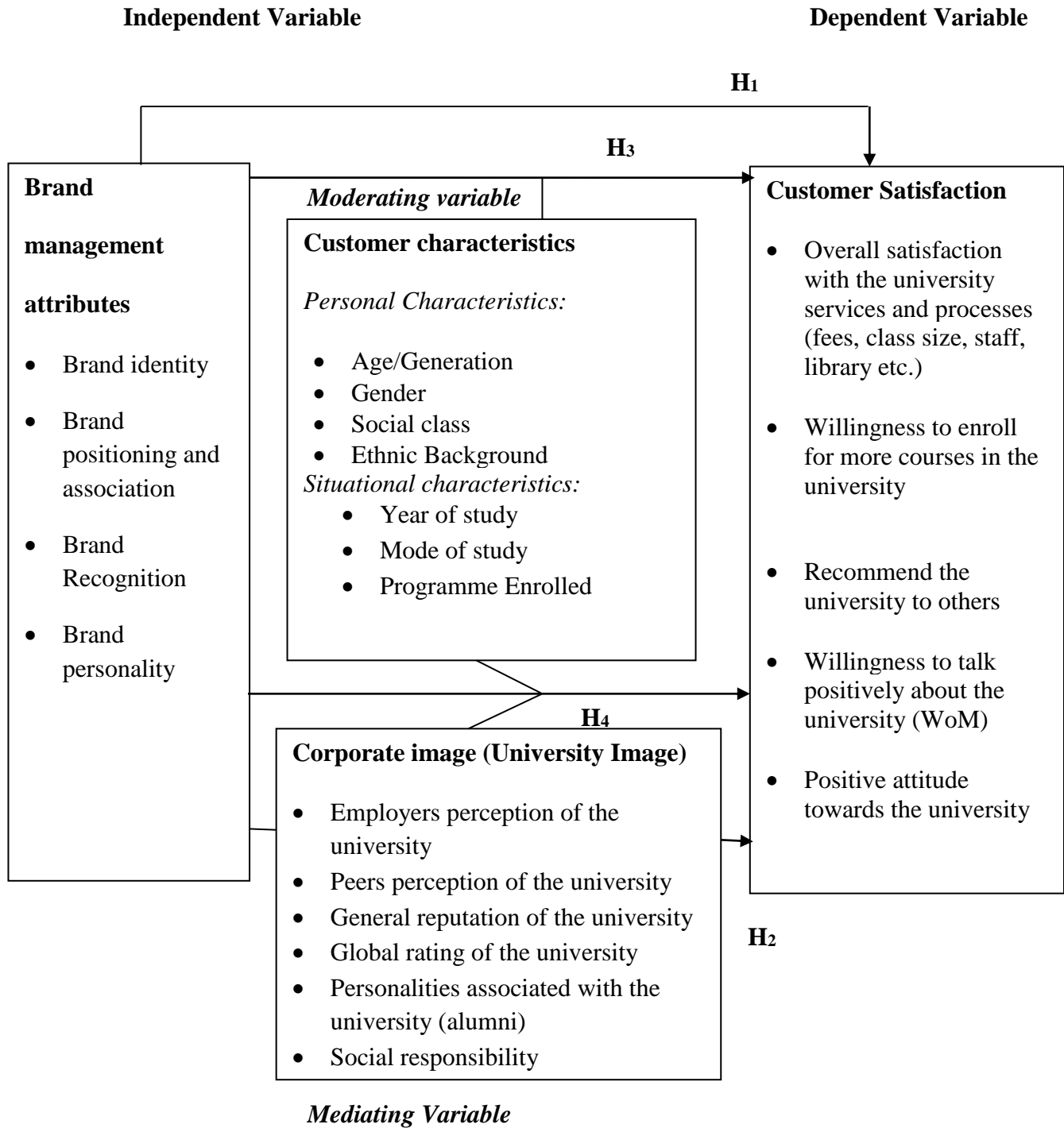
Makgosa R and Molphi B.A (2012)	The study sought to establish the effects and perceptions of rebranding of HEIs in Botswana	Descriptive survey design targeting business students. From the findings, the old university logo was rated higher than the new logo with respect to awareness, association and meaning.	The study only concentrated on the logo as a brand element. It did not evaluate the impact of the overall branding initiatives on customer satisfaction. There exists a conceptual and methodological gap.	Influence of brand management attributes on customer satisfaction with the overall service. The study also focused on the role of corporate image and customer characteristics as mediating and moderating variables respectively.
Lambooy J.V (2011)	Implication of Branding initiatives on university corporate identity and image in California, USA.	Descriptive cross-sectional survey. There was a positive impact of branding initiatives on university corporate identity and image.	Study limited only to colleges and universities in California, USA. There exists a methodological and contextual gap.	The current study focused on the influence of branding initiatives on customer satisfaction among Kenyan university students.
Pinar, M., Trapp, P., Girard, T., & Boyt, T. E. (2011).	Focused on how HEI utilize brand ecosystem framework in designing branding strategies in USA.	Descriptive cross-sectional survey. The study found out that branding efforts were significant in promoting an institution's enrollment.	The study was testing the application of the branding ecosystem framework in designing branding strategies. There exists both conceptual and contextual gap.	This study sought to establish the effect of brand management attributes on overall customer satisfaction among university students in Kenya.

Teh G.M and Saleh A.H (2011)	Focused on establishing how brand meaning impacted on brand equity of public and private HEIs in Malaysia	Questionnaire survey was used. The study found out that the meaning attributed to a brand positively influenced brand equity in HEIs	The study did not delve into the theories and applications of branding and how it influences customer satisfaction. There exists a conceptual and contextual gap.	The study delved on the branding theory, with focus on the relationship between brand management attributes and customer satisfaction across different categories of universities in Kenya.
Teh G.M (2010)	Comparison of service branding models between private and public Higher Educational Institutions (HEIs) in Malaysia.	A descriptive Survey. There was significant difference between public and private HEIs branding model.	The study was evaluating the difference in branding approaches used HEIs. There exists a contextual gap.	This study focused on the BMAs and their impact on students' satisfactions, as mediated by corporate image and moderated by customer characteristics.

Source: Researcher, 2018

## **2.8 Conceptual Framework**

This study adopted the conceptual framework shown in Figure 2.1. The conceptual model identifies brand management attributes (independent variable); and customer satisfaction (dependent variable). The study sought to measure the moderating effect of both corporate image and customer characteristics on the relationship between brand management attributes and customer satisfaction.



**Figure 2.1 Conceptual Model**

Source: Researcher, 2018

## **2.9 Conceptual Study Hypotheses**

As illustrated in the conceptual model (Figure 2.1), the study addressed the following hypotheses:

- H<sub>1</sub>: There is a significant relationship between brand management attributes and customer satisfaction among undergraduate university students in Kenya.
- H<sub>2</sub>: Corporate image significantly mediates the relationship between brand management attributes and customer satisfaction among undergraduate university students in Kenya.
- H<sub>3</sub>: Customer characteristics significantly moderate the relationship between brand management attributes and customer satisfaction among undergraduate university students in Kenya.
- H<sub>4</sub>: There is a significant combined influence of brand management attributes, corporate image and customer characteristics on customer satisfaction among undergraduate university students in Kenya.

## **2.10 Chapter Summary**

The chapter presented a theoretical foundation of the study, reviewed empirical literature on brand management, corporate image, customer characteristics and customer satisfaction. Finally, the chapter identified existing knowledge gaps based on reviewed literature, the conceptual framework and the conceptual hypotheses to guide the study.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the procedures and methods that were used in gathering, analyzing and presenting the findings from the study. It describes the research philosophy, the study population, the sampling design and procedure, instrumentation and the data collection approach to be used in order to identify the role of brand management attributes in influencing customer satisfaction, as well as testing the mediating effect of corporate image and the moderating effect of customer satisfaction.

#### **3.2 Research Philosophy**

Easterby-Smith, Thorpe and Jackson (2013) observe that research philosophy refers to the approach used in data collection, analysis, interpretation and use, to solve an identified research problem. There are two main philosophies; epistemology and doxology. They further argue that science seeks to translate what is believed to what is known (transform doxa to episteme). Galliers (1991) identified two research philosophies in science, namely; positivism and interpretivism. The positivists believe that in reality, every phenomenon can be observed and described objectively. On the other hand, the interpretivists argue that most phenomena are interpreted subjectively depending on the situation. To understand the nature of reality, other debates have featured on realism and relativism. The realists believe that there exists a single truth for every phenomenon,

whereas relativists believe that there are many ‘truths’ depending on the point of view of the researcher (Easterby-Smith et al., 2013).

For the purpose of this study, the researcher adopted the positivists approach, particularly, critical realism. Empirically, customer satisfaction was measured from the students’ point of view based on their experience and perception towards the university brand. However, this assumed that the students would be objective in their interpretation of various brand attributes associated with their respective universities.

### **3.3 Research Design**

To effectively measure the relationship between the dependent and independent variables, this study adopted a descriptive cross-sectional survey design. A descriptive cross-sectional survey is appropriate in collecting data to make deductions and conclusions about a population of interest and has been regarded as a representative of the population from which researchers collect data. According to Lomax and Raman (2007), cross-sectional studies have robust effects on relationship studies. Additionally, descriptive survey design allows for collection of large data from sizable population. This facilitates the researcher to give organized, consistent and interrelated summary of variables under study (Sandelowski, 2000). Babbie (2013) argues that a descriptive design tends to be more specific, accurate and involves description of events in a carefully planned way. Malhotra, Hall, Shaw & Oppenheim (2004) argues that in order to make an accurate prediction about the behavior of a group, a researcher should describe the population characteristics, estimate their distribution, determine their perception,



determine the relationship between variables and make predictions on their possible future behaviors.

### **3.4 Target Population**

The target population for this study was undergraduate university students in Kenyan local universities. According to the CUE 2015, there were 33 public universities, 18 private individual owned universities and 19 private institutional owned universities making a total of 70 universities registered and accredited to operate in Kenya, with a population of 443,783 students enrolled for various undergraduate degree programmes (See Table 3.1). Navarro, Iglesias and Torres (2005) noted that the undergraduate students are the primary target group for a university. In this context, undergraduate students qualify as a major focus for this study.

### **3.5 Sample Size and Sampling Procedure**

From the selected target population, the students were stratified into three categories, based on the ownership and management of the university. The three strata include: Public universities; Private Institutional owned universities; and private individual owned Universities. The researcher's choice is based on the fact that brand management attributes are highly influenced by the ownership of the institution. Similarly, the student's characteristics in public and private universities tend to differ significantly.

The study used a multistage sampling procedure that involved two stages. The first stage was sampling 30% of the universities in each category using a simple random sampling method. Since the categories were established, the researcher developed a source list

from which 21 universities representing 30% of the target population was picked using random sampling. According to Mugenda and Mugenda (1999), at least 30% of the cases per group are required for research. A number was given to every university this was written on pieces of papers and placed in a container, folded and shuffled. A number was picked at a random. The process was repeated until the required sample of 21 universities was attained.

The second stage used systematic random sampling, selecting every 5th student entering the main gate of the main campus of the selected university. Purposeful sampling was applied strategically to ensure equitable distribution of respondents based on gender, the program enrolled and the year of study. This helped reduce biasness and ensured fair representation.

To arrive at the sample size of the university students, the researcher used Krejcie and Morgan (1970) sample size determination table (See Appendix, IV). According to the table the appropriate sample size of a population size of 443,783 at 95% confidence level is 384. Systematic random sampling method was used, where the researcher picked every 5<sup>th</sup> undergraduate student entering through the main gate of the selected university. The process was repeated until the required sample size was achieved. From every category a sample size equivalent to 18.29% was applied. The advantage of using this method is that it minimizes errors that occur during sampling thereby increasing the accuracy (Yin as cited by Tim, Brnich & Jason, 2016).

**Table 3. 1: Sample Size**

<b>Strata</b>	<b>No. of Universities</b>	<b>Percentage %</b>	<b>Sample size</b>	<b>Sample Size</b>
Public Universities	33	30	10	183
Private Individual owned Universities	18	30	5	91
Private Institutional owned universities	19	30	6	110
<b>Total</b>	<b>70</b>		<b>21</b>	<b>384</b>

Source: Commission for University Education (2015)

### **3.6 Data Collection**

The researcher collected primary and secondary data. Primary data was collected using a self-administered structured questionnaire, distributed proportionately to each selected university. The questionnaire was divided into five main sections, namely; respondents' bio data, brand management attributes, customer characteristics, corporate image and lastly, customer satisfaction. Likert-type questions were mainly used across the sections, where the respondents were asked to state the extent to which they agreed/disagreed with specific variable related statements on a scale of 1 to 5, where; 5=Strongly Agree; 4 = Agree; 3 = Indifferent; 2 = Disagree; 1 = Strongly Disagree.

The researcher used three research assistants to assist in data collection. The assistants received induction training by the researcher to equip them with the relevant skills as well as attain a mastery of the instrument. To facilitate the process, the researcher established a contact person in each selected university, who assisted the research assistants during the exercise. In addition, the researcher randomly visited the assistants during the data collection exercise to ensure that the process was executed as expected.

Additionally, each selected university was presented with an authorization letter attained from National Commission for Science, Technology and Innovation (NACOSTI) in order to be permitted by the university management to interact with the students. The study used systematic random sampling, by selecting every fifth student entering the main gate of the main campus of the selected university. This was done until the researcher achieved the targeted sample as outlined in table 3.1.

### **3.7 Reliability, Validity and Diagnostics Tests**

According to Winter (2000), reliability and validity are tools of an essentially positivist epistemology. Reliability test measures the internal consistency of each variable and investigates if each individual question used to create the variable will be measuring the same aspect while the validity test measures the extent to which a scale measures the variable it is supposed to measure (Zikmund, Babin, Carr & Griffin, 2013).

#### **3.7.1 Reliability Test**

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials. Reliability of the research instrument is its level of internal

consistency over time (Mugenda & Mugenda, 2003). To check on whether the items in the questionnaire measured the expected theorized variables in the conceptual model, the questionnaire was pretested. The selected respondents were asked to rate the clarity of the items in the questionnaire and comment on the time used to fill one questionnaire. The researcher used the most common internal consistency measure known as Cronbach's alpha ( $\alpha$ ). It indicates the extent to which a set of test items can be treated as measuring a single latent variable (Cronbach, 1951). The recommended value of 0.7 was used as a cut-off of reliabilities. A pilot study of 25 students was undertaken to establish the reliability of the questionnaires using internal consistency approach by use of SPSS version 21. The results (as shown in table 4.2) indicates that all variables had a high reliability, with Cronbach's alpha ( $\alpha$ ) greater than 0.9.

### **3.7.2 Validity test**

According to Mugenda and Mugenda (2003), validity refers to how accurately the data obtained capture what they were designed and purported to measure. To enhance the content validity of the questionnaire, marketing experts were consulted to validate the instruments. Their comments were considered in revising the instruments in order to collect valid data. Mugenda and Mugenda (1999), state that the usual procedure in assessing content validity of a measure is to seek expert or professional advice in that particular field. Additionally, factor analysis method was applied to assess validity of measurements.

This method of analysis was based on the criteria of the Keiser, Meyer and Ohlin (KMO) above 0.7; while Bartlett's test is significant at Eigen values greater than 1. To ascertain validity, the questionnaires were tested on 25 students conveniently selected from different representative universities. The constructs of the variables (brand management attributes, corporate image, customer characteristics and customer satisfaction) were subjected to Kaiser-Meyer Olkin (KMO) and Bartlett's test extraction using Principal Component Analysis by Varimax rotation and Kaiser Normalization. This was necessitated by the large number of items in all the variables under study. Additionally, previous studies have also used factor analysis to determine validity of questionnaire (Njeru, 2013; Sin et al., 2005; Thuo, 2010, Macharia, 2017).

### **3.7.3 Diagnostic tests**

To test the statistical assumptions, the researcher ran tests for normality, linearity, homoscedasticity, auto-correlation and multicollinearity. To test out if the sample's data used on this research was normally distributed, Shapiro-Wilk test was performed to check for normality. The second assumption tested out is linearity or assumption of linear relationship observed between two variables. Correlation test was done to test the relationship between variables using Durbin-Watson, which is a test used to detect the presence of auto-correlation (a relationship between values separated from each other by a given time lag) in the residuals (prediction of errors).

The other assumption tested was the homoscedasticity, which is the assumption that quantitative dependent variables have equal levels of variability across a range of (either

continuous or categorical) independent variables” (Hair, Anderson, Tatham & Black 1998). Absence of this assumption is called “heteroskedasticity”. The probability – probability plot (P-P Plot) a graphical method was used to assess homoscedasticity of data distribution. Finally, it was necessary to test for multicollinearity. According to (Hair et al., 1998), it occurs when “any single predictor variable is highly correlated with a set of other predictor variables” Similarly, to establish if there are multicollinearity problems, the study looked at the VIF (variance inflation factor) and tolerance. When there is no problem with multicollinearity, tolerance value should not be less than 0.10 while VIF value should not be more than 10 (Newbert, 2008).

### **3.8 Operationalization of Study Variables**

This section provides the operationalization of the study variables. Operationalization of the study variables was based on the literature. The variables were operationalized and measured using indicators based on a five-point Likert type scale. For Brand Management Attributes and Customer Satisfaction, Likert scale was used ranging from 1 = strongly disagree to 5 = strongly agree. For Corporate Image and Customer Characteristics, Likert type scale ranging from 1= Not at all (NAA) 2 = Small extent (SE) 3 = Moderate extent (ME) 4 = Large extent (LE) 5 = Very large extent (VLE). Likert type scale is a standardized psychometric response scale mainly used in questionnaires to get participant’s preferences or the extent of agreement with a statement or set of statements (Vogt, 1999). Table 3.2 outlines the relevant measures and their corresponding operational indicators.

**Table 3.2: Operationalization of Study Variables**

Variable	Nature	Indicators	Measure	Scale	Question
Brand management attributes	Independent variable	<ul style="list-style-type: none"> <li>• Brand identity</li> <li>• Brand positioning and association</li> <li>• Brand Recognition</li> <li>• Brand personality</li> </ul>	Five-point Likert's scale 1 = Strongly Disagree; 2 = Disagree; 3 = Indifferent; 4 = Agree; 5 = Strongly Agree	Interval	Section B
Corporate image	Mediating variable	<ul style="list-style-type: none"> <li>• Employers perception of the university</li> <li>• Peers perception of the university</li> <li>• General reputation of the university</li> <li>• Global rating of the university</li> <li>• Personalities associated with the university (alumni)</li> <li>• Social responsibility</li> </ul>	Five-point Likert's scale.  1=Not at all (NAA); 2 = Small extent (SE) 3 = Moderate extent (ME) 4 = Large extent (LE) 5 = Very large extent (VLE)	Interval	Section C
Customer characteristics	Moderating variable	<ul style="list-style-type: none"> <li>• Personal Characteristics: <ul style="list-style-type: none"> <li>✓ Age/Generation</li> <li>✓ Gender</li> <li>✓ Social class</li> <li>✓ Ethnic Background</li> </ul> </li> <li>• Situational characteristics: <ul style="list-style-type: none"> <li>✓ Year of study</li> <li>✓ Mode of study</li> </ul> </li> </ul>	Five-point Likert's scale.  1=Not at all (NAA); 2 = Small extent (SE) 3 = Moderate extent (ME) 4 = Large extent (LE) 5 = Very large extent (VLE)	Interval	Section D



Customer satisfaction	Dependent Variable	<ul style="list-style-type: none"> <li>• Overall satisfaction with the university services and processes (fees, class size, staff, library etc.)</li> <li>• Willingness to enroll more courses in the university</li> <li>• Recommend the university to others</li> <li>• Willingness to talk positively about the university</li> <li>• Positive attitude towards the university</li> </ul>	<p>Five-point Likert's' scale</p> <p>1 = Strongly Disagree;  3 = Disagree; 3 =Indifferent;  4 = Agree; 5 = Strongly Agree</p>	Interval	Section E
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Source; Researcher, 2018

### 3.9 Data Analysis

This involved data preparation, data analysis and reporting of the findings. The quantitative data analysis was aided by statistical package for social sciences. Data analysis was done using a combination of four different statistical analysis methods. Firstly, simple descriptive statistical analysis was used to analyze the demographical profile of the respondents. Secondly, Factor Analysis (FA) was used to reduce the size of items in the Likert's scale to manageable size across the variables. Items with factor loading of less than 0.4 were removed.

Thirdly, correlation analysis was used to quantify the relation among the variables. The analysis focused on individual owned universities, institutional owned universities, public universities and lastly all the universities. Regression analysis was carried out to test the research hypotheses. The regression analysis involved testing hypotheses with special focus on individual owned universities, institutional owned universities, public universities and lastly all the universities.

The general multiple regression equation was:  $CS = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$ ,

Where; CS= Customer Satisfaction;  $X_1$ = Brand Management Attributes;  $X_2$ = Corporate Image,  $X_3$  = Customer Characteristics and  $e$  = the error term. While  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  = respective regression coefficients. To establish the moderating effect of customer characteristics, the regression coefficient for the interaction term  $\beta_3$  was measured, whereby the coefficient was not equal to zero, therefore customer characteristic was significant since the p value was less than 0.05 at 95 percent level of significance (Baron & Kenny, 1986).

Mediation and moderation effects testing followed the procedures described by Baron and Kenny (1986) and MacKinnon, Fairchild & Fritz (2007). A stepwise multiple regression analysis was used to test the extent to which customer characteristics moderates the relationships between brand management attributes and customer satisfaction. A stepwise multiple regression analysis explores the extent to which one or a combination of the independent variables predicts the changes in the dependent variables while controlling for the preceding variables. A two-step analysis was used to evaluate the overall ability of the model to predict the relationships.

In the first step, the independent variable (brand management attributes) and customer characteristics were entered into the model as a predictor of the outcome variable (customer satisfaction). According to Baron and Kenny (1986) the independent variables do not have to be statistically significant predictors of dependent variable (customer satisfaction) in order to test for an interaction term. In step two, an interaction term (the product of brand management attributes and customer characteristics was calculated. An interaction term presents a joint relationship between the two variables and thus accounts for additional variance in the dependent variable beyond that which was explained by either of the variables (brand management attributes and customer characteristics). The moderation effect is present if the interaction term explains a statistically significant amount of variance in the dependent variable. The single regression equation was presented as follows:

$$CS = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_1 * X_2 + e^1$$

Where: CS is the composite score of Customer Satisfaction;  $X_1$  = the composite index of Brand Management Attributes;  $X_2$  = the Composite score of Customer Characteristics;  $\beta_1$  and  $\beta_2$  are the coefficients of brand management attributes and customer characteristics respectively;  $\beta_3$  represents the regression coefficient for the interaction term while  $e^1$  represents the error term. The regression coefficient for the interaction term  $\beta_3$  provides an effect of the moderation effect. If  $\beta_3$  is statistically different from zero, there is a significant moderation on the relationship between brand management attributes and customer satisfaction.

To examine the mediating effect, Baron and Kenny's (1986) four steps method was used. Several regression analyses conducted and the significance of coefficients examined in each step. In the first step, a single regression analysis with the independent variable (BMAs) predicting the dependent variable (CS) was carried out. In the second step, a single regression analyses with the independent variable (BMA) predicting the intervening variable (CI) was carried out. In step 3, a simple regression analysis was carried out with the intervening variable (CI) predicting the dependent variable (CS). Lastly a multiple regression analysis with the independent variable (BMA) and (CI) predicting the dependent variable Customer Satisfaction (CS) was carried out.

The reason for steps one to three was to establish if zero-order relationship among the variables existed and if they were statistically significant and then proceed to step four.

For example, if brand management attributes were not significant when corporate image was controlled, then the findings would support partial mediation.

**Table 3. 3: Analytical model**

Objectives	Hypotheses	Analytical Method	Interpretation of output of the analytical method
<p><i>Objective 1:</i> To assess the influence of Brand Management Attributes on customer satisfaction</p>	<p><b>H<sub>1</sub></b> Brand Management Attributes significantly influence Customer Satisfaction</p>	<p><math>CS = \alpha_1 + \beta_{11} X_{11} + e_1</math> Where <math>\alpha_1</math> = constant (y intercept) <math>X_{11}</math> = BMA <math>\beta_{11}</math> = represent coefficients of Brand management attributes</p>	<p><math>R^2</math> was used to assess the extent to which the independent variable explains the variations in the dependent variable An F test (Analysis of Variance) was used to assess overall significance of the model.</p>
<p><i>Objective 2:</i> To examine the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction</p>	<p><b>H<sub>2</sub></b> Corporate Image significantly mediates the relationship between brand management attributes and customer satisfaction</p>	<p><math>CS = \alpha_3 + \beta_{10} X_{31} + e_3</math> <math>Me = \alpha_3 + \beta_{20} X_{31} + e_3</math> <math>CS = \alpha_3 + \beta_{31} X_{31} + \beta_{32} Me + e_3</math> Where: <b>CS</b> is the composite score of Customer Satisfaction. <b>X<sub>31</sub></b> = the composite index of brand management attributes. <b>Me</b> = the Composite score of Corporate Image. <b><math>\beta_{31}</math></b> and <b><math>\beta_{32}</math></b> are the coefficients of BMAs and CI respectively.</p>	<p>The mediation effect was estimated by the regression coefficient for the interaction term <math>\beta_{32}</math>. If <math>\beta_{32}</math> is not statistically equal to zero, corporate image has a significant mediating effect on the relationship between independent and dependent variables.</p>

<p><b>Objective 3:</b> To examine the moderating effect of customer characteristics on the relationship between brand management attributes and customer satisfaction</p>	<p><b>H3:</b> Customer Characteristics significantly moderates the relationship between brand management attributes and customer satisfaction</p>	<p><math>CS = \alpha_2 + \beta_{21} X_{21} + \beta_{22} X_{22} + \beta_{23} X_{21} * X_{22} + e_2</math> Where: <b>CS</b> is the composite score of Customer Satisfaction. <b>X<sub>21</sub></b> = the composite index of Brand Management Attributes. <b>X<sub>22</sub></b> = the Composite score of customer characteristics. <b>β<sub>21</sub></b> and <b>β<sub>22</sub></b> are the coefficients of BMAs and CC respectively. <b>β<sub>23</sub></b> represents the regression coefficient for the interaction term</p>	<p>The moderation effect was estimated by the regression coefficient for the interaction term <math>\beta_{23}</math>. If <math>\beta_{23}</math> was not statistically equal to zero, customer characteristics had a significant moderating effect on the relationship between independent and dependent variables.</p>
<p><b>Objective 4:</b> Examine the joint influence of brand management attributes, corporate image and customer characteristics on customer satisfaction</p>	<p><b>H4:</b> There is a significant combined influence of brand management attributes, corporate image and customer characteristics on customer satisfaction.</p>	<p>Regression analysis <math>CS = \alpha_4 + \beta_{41} X_{41} + \beta_{42} X_{42} + \beta_{43} X_{43} + e_4</math> Where: <math>\alpha_4</math> = is the intercept <b>CS</b> = composite index of customer satisfaction <b>X<sub>41</sub>, X<sub>42</sub>, and X<sub>43</sub></b>, Represents Brand Management Attributes, Corporate Image and Customer Characteristics, respectively. <b>β<sub>41</sub>... β<sub>43</sub></b> = regression coefficients</p>	<p>Change in <math>R^2</math> was used to assess the extent to which variation in the dependent variable was influenced by the changes in the independent variables. Also, <i>F test</i> (Analysis of Variance) was used to assess overall robustness and significance of the simple regression model. Finally, a <i>T test</i> was used to assess the individual significance of the relationship</p>

Source: Researcher, 2018

## **CHAPTER FOUR**

### **DESCRIPTIVE DATA ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

This chapter presents the findings and discussion of results of the study on brand management attributes, corporate image, customer characteristics and customer satisfaction among university students in Kenya. It is divided into six sections covering: response rate, results of the pilot test, respondents' background information, and diagnostic tests of variables, descriptive analysis of variables, correlation analysis, regression analysis and combined effect model. Descriptive and inferential analyses were used. Data was further presented in the form of frequency distribution tables to facilitate description and explanation of the study findings.

#### **4.2 Response Rate**

From a target population of 384, data was collected from 325 students across 21 universities. The universities were stratified into three categories; public, private institutional owned and private individual owned. Table 4.1 indicates that the three categories recorded sufficient response rates. Public universities at 76.5%, private institutional owned at 85.5%, and private individual owned at 100.0%. According to Richardson (2005), a return rate above 60% is fairly good and above 70% very good, hence the response rate was rated as satisfactory.

The response rates across all university categories were considered excellent given the recommendations by Mugenda and Mugenda (2003) as cited in Tangri and Mwenda



(2013) that a response rate of 50% is adequate for analysis and reporting a rate of 60% is generally good while a response rate of above 70% is good enough. This is also the same position taken by Babbie (1990) cited in Mbaku (1993) who adds that a response rate of above 70% is deemed to be very good. Based on these assertions, this implies that the response rate for this study was adequate.

**Table 4. 1: Questionnaire return rate**

<b>Respondents category</b>	<b>Questionnaire distributed</b>	<b>Questionnaire received</b>	<b>Response rate percentage</b>
Public Universities	183	140	76.5
Private Universities (Institutional owned)	110	94	85.5
Private Universities (individual owned)	91	91	100.0
<b>Total</b>	<b>384</b>	<b>325</b>	<b>84.6</b>

Source: Primary data, 2018

### **4.3 Validity and Reliability Tests**

#### **4.3.1 Test of Construct Validity**

In order to check the relevance and validity the questionnaires were tested. According to Patton (2002), the researcher is guided by the factor analysis exploratory tool to decide whether the investigated variables could explain the dependent variables. In this study, validity was focused on determining if the results recorded explained customer satisfaction. To do this, the role of the constructs being measured in the dependent variable were explained by factors developed from factor analysis. The identical tactic

that has been largely accepted for factor analysis is majorly used as evidenced in the use by studies like Lee and Teo (2005). Cooper and Schindler (2007), on acceptable factors of loading have a value of 0.40 and above and is thought acceptable therefore has been employed by other analysts like Gomber, Schweickert, & Theissen, (2004) when they studied higher education institutions. Factor analysis results are indicated in Section 4.5. The results indicate that all the determinants related to brand management attributes, corporate image, customer characteristics and customer satisfaction had a factor loading of 0.4 and above and therefore, they were adopted in the following analysis.

#### **4.3.2 Reliability Analysis Results**

The study sought to establish the internal consistency of the key variables in the study. This was achieved by subjecting the four key variables to a reliability test as shown in Table 4.2, A scale test of the four variables yielded Cronbach alpha coefficients greater than 0.7 which was considered very reliable in providing consistent results overtime. George and Mallery (2003) provided the following rule of thumb: a value greater than 0.9 as excellent, value greater than 0.8 as good, value greater than 0.7 as acceptable, value greater than 0.6 as questionable, a greater than 0.5 as poor, and a less than 0.5 = unacceptable. The closer Cronbach's alpha coefficient is to 1.0, the greater the internal consistency of the items in the scale.

**Table 4. 2: Reliability Analysis**

<b>Private Individual owned Universities</b>				
		<b>Cronbach's Alpha</b>	<b>No. of Items</b>	<b>Verdict</b>
Brand	Management	0.944	33	Accepted
Attributes				
	Corporate image	0.951	14	Accepted
	Customer characteristics	0.917	8	Accepted
	Customer satisfaction	0.947	18	Accepted
<b>Private Institutional owned Universities</b>				
Brand	management	0.986	33	Accepted
attributes				
	Corporate image	0.983	14	Accepted
	Customer characteristics	0.956	8	Accepted
	Customer satisfaction	0.977	18	Accepted
<b>Public Universities</b>				
Brand	management	0.945	33	Accepted
attributes				
	Corporate image	0.940	14	Accepted
	Customer characteristics	0.897	8	Accepted
	Customer satisfaction	0.853	18	Accepted
<b>All Universities</b>				
Brand	management	0.961	33	Accepted
attributes				
	Corporate image	0.958	14	Accepted
	Customer characteristics	0.920	8	Accepted
	Customer satisfaction	0.952	18	Accepted

Source: Researcher (2018)

#### 4.4 Demographic Statistics of the Respondents

The study sort to establish the demographic characteristics of the respondents, this included, the age, gender, Nationality, residence, employment status, program enrolled, mode of study and year of study.

##### 4.4.1 Age of the Respondents

The study sought to establish the age of the respondents to ascertain the age bracket majority of the University students who participated in the study.

**Table 4. 3: Age of the respondents**

	<b>Frequency</b>	<b>Percentage (%)</b>
Under 20 years	37	11.5
20-24 years	188	57.8
25-29 years	53	16.4
30-34 years	31	9.6
35-39 years	11	3.3
40 years and above	5	1.4
<b>Total</b>	<b>325</b>	<b>100.0</b>

Source: Researcher (2018)

Table 4.3 shows that out of the 325 respondents, 57.8% were aged between 20 and 24 years, 16.4% were aged between 25 and 29 years, 3.3% were aged between 35 -39 years while 1.4% were aged above 40 years. This demonstrates the general distribution of students in undergraduate programs across universities, where majority are fresh high school graduates and minority being the mature working students.

#### 4.4.2 Gender of the respondents

The study sought to find out the gender distribution of the respondents. This was important as it ensured there was no bias as both male and female respondents were included in the study.

**Table 4. 4: Gender of the respondents**

	<b>Frequency</b>	<b>Percent</b>
Male	165	50.7
Female	160	49.3
<b>Total</b>	<b>325</b>	<b>100.0</b>

Source: Researcher (2018)

Results in Table 4.4, show that 50.7% of the respondents were male and another 160 49.3% were female. It can, therefore, be deduced that the population of the student was fair.

#### 4.4.3 Respondents Nationality and Residence

The study sought to find out the nationality distribution and residence of the respondents. Results indicate that majority of the respondents 86.6% were Kenyan while a few 13.4% were foreigners. On whether the students reside on or outside the campus, majority of the respondents 77.0% resided outside campus while 23% resided on campus. This implies that majority of students are prefer residing on hostels outside their campuses. This could be as a result of price or lack of accommodation within the campus.

#### 4.4.5 Respondents Employment Status

The study sought to find out the distribution of the respondents based on employment status. The results are presented in Table 4.5.

**Table 4. 5: Respondents Employment Status**

	<b>Frequency</b>	<b>Percent</b>
Formally Employed	36	11.0
Self Employed	98	30.1
Not Employed at all	191	58.9
<b>Total</b>	<b>325</b>	<b>100.0</b>

Source: Researcher (2018)

According to Table 4.5 show that majority of the respondents 58.9% were not employed, 30.1% were self-employed while 11.0% were formally employed.

#### 4.4.6 Response on program enrolled

The respondents were required to state their various programs. The results are indicated in the Table 4.6.

**Table 4. 6: Response on Program Enrolled**

<b>Program enrolled</b>	<b>Frequency</b>	<b>Percentage</b>
Public health	26	8
Dentistry	26	8
Nursing	26	8
Medicine	26	8
Arts and Social Sciences	26	8
Biological and Physical Sciences	26	8
Education	33	10
Engineering	26	8
Human Resource Development	26	8
Information Sciences	26	8
Business and Economics	33	10
Tourism, Hospitality and events Management	26	8
<b>Total</b>	<b>325</b>	<b>100</b>

Source: Researcher (2018)

Table 4.6 shows that the entire degree courses response rate was fairly distributed. With Education and Business and Economics at 10.0. All the other programs were at 8%. This can be used to indicate the overall distribution of undergraduate students across the universities as well as the popularity of the programs.

#### **4.4.7 Respondents' mode of study**

The respondents were asked to indicate their mode of study, from the findings 76.4% of the respondents indicated part time, 16.4% indicated full time.

**Table 4. 7: Respondents' mode of study**

	<b>Frequency</b>	<b>Percent</b>
Full time	53	16.4
Part time	248	76.4
Online	2	0.5
Distance(open)	22	6.6
<b>Total</b>	<b>325</b>	<b>100.0</b>

Source: Researcher (2018)

#### **4.4.8 Respondents Year of Study**

The study sought to establish the respondents' year of study, from the results in Table 4.8, most of the respondents 34.5% were in their third year of study, followed by 25.2% who were in their fourth year of study according to Table 4.10. This sample set was most appropriate for the study, because the third- and fourth-year students had repeated exposure to university education.

**Table 4. 8: Respondents Year of Study**

	<b>Frequency</b>	<b>Percent</b>
First year	53	16.4
Second year	74	22.7
Third year	112	34.5
Fourth year	82	25.2
Fifth year	3	.8
Other	1	.3
<b>Total</b>	<b>325</b>	<b>100.0</b>

Source: Researcher (2018)



## **4.5 Factor Analysis**

Factor analysis (FA) was used to test for convergent validity and discriminate validity. To test for sampling adequacy, KMO & Bartlett's Test was used. KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, factor analysis is likely to be inappropriate). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors. Kaiser (1974) recommends accepting values greater than 0.5 as acceptable values below this should lead you to either collect more data or rethink which variables to include). Furthermore, values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb (Hutchinson, 2003).

Varimax method was used to extract the factors or constructs that measured the study variables as shown in proceeding sections. Principle component analysis and Varimax rotation method were done using Eigen values greater than or equal to 0.5. Factors with Eigen values greater than (1) were extracted and items with factors loadings with greater or equal to 0.5 were retained. The results are presented in the following sections.

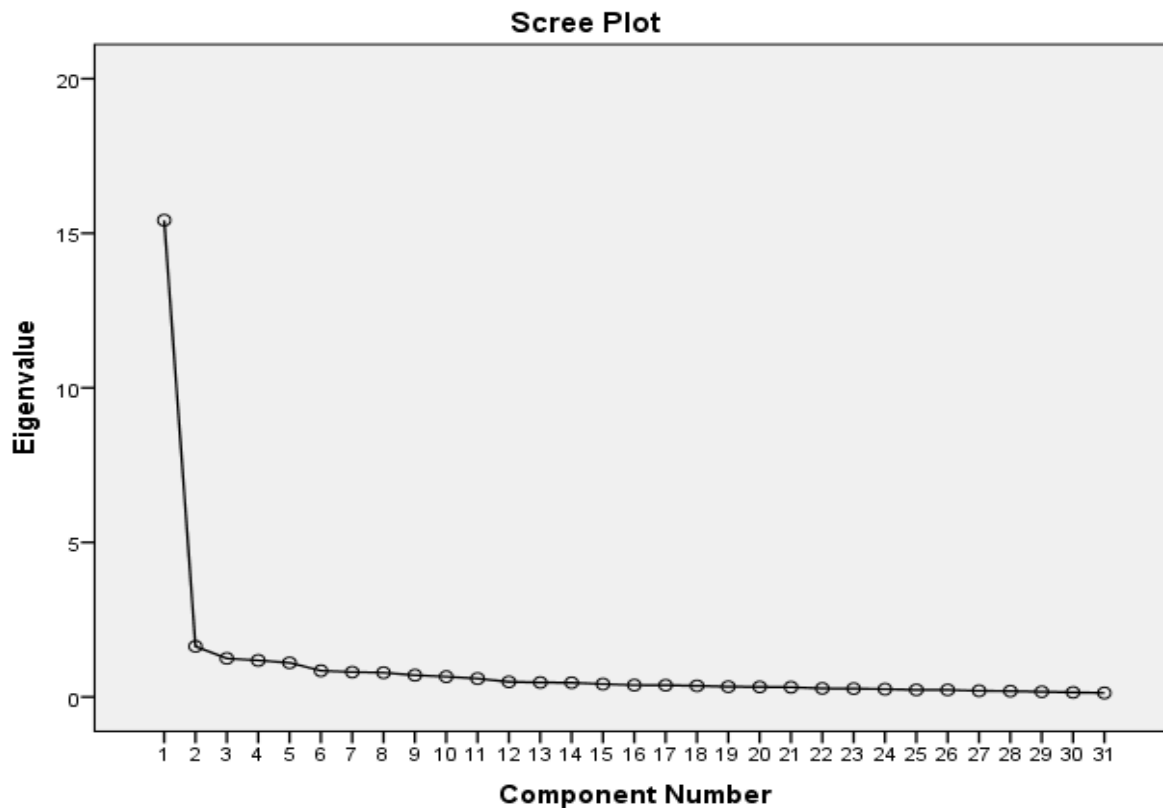
### **4.5.1 Factor Analysis for Brand Management Attributes**

All the constructs of the Brand management attributes were subjected to factor analysis and the results presented in Table 4.9.

**Table 4. 9: Factor Analysis for Brand Management Attributes**

<b>KMO and Bartlett's Test</b>									
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.									.954
Bartlett's Test of Sphericity									7387.989
									df
									465
									Sig.
									.000
<b>Total Variance Explained</b>									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.422	49.748	49.748	15.422	49.748	49.748	5.494	17.722	17.722
2	1.635	5.276	55.024	1.635	5.276	55.024	4.749	15.320	33.042
3	1.245	4.018	59.042	1.245	4.018	59.042	4.294	13.853	46.895
4	1.182	3.812	62.854	1.182	3.812	62.854	4.075	13.146	60.041
5	1.106	3.567	66.421	1.106	3.567	66.421	1.978	6.380	66.421
6	.848	2.734	69.156						
7	.805	2.598	71.754						
8	.786	2.535	74.289						
9	.704	2.272	76.561						
10	.657	2.121	78.681						
11	.595	1.921	80.602						
12	.490	1.582	82.184						
13	.467	1.506	83.690						
14	.459	1.482	85.172						
15	.417	1.346	86.518						
16	.382	1.233	87.751						
17	.381	1.228	88.979						
18	.361	1.164	90.143						
19	.333	1.075	91.217						
20	.325	1.048	92.266						
21	.313	1.011	93.277						
22	.275	.888	94.165						
23	.269	.866	95.031						
24	.252	.812	95.843						
25	.230	.741	96.584						
26	.227	.732	97.316						
27	.197	.636	97.953						
28	.188	.606	98.559						
29	.169	.544	99.103						
30	.149	.480	99.583						
31	.129	.417	100.000						

Extraction Method: Principal Component Analysis.



**Figure 4. 1: Scree plot for Brand Management Attributes**

The scree plot represents the eigenvalues against the component number and displays a point of inflexion on the curve, which can be used in determination of number of components to extract. In a scree plot, the components before this point indicate the number of factors to retain while the components after the point of inflexion show that each successive factor is accounting for smaller and smaller amounts of variations hence should not be retained. According to Norusis (2003), the plot most often shows a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors, the scree that forms at the foot of a mountain. Only factors before the scree begins should be used. The scree plot in Figure 4.1 shows a point of inflexion after the first component and for this reason only the first component was considered adequate descriptors of the variations in the combined data set.

**Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
BMA1		.673			
BMA2		.703			
BMA3		.603			
BMA4		.622			
BMA5		.739			
BMA6		.566			
BMA7		.531		.623	
BMA8				.640	
BMA9		.531		.595	
BMA10				.533	
BMA11	.632				
BMA12	.649				
BMA13	.643				
BMA14	.694				
BMA15	.617				
BMA16	.630				
BMA17	.615				
BMA18	.563				
BMA19					
BMA20				.665	
BMA21				.613	
BMA22			.528	.563	
BMA23			.568		
BMA24					.721
BMA25					.541
BMA26					
BMA27			.698		
BMA28			.694		
BMA29			.522		
BMA30			.584		
BMA31			.559		

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 15 iterations.

Kaiser-Meyer-Olkin and Bartlett's tests of sampling adequacy results show that the indicators of brand management attributes had KMO of 0.954 and there were five critical factors driving the brand management attributes which accumulated to 66.421 percent of the total variance in these constructs. The Kaiser criterion has a weakness as observed by Nunnally and Berstein (1994) as its tendency to overstate the number of factors. Stevens (2002) proposes the use of a scree plot in determining the number of components to retain when the sample size is greater than 200.

The results in Total Variance Explained table indicated that factor one had four most dominant loadings which accounted for 49.748 percent of the variance in this construct. Factor 2 contributing 5.276 percent of the variance, factor 3 had 4.018% of the variance, factor 4 had 3.812% of the variance while factor 5 had 3.567% of the variance.

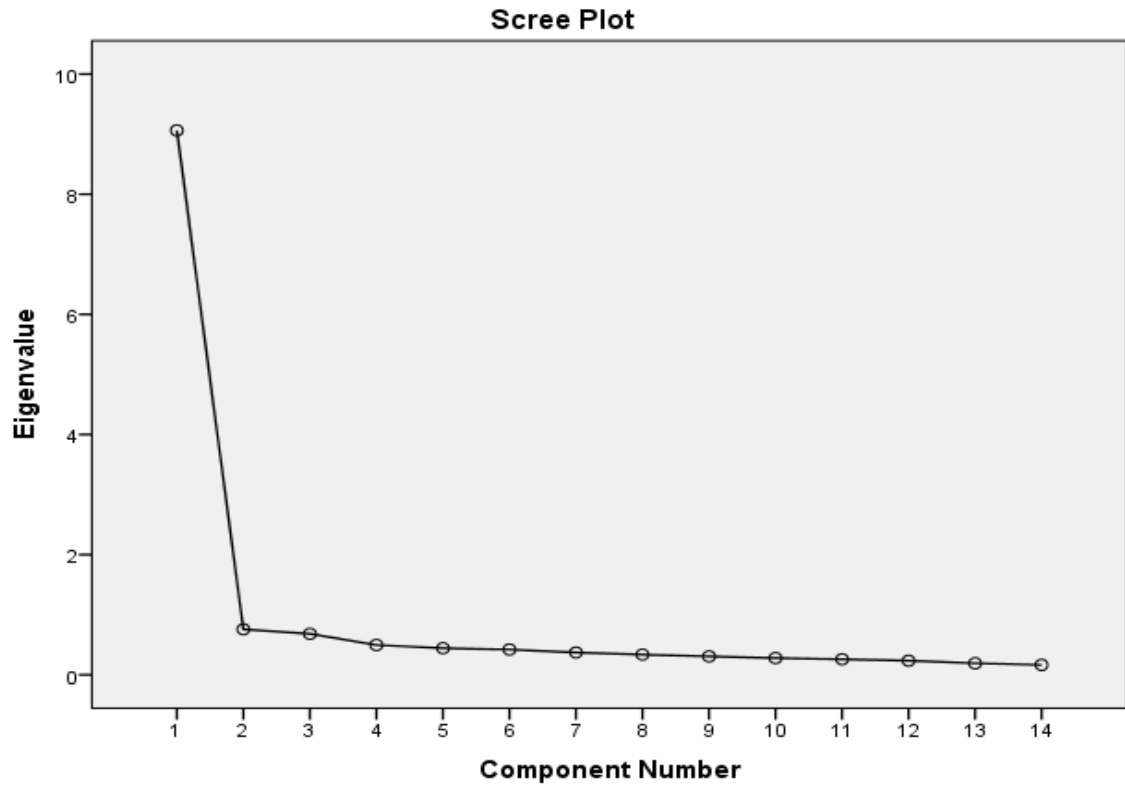
Rotation has the effect of optimizing the factor structure and states the relative importance of the factor. This implies that from the study results, the system has identified five important factors to be loaded in the analysis. From the results in Rotated Component Matrix table rotated matrix, factor one is highly and positively correlated with (University programmes are perceived to be of high quality) BMA14 (.934), (The university enjoys strong heritage/history) BMA5 was highly and positively correlated with factor two (.739), (I understand the management structure of this university) BMA24 was highly and positively correlated with factor five (.739) while (The staff are Down-to-Earth) BMA27 was highly and positively correlated with factor three (.698).

#### 4.5.2 Factor Analysis for Corporate Image

All the constructs of the corporate image were subjected to factor analysis and the results presented in Table 4.10.

**Table 4. 10: Factor Analysis for Corporate Image**

<b>KMO and Bartlett's Test</b>						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.						.956
Bartlett's Test of Sphericity	Approx. Chi-Square				3698.241	
	df				91	
	Sig.				.000	
<b>Total Variance Explained</b>						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.062	64.729	64.729	9.062	64.729	64.729
2	.758	5.413	70.142			
3	.682	4.869	75.011			
4	.496	3.541	78.552			
5	.443	3.161	81.713			
6	.420	2.999	84.712			
7	.371	2.652	87.364			
8	.336	2.402	89.766			
9	.306	2.184	91.950			
10	.278	1.988	93.938			
11	.258	1.845	95.783			
12	.235	1.675	97.458			
13	.191	1.367	98.825			
14	.165	1.175	100.000			
Extraction Method: Principal Component Analysis.						



**Figure 4. 2: Scree plot for Corporate Image**

According to Norusis (2003), the plot most often shows a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors, the scree that forms at the foot of a mountain. Only factors before the scree begins should be used. The scree plot in Figure 4.2 shows a point of inflexion after the first component and for this reason only the first component was considered adequate descriptors of the variations in the combined data set.

### **Component Matrix<sup>a</sup>**

	<b>Component 1</b>
CI1	.787
CI2	.829
CI3	.733
CI4	.859
CI5	.814
CI6	.764
CI7	.735
CI8	.833
CI9	.800
CI10	.823
CI11	.844
CI12	.839
CI13	.838
CI14	.750

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Kaiser-Meyer-Olkin and Bertlet's tests of sampling adequacy results show that the indicators of brand management attributes had KMO of 0.956 and there was one critical factor driving the corporate image which accumulated to 64.729 percent of the total variance in these constructs.

The Kaiser criterion has a weakness as observed by Nunnally and Berstein (1994) as its tendency to overstate the number of factors. Stevens (2002) proposes the use of a scree plot in determining the number of components to retain when the sample size is greater than 200. The scree plot graphs the eigenvalues against the component number and displays a point of inflexion on the curve, which can be used in determination of number of components to extract. In a scree plot, the components before this point indicate the number of factors to retain while the components after the point of inflexion show that



each successive factor is accounting for smaller and smaller amounts of variations hence should not be retained.

Rotation has the effect of optimizing the factor structure and states the relative importance of the factor. This implies that from the study results, the system has identified one important factor to be loaded in the analysis. From the rotated matrix, factor one is highly and positively correlated with (The university location is convenient) CI4 (.859).

#### 4.5.3 Factor Analysis for Customer Characteristics

All the constructs of the customer characteristics were subjected to factor analysis and the results presented in Table 4.11.

**Table 4. 11: Factor Analysis for Customer Characteristics**

<b>KMO and Bartlett's Test</b>						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.						.883
Bartlett's Test of Sphericity		Approx. Chi-Square		1650.192		
		df		28		
		Sig.		.000		
<b>Total Variance Explained</b>						
Component	Initial Eigenvalues			Extraction Sums of Squared		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.011	62.640	62.640	5.011	62.640	62.640
2	.842	10.526	73.166			
3	.586	7.330	80.497			
4	.450	5.631	86.128			
5	.380	4.751	90.879			
6	.290	3.630	94.509			
7	.252	3.152	97.661			
8	.187	2.339	100.000			
Extraction Method: Principal Component Analysis.						

Kaiser-Meyer-Olkin and Bertlet's tests of sampling adequacy results show that the indicators of brand management attributes had KMO of 0.883 and there was one critical factor driving the customer characteristics which accumulated to 62.640 percent of the total variance in these constructs.

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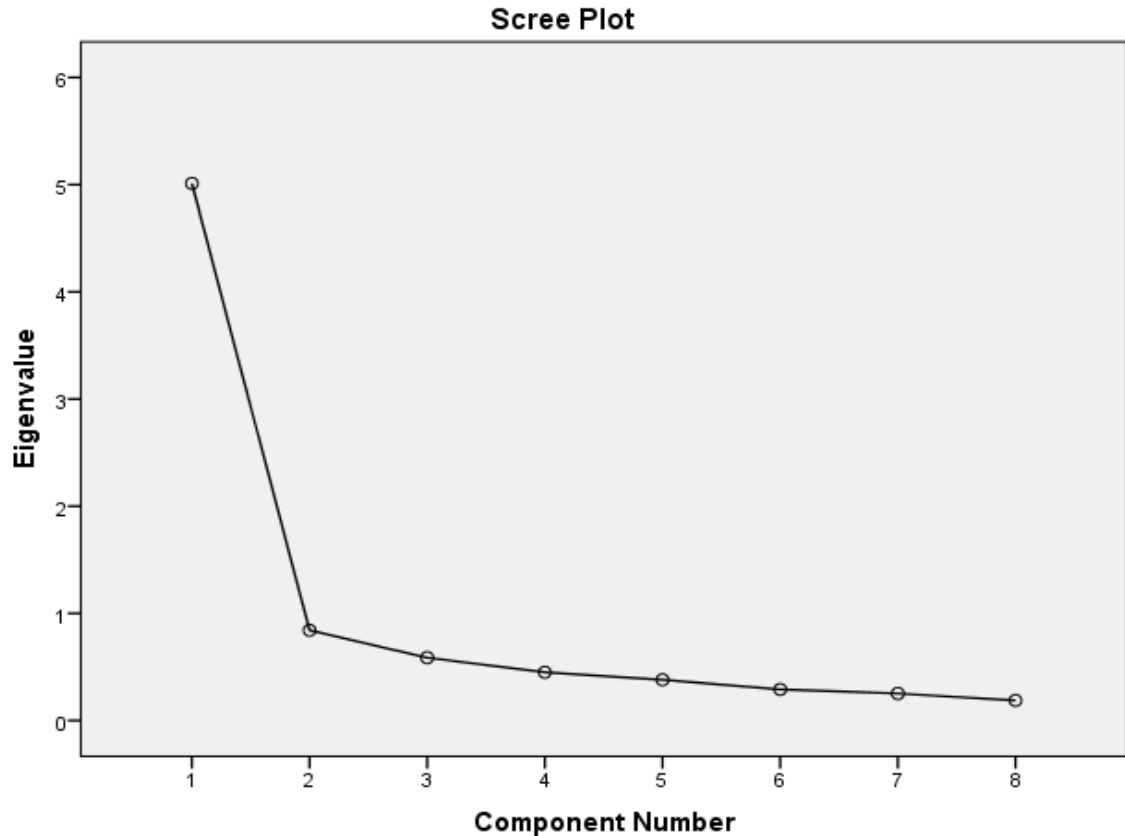
**Component Matrix<sup>a</sup>**

	Component 1
CC1	.803
CC2	.828
CC3	.757
CC4	.805
CC5	.798
CC6	.809
CC7	.759
CC8	.769

---

Extraction Method: Principal Component Analysis.

a. 1 components extracted.



**Figure 4. 3: Scree plot for Customer Characteristics**

The Kaiser criterion has a weakness as observed by Nunnally and Berstein (1994) as its tendency to overstate the number of factors. Stevens (2002) proposes the use of a scree plot in determining the number of components to retain when the sample size is greater than 200. The scree plot graphs the eigenvalues against the component number and displays a point of inflexion on the curve, which can be used in determination of number of components to extract. In a scree plot, the components before this point indicate the number of factors to retain while the components after the point of inflexion show that each successive factor is accounting for smaller and smaller amounts of variations hence should not be retained.

According to Norusis (2003), the plot most often shows a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors, the

scree that forms at the foot of a mountain. Only factors before the scree begins should be used. The scree plot in Figure 4.3 shows a point of inflexion after the first component and for this reason only the first component was considered adequate descriptors of the variations in the combined data set.

Rotation has the effect of optimizing the factor structure and states the relative importance of the factor. This implies that from the study results, the system has identified one important factor to be loaded in the analysis. From the rotated matrix, factor one is highly and positively correlated with gender ( $CC2 = 0.828$ ).

#### **4.5.4 Factor Analysis for Customer Satisfaction**

All the constructs of the customer satisfaction were subjected to factor analysis and the results presented in Table 4.12.

**Table 4.12: Factor Analysis for Customer Satisfaction**  
**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.945
Bartlett's Test of Sphericity	Approx. Chi-Square		4046.678
	df		153
	Sig.		.000

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.919	55.106	55.106	9.919	55.106	55.106	6.219	34.549	34.549
2	1.037	5.759	60.865	1.037	5.759	60.865	4.737	26.317	60.865
3	.949	5.274	66.139						
4	.780	4.333	70.472						
5	.706	3.922	74.394						
6	.671	3.729	78.123						
7	.552	3.066	81.189						
8	.484	2.691	83.880						
9	.445	2.474	86.354						
10	.400	2.220	88.574						
11	.339	1.884	90.458						
12	.314	1.747	92.205						
13	.292	1.625	93.829						
14	.258	1.434	95.263						
15	.249	1.385	96.649						
16	.221	1.226	97.874						
17	.207	1.148	99.022						
18	.176	.978	100.000						

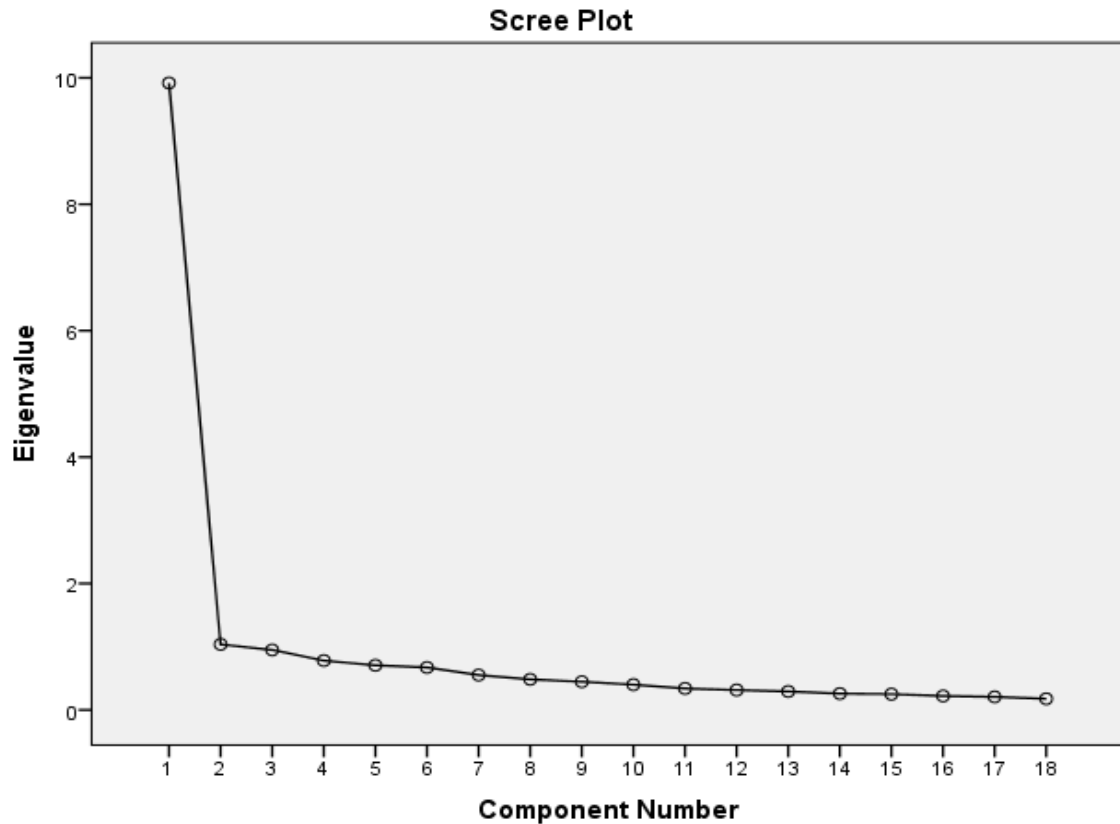
Extraction Method: Principal Component Analysis.

	Component	
	1	2
CS1	.575	
CS2	.780	
CS3	.815	
CS4	.706	
CS5	.620	
CS6	.652	
CS7	.662	
CS8	.597	
CS9		.571
CS10		.702
CS11		.835
CS12		.736
CS12	.572	.527
CS14		.698
CS15	.641	
CS16	.669	
CS17		.677
CS18	.729	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.



**Figure 4. 4: Scree plot for Customer satisfaction**

Kaiser-Meyer-Olkin and Bertlet’s tests of sampling adequacy results show that the indicators of customer satisfaction had KMO of 0.945 and there were two critical factors driving customer satisfaction which accumulated to 60.865 percent of the total variance in these constructs. Factor one had 12 most dominant loadings which accounted for 55.106 percent of the variance in this construct while factor 2 contributed 5.759 percent of the variance.

The Kaiser criterion has a weakness as observed by Nunnally and Berstein (1994) as its tendency to overstate the number of factors. Stevens (2002) proposes the use of a scree plot in determining the number of components to retain when the sample size is greater

than 200. The scree plot graphs the eigenvalues against the component number and displays a point of inflexion on the curve, which can be used in determination of number of components to extract. In a scree plot, the components before this point indicate the number of factors to retain while the components after the point of inflexion shows that each successive factor is accounting for smaller and smaller amounts of variations hence should not be retained.

According to Norusis (2003), the plot most often shows a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors, the scree that forms at the foot of a mountain. Only factors before the scree begins should be used. The scree plot in Figure 4.4 shows a point of inflexion after the first component and for this reason only the first component was considered adequate descriptors of the variations in the combined data set.

Rotation has the effect of optimizing the factor structure and states the relative importance of the factor. This implies that from the study results, the system has identified two important factors to be loaded in the analysis. From the rotated matrix, factor one is highly and positively correlated with (I feel secure when within the university) CS3 (.815) while factor one is highly and positively correlated with (I am likely to further my career/education at this university) CS11 (.835).

#### **4.6 Descriptive analysis**

The main purpose of a descriptive statistic is to calculate summary measures, to describe the location (a measure of the middle value) and the spread (a measure of the dispersion



of the values) for each variable. Descriptives are of great interest, especially when comparing between groups or when the results of the study are to be generalized (Zikmund et al., 2013). Below is a general descriptive analysis based on students' responses on all variables.

#### **4.6.1 Descriptive analysis for Brand Management Attributes and Customer Satisfaction**

Brand management attributes was operationalized along four practices namely; Brand identity, Brand positioning and association, Brand recognition and Brand personality. To capture data on these operational indicators, respondents were asked to indicate on a 5 – point Likert scale to what extent the various aspects of the indicators applied in their university. The results of one sample t-test are presented in Table 4.13.

**Table 4. 13: Brand Management Attributes**

<b>Statement</b>	<b>M</b>	<b>SD</b>	<b>t</b>	<b>CV (%)</b>	<b>Sig-2 tailed-value</b>
<b>Brand Identity</b>					
The university has a unique identity	3.84	1.29	55.86	34	0.00
The university gives me a sense of belonging	3.87	1.19	61.77	31	0.00
The university expresses who I am	3.8	1.18	61.15	31	0.00
The university has a unique culture	3.85	1.22	59.03	32	0.00
The university enjoys strong heritage/history	3.86	1.27	57.93	33	0.00
The university brand is consistent across all campuses	3.71	1.26	56.43	34	0.00
The university slogan is appealing	3.94	1.17	63.43	30	0.00
<b>The university Logo is unique</b>	<b>4.08</b>	<b>1.07</b>	<b>69.52</b>	<b>26</b>	<b>0.00</b>

The university Logo is attractive	3.94	1.14	66.52	29	0.00
The University Colours are Appealing	3.94	1.25	60.77	32	0.00
<b>Average</b>	<b>3.88</b>	<b>1.204</b>	<b>61.24</b>	<b>31.2</b>	<b>0.00</b>

### **Brand Positioning and Association**

The university name is easy to pronounce	4.17	1.19	67.07	29	0.00
I am proud to be associated with this university	4.15	1.07	73.09	26	0.00
The university brand is associated with prominent people	3.85	1.21	60.93	31	0.00
University programmes are perceived to be of high quality	3.90	1.15	63.83	29	0.00
The university has a good reputation	3.88	1.11	66.44	28	0.00
The university has a global appeal	3.63	1.24	55.83	34	0.00
The university is popular in the local market	3.78	1.28	56.82	34	0.00
<b>Average</b>	<b>3.90</b>	<b>1.178</b>	<b>63.43</b>	<b>30.14</b>	<b>0.00</b>

### **Brand Recognition**

I understand the meaning of this university name	3.68	1.18	64.06	37	0.00
I know the mission and vision of this university	3.84	1.28	57.25	33	0.00
I know the colours of this university	4.03	1.31	52.70	29	0.00
I can remember the logo of this university	4.01	2.49	29.44	29	0.00
I can recall the slogan of this university	3.85	1.36	50.16	33	0.00
I understand the management structure of this university	3.59	1.18	64.06	36	0.00
I know the ranking of this university	3.77	1.28	57.25	66	0.00

locally and globally					
I know all programmes offered in this university	3.55	1.31	52.70	38	0.00
<b>Average</b>	<b>3.79</b>	<b>1.423</b>	<b>53.45</b>	<b>37.62</b>	<b>0.00</b>
<b>Brand Personality</b>					
The staff are Down-to-Earth	3.48	1.34	49.18	39	0.00
The management and staff are honest	3.46	1.31	50.00	38	0.00
The university is up to date	3.79	1.26	57.93	33	0.00
The brand is energetic and vibrant	3.74	1.20	58.27	32	0.00
The university is innovative	3.71	1.18	59.44	32	0.00
The students are Cheerful	3.8	1.23	57.84	32	0.00
There is a culture of sincerity in the university	3.48	1.34	56.18	34	0.00
<b>Average</b>	<b>3.63</b>	<b>1.265</b>	<b>55.54</b>	<b>34.28</b>	<b>0.00</b>

**N = 325**

Source: Researcher (2018)

The result in Table 4.13 show moderately high ranking with respect to brand management attributes (mean score above 3.5 was recorded for most of the Brand management attributes description). Notably, all statements had high t values yielding to statistically significant (p-values of less than 0.05). The aspect ‘The university name is easy to pronounce’ had the highest mean score of 4.17. The second highest mean score of 4.15 was scored for ‘I am proud to be associated with this university’. The statements ‘The staff are Down-to-Earth’ and ‘There is a culture of sincerity in the university’ had the lowest means of 3.48, implying that majority of the respondents were neutral over the statements.

‘I know the ranking of this university locally and globally’ had the highest coefficient of Variation (CV) of 66 percent suggesting that there was a relatively high level of disagreement among the respondents that they were aware of their university ranking both locally and internationally. Conversely, the statements ‘The University Logo is unique’ and ‘I am proud to be associated with this university’ had the lowest coefficient of Variation (CV) of 26 percent each suggesting that there was a relatively high level of agreement among the respondents.

#### 4.6.2 Descriptive analysis for corporate image

The study analyzed the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction among University students in Kenya. To capture data on corporate image, respondents were asked to indicate on a 5 – point Likert’s scale to what extent the various aspects of the indicators applied in their university. The results of one sample t-test are presented in Table 4.14.

**Table 4. 14: Corporate Image**

<b>Statements</b>	<b>Mean</b>	<b>SD</b>	<b>t-value</b>	<b>CV (%)</b>	<b>Sig. (2-tailed)</b>
<b>University Corporate Image</b>					
This university has a strong brand name	3.67	1.24	55.24	34	0.000
This university makes a lot of contribution to the society	3.67	1.24	56.47	34	0.000
Media reports on the university are generally positive	3.61	1.21	57.36	33	0.000
Employers have a positive perception towards this university	3.72	1.20	59.55	32	0.000
The university conserves the environment	3.87	1.20	61.71	31	0.000
This university is recognized internationally	3.54	1.32	52.46	37	0.000

This university has a superior technology	3.48	1.38	48.40	40	0.000
This university has reputable professors	3.77	1.21	59.54	32	0.000
The university views interests and welfare of the community above its own profitability and interests	3.54	1.20	55.79	34	0.000
The university supports environmental conservation programs	3.83	1.16	64.17	30	0.000
The university offers marketable programmes	3.91	1.14	66.19	29	0.000
This university is preferred by my peers (friends, relatives)	3.72	1.27	56.33	34	0.000
The campus ambience is attractive and conducive	3.85	1.21	61.32	31	0.000
The university location is convenient	3.82	1.35	53.92	35	0.000
<b>Average</b>	<b>3.714</b>	<b>1.23</b>	<b>57.74</b>	<b>33.2</b>	<b>0.00</b>

**N = 325**

Source: Researcher (2018)

The result in Table 4.14 show moderately high ranking with respect to Corporate image (Mean score above 3.5 was recorded for most of the Corporate image description). Notably, all statements had high t values yielding to statistically significant (p values of less than 0.05). The aspect ‘The University offers marketable programmes’ had the highest mean score of 3.91. The second highest mean score of 3.85 was scored for ‘The University conserves the environment’. The statements ‘The university views interests and welfare of the community above its own profitability and interests’ had the lowest means of 3.54, implying that majority of the respondents were neutral over the statements.

‘This University has a superior technology’ had the highest coefficient of Variation (CV) of 40 percent suggesting that there was a relatively high level of disagreement among the respondents that the technology was superior. Conversely, the statements ‘The university offers marketable programmes’ had the lowest coefficient of Variation (CV) of 29 percent each suggesting that there was a relatively high level of agreement among the respondents.

#### 4.6.3 Descriptive analysis for Customer Characteristics

The study analyzed statements on customer characteristics. To capture data on customer characteristics, respondents were asked to indicate on a 5 – point Likert scale to what extent the various aspects of the indicator applied in their university. The results of one sample t-test are presented in Table 4.15.

**Table 4. 15: Descriptive analysis for Customer Characteristics**

	Mean	SD	t-value	CV (%)	Sig. (2-tailed)
Age	3.01	1.34	43.49	44	0.000
Gender	2.97	1.42	40.30	48	0.000
Income	3.13	1.40	42.45	45	0.000
Social status	3.22	1.41	44.22	44	0.000
Ethnic background	2.9	1.40	39.35	48	0.000
Year of study	3.26	1.37	45.00	42	0.000
Programme enrolled	3.43	1.31	50.02	38	0.000
Mode of study	3.44	1.45	44.96	42	0.000
<b>Average</b>	<b>3.17</b>	<b>1.38</b>	<b>43.723</b>	<b>43.87</b>	<b>0.00</b>

**N = 325**

Source: Researcher (2018)

The results in Table 4.15 show that on average, customer characteristics were rated averagely (average mean score of 3.17). This indicates that customer characteristics influence the students' interpretation of the university's marketing and branding initiatives. Notably, all statements had high t-values yielding to statistically significant (p values of less than 0.05). The student mode of study had the highest mean score of 3.44, indicating that the programme the student is pursuing influence their interpretation of the university branding and marketing initiatives. This may be based on the fact that university brand identity, association, positioning and personality may have influenced their choice of the university. The second highest mean score of 3.43 was scored for 'Programme enrolled'. The statements 'Ethnic background' had the lowest means of 2.9, implying that majority of the respondents felt that ethnic background did not influence their judgement of the university marketing and branding initiatives.

'Gender' and 'ethnic background' had the highest coefficient of Variation (CV) of 48 percent suggesting that there was a relatively high level of disagreement among the respondents that these characteristics influence interpretation of the university's marketing and branding initiatives. Conversely, the statement 'Programme enrolled' had the lowest coefficient of Variation (CV) of 38 percent suggesting that there was a relatively high level of agreement among the respondents.

#### **4.6.4 Descriptive analysis for Customer Satisfaction**

The study analyzed statements on customer satisfaction. To capture data on customer satisfaction, respondents were asked to indicate on a 5 – point Likert scale to what extent the various aspects of the indicators applied in their university. The results of one sample t-test are presented in Table 4.16.

**Table 4. 16: Descriptive analysis for Customer satisfaction**

	<b>M</b>	<b>SD</b>	<b>T</b>	<b>CV (%)</b>	<b>Sig. (2-tailed)</b>
The fees charged is equivalent to the value I receive	3.39	3.12	21.23	92	0.000
The university offers good academic programmes	3.95	1.11	68.26	28	0.000
I feel secure when within the university	3.93	1.22	62.11	31	0.000
The students are generally disciplined	3.81	1.17	60.33	31	0.000
Lecturers are highly experienced	3.95	1.09	67.08	28	0.000
The class size is manageable (students/lecturer ratio)	3.88	1.27	57.87	33	0.000
The university offers a conducive learning environment	3.97	1.19	63.33	30	0.000
The university offers satisfactory customer service	3.74	1.24	57.46	33	0.000
The university library is well stocked with relevant material	3.72	1.22	59.11	33	0.000
The university has state of the art infrastructure	3.68	1.26	55.97	34	0.000
I am likely to further my career/education at this university	3.58	1.33	51.38	37	0.000
I am likely to recommend this university to a friend/associate	3.88	1.20	61.89	31	0.000
I am likely to remain committed to supporting this university as an alumnus	3.85	1.21	61.48	31	0.000



I am likely to bring my children or other dependents to this university	3.7	1.29	54.59	35	0.000
I am likely to talk favorably about this university	3.92	1.13	64.73	29	0.000
I am likely to give feedback to the university to help them improve their services	3.98	1.16	66.44	29	0.000
I am likely to look for a job at this university	3.52	1.30	50.86	37	0.000
Generally, I have a positive attitude towards this university	4.09	1.14	67.56	28	0.000
<b>AVERAGE</b>	<b>3.80</b>	<b>1.313</b>	<b>58.42</b>	<b>35</b>	<b>0.000</b>

**N = 325**

Source: Researcher (2018)

The result in Table 4.16 show moderately high ranking with respect to customer satisfaction (Mean score above 3.5) was recorded for most of the customer satisfaction description). Notably, all statements had high t values yielding to statistically significant (p values of less than 0.05). The aspect ‘Generally, I have a positive attitude towards this university’ had the highest mean score of 4.09. The second highest mean score of 3.98 was scored for ‘I am likely to give feedback to the university to help them improve their services’. The statement ‘The fees charged is equivalent to the value I receive’ had the lowest means of 3.39, implying that majority of the respondents were neutral over the statements.

‘The fees charged is equivalent to the value I receive’ had the highest coefficient of Variation (CV) of 92 percent suggesting that there was a relatively high level of disagreement among the respondents that they received value equivalent to the fees paid. Conversely, the statements ‘The University offers good academic programmes’, ‘Lecturers are highly experienced’, and ‘Generally, I have a positive attitude towards this University’ had the lowest coefficient of Variation (CV) of 28 percent suggesting that there was a relatively high level of agreement among the respondents.

#### **4.7 Diagnostic Tests**

Before fitting a regression model, it is important to determine whether all the necessary model assumptions are valid before performing inference. If there are any violations, subsequent inferential procedures may be invalid resulting in faulty conclusions. It is therefore crucial to perform appropriate model diagnostics prior to carrying out statistical tests. In this study the researcher carried out the following tests: Test of normality, homoscedasticity test, multicollinearity test, auto-correlation test and linearity test.

##### **4.7.1 Test of Normality**

Normality tests determined whether data sets are well modeled by a normal distribution (Farrell & Stewart, 2006). The null hypothesis stated that the population is normally distributed, against the alternative hypothesis that it was not normally-distributed. Normality was tested and the results are given on the Table 4.17. The test statistics results in Table 4.17 show results of normality test. For dataset small than 2000 elements, Shapiro-Wilk test is used, otherwise, the Kolmogorov-Smirnov test is used. In this study, since there were 325 elements, the Shapiro-Wilk test was used. From the results, the p-value of the variables are as follows: Brand management attributes showed normal

distribution with a p-value of 0.124, Corporate image had normal distribution with a p-value of 0.213, normal distribution was observed on customer characteristics which had a p-value of 0.321, and lastly normal distribution was observed on customer satisfaction which had a p-value of 0.214. The study rejected the alternative hypothesis and concluded that the data for the variables were normally distributed thus satisfied the regression assumption of normality allowing further analysis of the variables.

**Table 4. 17: Test of Normality**

**Private Individual Owned Universities**

	<b>Shapiro-Wilk</b>		
	<b>Statistic</b>	<b>df</b>	<b>Sig.</b>
Brand management attributes	0.839	91	0.132
Corporate image	0.83	91	0.214
Customer Characteristics	0.89	91	0.432
Customer satisfaction	0.797	91	0.321

**Private Institutional Owned Universities**

Brand management attributes	.857	94	.120
Corporate image	.857	94	.156
Customer Characteristics	.896	94	.134
Customer satisfaction	.833	94	.122

**Public Universities**

Brand management attributes	.866	140	.123
Corporate image	.855	140	.234
Customer Characteristics	.877	140	.214
Customer satisfaction	.798	140	.125

**All universities combined**

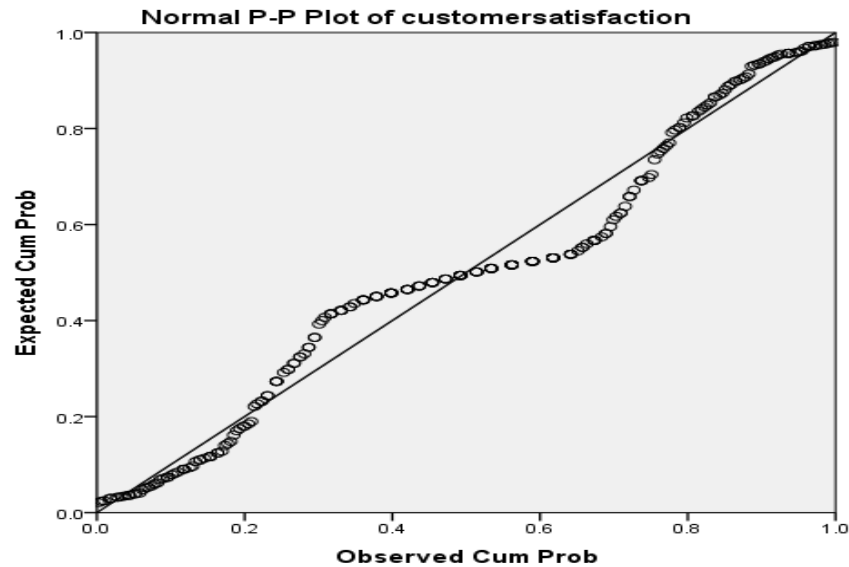
Brand management attributes	0.869	325	0.125
Corporate image	0.862	325	0.111
Customer Characteristics	0.887	325	0.135
Customer satisfaction	0.768	325	0.213

Source: Researcher (2018)

**4.7.2 Homoscedasticity Test**

Homoscedasticity suggests that the dependent variable has an equal level of variability for each of the values of the independent variables (Garson, 2012). A test for homoscedasticity is made to test for variance in residuals in the regression model used. Lack of an equal level of variability for each value of the independent variables is known as heteroscedasticity.

The probability – probability plot (P-P Plot) is a graphical method that is used to assess the normality as well as homoscedasticity of data distribution. It compares an empirical cumulative distribution function of a variable with a specific theoretical cumulative distribution function (Park, MacInnis & Priester, 2008). If two distributions match, the plot forms a linear pattern passing through the origin with a unit slope. The more the straight line formed by the P-P plot, the more the variable distribution conforms to normality and homoscedasticity (Garson, 2012). The normal P-P plot of customer satisfaction shown in Figure 4.5 shows that there are minimum deviates of the points from the line that cuts across the plane at  $45^{\circ}$ . This guaranteed that the data used for the dependent variable (customer satisfaction) was normally distributed and homoscedastic and therefore the study adopted a multiple linear regression model.



**Figure 4. 5: Homoscedastic Test customer satisfaction**

Source: Researcher (2018)

#### **4.7.3 Multicollinearity Test**

Multicollinearity is the undesirable situation where the correlations among the independent variables are strong. It increases the standard errors of the coefficients using collinearity statistics to get tolerance and variation inflation factor. In order to test for multi-collinearity, VIF was computed using SPSS. Tolerance is the amount of variance in independent variable that is not explained by the other independent variable. VIF measures how much variance the regression coefficient is inflated by multicollinearity, thus misleadingly inflates the standard errors. The minimum cutoff value for tolerance is typically 0.10. When there is no problem with multicollinearity tolerance, value should not be less than 0.10 while VIF value should not be more than 10 (Newbert, 2008). If no two variables are correlated, then all the VIFs will be 1. If VIF for one of the variables is  $\geq 5$ , then there is collinearity associated with that variable. The results of the tests of

multicollinearity between Brand management attributes, corporate image, customer characteristics and customer satisfaction are presented in Table 4.18.

**Table 4. 18: Multicollinearity Test**

	<b>Collinearity statistics</b>	
	<b>Tolerance</b>	<b>VIF</b>
<b>Public Universities</b>		
Brand management attributes	.676	1.480
Corporate image	.660	1.515
Customer characteristics	.959	1.043
<b>Private Institutional owned universities</b>		
Brand management attributes	.549	1.822
Corporate image	.524	1.908
Customer characteristics	.798	1.253
<b>Private Individual Owned universities</b>		
Brand management attributes	.699	1.431
Corporate image	.674	1.484
Customer characteristics	.870	1.149
<b>All Universities combined</b>		
Brand management attributes	.815	1.227
Corporate image	.791	1.264
Customer characteristics	.962	1.040

Source: Researcher (2018)

Since all the VIFs were less than 5, then the assumption of non-existence of multicollinearity was not violated. VIF is reciprocal of tolerance. Hence if tolerance of one of the variables is equal to or less than 0.2, then there exists collinearity. Again, since all the tolerant results were greater than 0.2, then the assumptions of non-existence of multicollinearity was not violated.

#### **4.7.4 Auto-Correlation Tests**

Correlation test was done to test the relationship between variables using Durbin-Watson, which is a test used to detect the presence of auto-correlation (a relationship between values separated from each other by a given time lag) in the residuals (prediction of errors). The Durbin-Watson statistic is always between 0 and 4. A value of 2.0 means that there is no autocorrelation in the sample. Values approaching zero indicate positive autocorrelation and values toward 4 indicate negative autocorrelation.

This means that there should be no serial correlation among the observations. The dependent variable in this study was tested using Durbin-Watson Test and the results are indicated on Table 4.19. The Durbin-Watson  $d = 2.333$ , which is between the two critical values of  $1.5 < d < 2.5$ . Therefore, it was assumed that there is no first order linear auto-correlation in the study multiple linear regression data.

**Table 4. 19: Auto-correlation test results**

**4.19 Durbin-Watson Test**

<b>University Category</b>	<b>Test Statistic (DW)</b>	<b>P-value</b>
Public Universities	1.828	0.000
Private Individual Owned Universities	1.804	0.000
Private Institutional Owned Universities	1.808	0.000
All Universities Combined	2.333	0.000

Source: Researcher (2018)

The rule is if  $P > 0.05$ , fail to reject null hypothesis. From the table above the p value is 0.000 which is less than 0.05. We therefore fail to reject the null hypothesis and conclude that the variables under the study are not correlated and thus the linear model is acceptable.

**4.7.5 Linearity Tests**

Linearity test aims to determine whether the relationship between independent variables and the dependent variable is linear or not. The linearity test is a requirement in the correlation and the linear regression analysis. If the significant deviation from linearity is greater than 0.05, then the relationship between independent variables with the dependent is linear. If the value significant deviation from linearity is less than 0.05, then the relationship between independent variables with the dependent is not linear. Table 4.20 shows the linearity tests results. The significance deviation from linearity in all the variables for every category had a sig value greater than 0.05, the study concluded that the relationship between the independent variables were linearly dependent.



**Table 4. 20: Linearity Test Results**

<b>Public Universities</b>		<b>F</b>	<b>Sig.</b>
CS * BMA	Deviation from Linearity	4.026	0.019
CS * CI	Deviation from Linearity	0.698	0.555
CS * CC	Deviation from Linearity	2.403	0.070
<b>Private Institutional owned Universities</b>			
CS * BMA	Deviation from Linearity	1.466	0.124
CS * CI	Deviation from Linearity	4.079	0.089
CS * CC	Deviation from Linearity	1.220	0.307
<b>Private Individual Owned Universities</b>			
CS * BMA	Deviation from Linearity	2.896	0.138
CS * CI	Deviation from Linearity	0.643	0.134
CS * CC	Deviation from Linearity	1.011	0.333
<b>All Universities Combined</b>			
CS * BMA	Deviation from Linearity	1.608	0.301
CS * CI	Deviation from Linearity	1.084	0.141
CS * CC	Deviation from Linearity	0.873	0.563

Source: Researcher (2018)

Key: CS = Customer Satisfaction; BMA = Brand Management Attributes; CI = Corporate Image and CC = Customer characteristics

#### **4.8 Correlation Analyses**

The general objective of the current study was to establish the influence of brand management attributes, corporate image, and customer characteristics on customer satisfaction in universities in Kenya. Pearson product moment coefficient technique was used to conduct correlation analysis so as to ascertain the relationship among study variables. The relationship between variables was done for every category of the Universities in Kenya.

#### 4.8.1 Brand Management Attributes and Customer Satisfaction

The study sought to establish the relationship between brand management attributes and customer satisfaction. The results are presented in Table 4.21.

**Table 4.21: Correlation Analyses for Brand Management Attributes and Customer Satisfaction**

##### 4.21 a) Correlation Analyses for Private Individual owned Universities

		Brand Management Attributes	Customer Satisfaction
Brand Management Attributes (BMA)	Pearson Correlation	1	.559**
	Sig. (2-tailed)		.000
Customer Satisfaction (CS)	Pearson Correlation	.559**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 91  
Source: Researcher (2018)

##### 4.21 b) Correlation Analyses for Private Institutional owned Universities

		Brand management attributes	Customer Satisfaction
Brand management attributes (BMA)	Pearson Correlation	1	.650**
	Sig. (2-tailed)		.000
Customer satisfaction (CS)	Pearson Correlation	.650**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 94  
Source: Researcher (2018)

##### 4.21 c) Correlation Analyses for Public Universities

		Brand management attributes	Customer satisfaction
Brand management attributes (BMA)	r	1	
	Sig. (2-tailed)		
Customer satisfaction (CS)	r	.378**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 140  
Source: Researcher (2018)

#### 4.21 d) Correlation Analyses for All Universities Combined

			Brand Management Attributes	Customer Satisfaction
Brand Management Attributes (BMA)	Pearson Correlation	1	.488**	
	Sig. (2-tailed)		.000	
Customer Satisfaction (CS)	Pearson Correlation	.488**	1	
	Sig. (2-tailed)	.000		

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 325

Source: Researcher (2018)

Table 4.21 shows that there is a statistically significant positive correlation between brand management attributes and customer satisfaction among individual owned university students ( $r = .559$ ,  $p < 0.05$ ), Institutional owned University ( $r = .650$ ,  $p < 0.05$ ), public universities ( $r = .378$ ,  $p < 0.05$ ) and lastly all the universities ( $r = .488$ ,  $p < 0.05$ ).

#### 4.8.2 Corporate Image and Customer Satisfaction

The study sought to establish the relationship between corporate image and customer satisfaction. The results are presented in Table 4.22.

**Table 4. 22: Correlation Analyses for Corporate Image and customer satisfaction**

#### 4.22 a) Correlation Analyses for Institutional Owned Universities

		Customer Image	Customer Satisfaction
Corporate Image (CI)	Pearson Correlation	1	.804**
	Sig. (2-tailed)		.000
Customer satisfaction (CS)	Pearson Correlation	.804**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 94

Source: Researcher (2018)

#### 4.22 b) Correlation Analyses for Public Universities

		Corporate Image	Customer Satisfaction
Corporate Image	r	1	.515**
	Sig. (2-tailed)		.000
Customer satisfaction	r	.515**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 140  
Source: Researcher (2018)

#### 4.22 c) Correlation Analysis for individual Owned Universities

		Corporate image	Customer satisfaction
Corporate Image	Pearson Correlation	1	
	Sig. (2-tailed)		
Customer satisfaction	Pearson Correlation	.184*	1
	Sig. (2-tailed)	.049	

\*. Correlation is significant at the 0.05 level (2-tailed).  
N = 91

#### 4.22 d) Correlation Analyses for All Universities

		Customer Image	Customer Satisfaction
Corporate Image	Pearson Correlation	1	.592**
	Sig. (2-tailed)		.000
Customer satisfaction	Pearson Correlation	.592**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 325  
Source: Researcher (2018)

Table 4.22 shows that there is a statistically significant positive correlation between corporate image and customer satisfaction among individual owned university students ( $r = 0.184$ ,  $p < 0.05$ ), Institutional owned University ( $r = .804$ ,  $p < 0.05$ ), public universities ( $r = .515$ ,  $p < 0.05$ ) and lastly all the universities ( $r = .592$ ,  $p < 0.05$ ).

### 4.8.3 Customer Characteristics and Customer Satisfaction

The study sought to establish the relationship between customer characteristics and customer satisfaction. The results are presented in Table 4.23.

**Table 4. 23: Correlation Analysis for Customer Characteristics and Customer Satisfaction**

#### 4.23 a) Correlation Analyses for Private Individual owned University

		Customer Characteristics	Customer Satisfaction
Customer Characteristics (CC)	r	1	.403**
	Sig. (2-tailed)		.000
Customer Satisfaction (CS)	r	.403**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 91  
Source: Researcher (2018)

#### 4.23 b) Correlation Analyses for Private Institutional owned University

		Customer Characteristics	Customer Satisfaction
Customer Characteristics	r	1	.496**
	Sig. (2-tailed)		.000
Customer Satisfaction	r	.496**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 94  
Source: Researcher (2018)

#### 4.23 c) Correlation Analyses for Public University

		Customer Characteristics	Customer Satisfaction
Customer Characteristics	r	1	
	Sig. (2-tailed)		
Customer Satisfaction (CS)	r	.417**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 140  
Source: Researcher (2018)

#### 4.23 d) Correlation Analyses for All University

		Customer	Customer
		Characteristics	Characteristics
Customer (CC)	Characteristics r	1	.205**
	Sig. (2-tailed)		.000
Customer Satisfaction (CS)	r	.205**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 325  
Source: Researcher (2018)

Table 4.23 shows that there is a statistically significant positive correlation between customer characteristics and customer satisfaction among individual owned university students ( $r = 0.403$ ,  $p < 0.05$ ), Institutional owned University ( $r = .496$ ,  $p < 0.05$ ), public universities ( $r = .417$ ,  $p < 0.05$ ) and lastly all the universities ( $r = .205$ ,  $p < 0.05$ ).

#### 4.8.4 Brand Management, Corporate Image, Customer Characteristics and Customer Satisfaction

The study sought to establish the relationship between variables. The results are presented in Table 4.24.

**Table 4. 24: Correlation Analyses Results**  
**4.24 a) Correlation Analyses - All universities**

		BMA	CI	CC	CS
BMA	Pearson Correlation	1			
	Sig. (2-tailed)				
CI	Pearson Correlation	.420**	1		
	Sig. (2-tailed)	.000			
CC	Pearson Correlation	.101	.220**	1	
	Sig. (2-tailed)	.053	.000		
CS	Pearson Correlation	.479**	.520**	.407**	1
	Sig. (2-tailed)	.000	.000	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed). N = 325

**Key: BMA** = Brand Management Attributes; **CI** = Corporate Image; **CC** = Customer Characteristics and **CS** = Customer Satisfaction

#### 4.24 b) Correlation Analyses – Individual Owned

		BMA	CI	CC	CS
BMA	Pearson Correlation	1			
	Sig. (2-tailed)				
CI	Pearson Correlation	.691**	1		
	Sig. (2-tailed)	.000			
CC	Pearson Correlation	.243*	.363**	1	
	Sig. (2-tailed)	.018	.000		
CS	Pearson Correlation	.610**	.711**	.418**	1
	Sig. (2-tailed)	.000	.000	.000	

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

\* . Correlation is significant at the 0.05 level (2-tailed). N = 91

**Key: BMA** = Brand Management Attributes; **CI** = Corporate Image; **CC** = Customer Characteristics and **CS** = Customer Satisfaction

#### 4.24 c) Correlation Analyses – Public Universities

		BMA	CI	CC	CS
BMA	Pearson Correlation	1	.376**	-.064	.563**
	Sig. (2-tailed)		.000	.454	.000
CI	Pearson Correlation	.376**	1	.034	.504*
	Sig. (2-tailed)	.000		.687	.016
CC	Pearson Correlation	-.064	.034	1	.099
	Sig. (2-tailed)	.454	.687		.246
CS	Pearson Correlation	.563**	.504*	.599	1
	Sig. (2-tailed)	.000	.016	.246	

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

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

N = 140

**Key: BMA** = Brand Management Attributes; **CI** = Corporate Image; **CC** = Customer Characteristics and **CS** = Customer Satisfaction

#### 4.24 d) Correlation Analysis – Institutional Owned

		BMA	CI	CC	CS
BMA	Pearson Correlation	1			
	Sig. (2-tailed)				
CI	Pearson Correlation	.324**	1		
	Sig. (2-tailed)	.000			
CC	Pearson Correlation	.149	.153	1	
	Sig. (2-tailed)	.113	.102		
CS	Pearson Correlation	.523*	.584*	.639*	1
	Sig. (2-tailed)	.017	.049	.010	

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

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

N = 94

**Key:** **BMA** = Brand Management Attributes; **CI** = Corporate Image;  
**CC** = Customer Characteristics and **CS** = Customer Satisfaction

Table 4.24 shows that there is a statistically significant positive correlation between brand management attributes and customer satisfaction among individual owned university students ( $r = 0.610$ ,  $p < 0.05$ ), Institutional owned University ( $r = .523$ ,  $p < 0.05$ ), public universities ( $r = .563$ ,  $p < 0.05$ ) and lastly all the universities combined ( $r = .479$ ,  $p < 0.05$ ). The results in Table 4.24 further shows that there is a statistically significant positive correlation between corporate image and customer satisfaction among individual owned university students ( $r = 0.711$ ,  $p < 0.05$ ), Institutional owned University ( $r = .584$ ,  $p < 0.05$ ), public universities ( $r = .504$ ,  $p < 0.05$ ) and lastly all the universities ( $r = .520$ ,  $p < 0.05$ ).

Lastly, the results indicate that there is no statistically significant positive correlation between customer characteristics and brand management among all universities ( $r = 0.101$ ,  $p < 0.053$ ). Similarly, there is no correlation between customer characteristics and brand management attributes, corporate image, and customer satisfaction in public universities, with  $P = 0.454$ ;  $0.687$ ; and  $0.246$  respectively. In private institutional owned



universities, the results indicate that there is no significant relationship between customer characteristics and brand management and corporate image, with a p value = 0.113 and 0.102 respectively. However, there is a positive correlation between customer characteristics and customer satisfaction in that category.

Finally, results indicate a positive significant relationship between customer characteristics and customer satisfaction among private individual owned university students ( $r = 0.418$ ,  $p < 0.05$ ), private institutional owned universities ( $r = .639$ ,  $p < 0.05$ ), and all the universities combined ( $r = .407$ ,  $p < 0.05$ ). All the variables with  $r < 0.60$  is considered to have a weak correlation. From the results above, it can be concluded that there was a very weak correlation between customer characteristics and brand management attributes as well as the corporate image across all the university categories.

This is an indication that personal characteristics such as age, gender, ethnicity and social class as well as situational characteristics such as year of study, mode of study and programme enrolled, do not influence students' level of satisfaction with a brand. Similarly, these characteristics do not play a significant role in influencing the students' interpretation of brand attributes and corporate image.

#### **4.9 Chapter Summary**

This chapter presented the findings and discussion of results. Specifically, the chapter presented the results on response rate, validity and reliability tests, demographic information of the respondents, factor analysis, descriptive analysis for all variables, diagnostic tests as well as the correlation analysis results for all university categories.

## CHAPTER FIVE

### HYPOTHESES TESTING AND DISCUSSION OF RESULTS

#### 5.1 Introduction

This chapter presents the hypothesis test results using regression analysis and a discussion of the implications of the results. The broad objective of this study was to determine the influence of brand management attributes, corporate image, and customer characteristics on customer satisfaction among university students in Kenya. To achieve this, four specific objectives were set and corresponding hypotheses stated. Simple, multiple and hierarchical regression analysis were used to test these hypotheses. Simple regression was used to test independent effects, multi regression used to test combined effects while hierarchical regression was used to test the moderating and the intervening effects. These tests were carried out at 95 percent significant level ( $p < 0.05$ ).

Decision points to reject or fail to reject a hypothesis were based on the p-values. Where  $p < 0.05$  the study failed to reject the hypotheses. And where  $p > 0.05$ , the study rejected the hypotheses. Interpretations of results and subsequent discussions also considered coefficients of determinations ( $R^2$ ), F-Statistic values and beta values.  $R^2$  indicated the change in dependent variable explained by change in the independent variable. In this regard, where the results high the  $R^2$  it was interpreted to mean high explanatory power of the model. Further, the higher F-Statistic the more significant the model was. The negative or positive effect of the independent variable on the dependent (either negative

or positive) was explained by checking the beta ( $\beta$ ) sign. The findings are presented in various sections of this chapter along study objectives and corresponding hypotheses. The results have been discussed in within the context of theory and empirical literature.

## 5.2 Brand Management Attributes and Customer Satisfaction

The first objective was to establish the influence of brand management attributes on customer satisfaction among undergraduate university students in Kenya. The predicted model relating brand management attributes and customer satisfaction was presented using the linear regression model as:

$$CS = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where

CS	was customer satisfaction
$\beta_0$	was constant associated with regression model
$\varepsilon$	was the error term
$X_1$	was brand management attributes
$\beta_1$	was coefficients of Brand management attributes indicators.

The hypothesis is stated thus:

*H<sub>1</sub>: There is a significant relationship between brand management attributes and customer satisfaction among undergraduate university students in Kenya.*

The study tested the influence of brand management attributes on customer satisfaction among undergraduate university students in Kenya using regression analysis. Customer satisfaction (dependent variable) was regressed on brand management attributes (independent variable) and the relevant results were presented in Table 5.1. The regression analyses revealed that Brand management attributes had positive influences on customer satisfaction. The study results revealed a statistically significant positive linear relationship between brand management attributes and customer satisfaction among

students in public university ( $\beta = .385$ ,  $p\text{-value} = 0.000$ ). The regression results also showed that brand management attributes had explanatory power on customer satisfaction among students in public universities in Kenya in that it accounted for 14.9 percent of its variability ( $R^2 = 0.149$ ). The ANOVA results in Table 5.1(b) show a  $p\text{-value}$  of 0.000 which is less than 0.05. This indicates that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

**Table 5. 1: Regression Results of Brand Management Attributes and Customer Satisfaction - Public Universities**

**5.1 a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.386 <sup>a</sup>	0.149	0.143	1.104

a. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.1 b) ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	29.48	1	29.48	24.163	.000 <sup>b</sup>
Residual	168.313	138	1.22		
Total	197.793	139			

a. Dependent Variable: Customer Satisfaction  
b. Predictors: (Constant), Brand management attributes

**5.1 c) Coefficients**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Beta		
1 (Constant)	2.498		8.283	0.000
Brand management attributes	0.385	0.386	4.916	0.000

a. Dependent Variable: Customer Satisfaction  
Source: Researcher (2018)

Also, the results in Table 5.2 revealed a statistically significant positive linear relationship between brand management attributes and customer satisfaction among

students in individual owned university ( $\beta = .500$ ,  $p\text{-value} = 0.000$ ). The regression results also showed that brand management attributes had explanatory power on customer satisfaction among students in individual owned universities in Kenya in that it accounted for 31.1 percent of its variability ( $R \text{ square} = 0.312$ ).

**Table 5.2: Regression Results of Brand Management Attributes and Customer Satisfaction - Individual owned Universities**

**5.2 a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.559 <sup>a</sup>	.312	.306	.772

a. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.2 b) ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.565	1	30.565	40.376	.000 <sup>b</sup>
	Residual	67.383	89	.757		
	Total	97.948	90			

a. Dependent Variable: Customer Satisfaction  
b. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.2 c) Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.057	.294		7.002	.000
	Brand management attributes	.500	.070	.559	7.159	.000

a. Dependent Variable: Customer Satisfaction  
Source: Researcher (2018)

Further, the results in Table 5.2 c) revealed a statistically significant positive linear relationship between brand management attributes and customer satisfaction among students in Institutional owned university ( $\beta = .590$ ,  $p\text{-value} = 0.000$ ). The regression results also showed that brand management attributes had explanatory power on customer satisfaction among students in individual owned universities in Kenya in that it accounted for 42.3 percent of its variability ( $R \text{ square} = 0.423$ ). The ANOVA results in Table 5.2(b) show a  $p\text{-value}$  of 0.000 which is less than 0.05. This indicates that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

**Table 5.3: Regression Results of Brand Management Attributes and Customer Satisfaction – Private Institutional owned Universities**

**5.3 a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650 <sup>a</sup>	.423	.417	.933

a. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

**5.3 b) ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	58.668	1	58.668	67.434	.000 <sup>b</sup>
Residual	80.066	92	.870		
Total	138.734	93			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

**5.3 c) Coefficients**

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.774	.282		6.302	.000
	Brand management	.590	.072	.650	8.211	.000

attributes

a. Dependent Variable: Customer Satisfaction

Source: Researcher (2018)

Further, the results in Table 5.3c) revealed a statistically significant positive linear relationship between brand management attributes and customer satisfaction among private institutional owned universities in Kenya ( $\beta = 0.590$ ,  $p\text{-value} = 0.000$ ). The regression results also showed that brand management attributes had explanatory power on customer satisfaction in that it accounted for 42.3 percent of its variability (R square = 0.423). The ANOVA results in Table 5.3 (b) and 5.4(b) show a  $p\text{-value}$  of 0.000 which is less than 0.05. This indicates that the models are statistically significant in explaining the impact of the independent variables on the dependent variable.

**Table 5.4: Regression Results of Brand Management Attributes and Customer Satisfaction - All Universities**

**5.4 a) Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.488 <sup>a</sup>	.238	.236	1.007

a. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

**5.4 b) ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	114.829	1	114.829	100.815	.000 <sup>b</sup>
	Residual	368.004	323	1.139		
	Total	482.833	324			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

#### 5.4 c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.339	.173		13.512	.000
	BMA <sub>s</sub>	.475	.045	.488	10.643	.000

a. Dependent Variable: Customer Satisfaction  
Source: Researcher (2018)

The model below summarizes the relationship between brand management attributes and customer satisfaction among university students in Kenya;

$$CS = 2.339 + 0.488BMA \quad (5.1)$$

Where; CS represents Customer Satisfaction and BMA is Brand Management Attributes.

The findings in table 5.4 indicate that across all the universities categories, Brand management attributes had a significant influence on customer satisfaction ( $R^2 = 0.238$ ; p-value = 0 .000 and  $\beta = 0.475$ ).

Generally, brand management attributes were found to influence customer satisfaction more in the private individual owned and private institutional owned universities than in public universities, with R square of 0.312, 0.423 and 0.149 respectively. This indicates that students in private universities are more sensitive to the branding and marketing initiatives when evaluating the services offered by their institutions. This means private universities should focus more in branding compared to public universities. This can also be deduced to the fact that most public university students are government sponsored as opposed to those in private universities most of whom are self-sponsored.

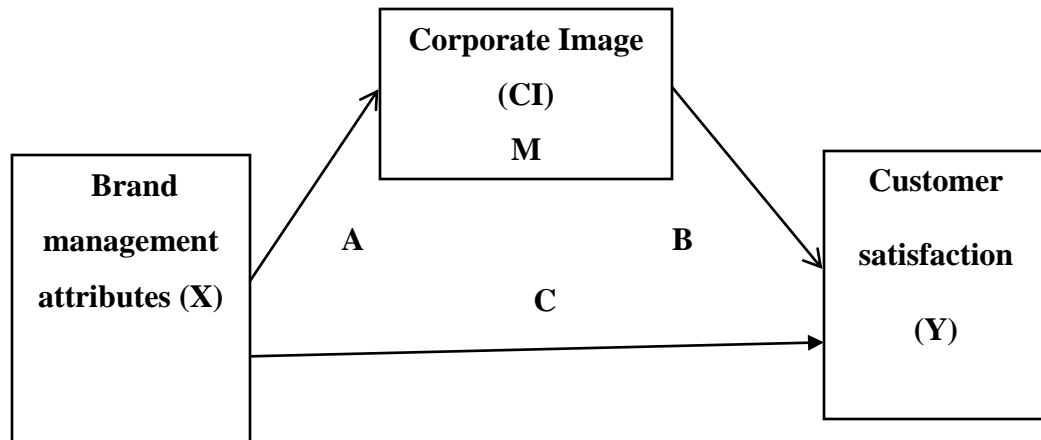


### **5.3 Brand Management Attributes, Corporate Image and Customer Satisfaction – Mediation Analysis**

The second objective was to establish the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction among university students in Kenya. In testing for the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction, the Baron and Kenny (1986) approach was employed. The hypothesis is stated thus;

*H<sub>2</sub>: Corporate image significantly mediates the relationship between brand management attributes and customer satisfaction among university students in Kenya.*

The approach known as step wise technique includes a four-step process whereby one step evaluates the influence of brand management attributes on corporate image. Step two evaluates the influence of corporate image on customer satisfaction among university students in Kenya. Step three evaluates the influence of brand management attributes on customer satisfaction among universities in Kenya and the requirement is that this influence should be statistically significant. The influence of brand management attributes should be statistically significant when controlling for corporate image for mediation to be confirmed. The direct and indirect effect in testing for the intervening effect was as presented in the path diagram in Figure 5.1.



Key: X = Independent variable; M = Mediating variable and Y = Dependent variable

**Figure 5. 1: Path diagram for mediation Effect**

Source: Baron, R. M. & Kenny, D. A. (1986). The moderator mediator variable distinction in social psychological-research-conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182

Path C represents the direct influence of Brand Management Attributes (BMAs) on customer satisfaction. Path A represents the interaction of brand management attributes (BMAs) and corporate image (CI) which is the indirect effect (intervening) while path B represents the influence of corporate image on customer satisfaction. Paths A and B represent the indirect effect. Step one of the tests for the intervening effect of corporate image and customer satisfaction was performed. This step involved evaluating the influence of brand management attributes on customer satisfaction. The requirement is that this influence should be statistically significant. Consequently, the influence of brand management attributes on customer satisfaction was evaluated while controlling for corporate image. The influence of brand management attributes on customer satisfaction should also be statistically significant when controlling for corporate image for mediation

to be confirmed. To determine the effect corporate image on the relationship between brand management attributes and customer satisfaction among university students in Kenya, regression analysis was conducted and the findings were presented as shown in Table 5.5.

The results in Table 5.5a) show that brand management attributes explain 14.9 % of the variation in customer satisfaction among students in public University ( $R^2 = .14.9$ ). The results indicate that the overall model is statistically significant at 95% level of confidence. The first step implies that the relationship between brand management attributes and customer satisfaction is positive and statistically significant. The ANOVA results in Table 5.5(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

**Table 5. 5: Regression Results of the Mediation effect - Public Universities**

**5.5 a) Step 1 –Effect of Brand Management Attributes on Customer Satisfaction**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1a	.386 <sup>a</sup>	0.149	0.143	1.104

Predictors: (Constant), Brand management attributes  
 Dependent variable Customer satisfaction  
 Source: Researcher (2018)

**5.5 b) ANOVA - Brand Management Attributes and Customer Satisfaction**

Model		Sum of Squares	df	Mean Square	F	Sig.
1a	Regression	29.48	1	29.48	24.163	.000 <sup>b</sup>
	Residual	168.313	138	1.22		
	Total	197.793	139			

a. Dependent Variable: Customer satisfaction  
 b. Predictors: (Constant), Brand management attributes  
 Source: Researcher (2018)

### 5.5 c) Coefficients - Brand Management Attributes and Customer Satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.498	0.302		8.283	0.000
Brand Management Attributes	0.385	0.078	0.386	4.916	0.000

a. Dependent Variable: Customer satisfaction

Source: Researcher (2018)

In the second step, a regression analysis to assess the relationship between brand management attributes and corporate image was conducted. In this step, brand management attributes were treated as the independent variable and corporate image as the dependent variable. The results are summarized in Table 4.30.

**Table 5. 6: Step 2 - Regression Results of Brand Management Attributes and Corporate Image**

#### 5.6 a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.559 <sup>a</sup>	.312	.308	.936

a. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

#### 5.6 b) ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	55.376	1	55.376	63.214	.000 <sup>b</sup>
Residual	121.830	139	.876		
Total	177.206	140			

a. Dependent Variable: Corporate Image

b. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

### 5.6 c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.888	.255		7.406	.000
	Brand Management Attributes	.527	.066	.559	7.949	.000

a. Dependent Variable: Corporate Image  
Source: Researcher (2018)

The results in Table 5.6a) portray that brand management attributes explains 31.2 percent of the variation in Corporate Image ( $R^2 = .312$ ). The overall model results reveal that the relationship between brand management attributes and corporate image is statistically significant at  $\alpha = .05$  ( $F = 63.180$ ,  $p\text{-value} = .000$ ). This indicates brand management attributes predicts corporate image outcome of the public universities. The beta coefficients also indicate that statistically significant linear relationship between corporate image and brand management attributes was detected ( $\beta = .559$ ,  $p = .002$ ). The ANOVA results in Table 5.6(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

The third step of the test for the intervening effect of corporate image on the relationship between brand management attributes and customer satisfaction involved testing the influence of corporate image on customer satisfaction. Finally, the process involved testing for the influence of brand management attributes on customer satisfaction while controlling for corporate image. The results for the two steps are presented in Table 5.7.

**Table 5. 7: Step 3 and 4 - Regression Results for the mediation effect of corporate image on relationship between Brand Management Attributes and Customer Satisfaction**

**5.7a) Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.458 <sup>a</sup>	.209	.204	1.066
2	.462 <sup>a</sup>	.213	.202	1.067

Model 1. Predictors: (Constant), Corporate Image

Model 2. Predictors: (Constant), Brand management attributes, Corporate Image

Source: Researcher (2018)

**5.7b) ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	41.230	1	41.230	36.262	.000 <sup>b</sup>
	Residual	155.705	137	1.137		
	Total	196.935	138			
2	Regression	42.044	2	21.022	18.456	.000 <sup>b</sup>
	Residual	154.891	136	1.139		
	Total	196.935	138			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Brand Management Attributes, Corporate Image

Source: Researcher (2018)

**5.7c) Coefficients**

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
1	(Constant)	2.108	.324		6.514	.000
	Corporate Image	.488	.081	.458	6.023	.000
2	(Constant)	2.001	.347		5.760	.000
	Corporate Image	.442	.098	.414	4.525	.000
	Brand management attributes	.304	.091	.077	3.342	.002

a. Dependent Variable: Customer Satisfaction

At step two, brand management attributes, adds significantly to the customer satisfaction as the variation increased from 0.209 to 0.213 ( $R^2$  change = 0.04 p-value =0.000). The results reveal that the variance explained by corporate image is significant ( $F=36.277$ , p-value=0.000). The ANOVA results in Table 5.7(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable. The results revealed that the regression coefficients for brand management attributes was statistically significant after adding corporate image to the regression implying that corporate image may be wielding a significant mediating effect. This implies that changes in the corporate image positively affect the relationship between brand management attributes and customer satisfaction because there was a positive direction in their relationship.

**Regression Results of the Mediation effect – Private Individual Owned Universities**

**Table 5.8: Step 1 – Effect of Brand Management Attributes on Customer Satisfaction**

**5.8 a) Model Summary - Brand Management Attributes and Customer Satisfaction**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.559 <sup>a</sup>	.313	.306	.772

a. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.8b) ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	30.565	1	30.565	40.376	.000 <sup>b</sup>
	Residual	67.383	89	.757		
	Total	97.948	90			

a. Dependent Variable: Customer Satisfaction  
b. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

### 5.8c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.057	.294		7.002	.000
	BMA	.500	.070	.559	7.159	.000

a. Dependent Variable: Customer Satisfaction  
Source: Researcher (2018)

The results in Table 5.8 (a) show that brand management attributes explain 31.3 % of the variation in customer satisfaction among students in Individual owned University ( $R^2 = 0.313$ ). The results indicate that the overall model is statistically significant at 95% level of confidence. The first step implies that the relationship between brand management attributes and customer satisfaction is positive and statistically significant. The ANOVA results in Table 5.8 (b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

In the second step, a regression analysis to assess the relationship between brand management attributes and corporate image was conducted. In this step, brand management attributes were treated as the independent variable and corporate image as the dependent variable. The results are summarized in Table 5.9.

**Table 5.9: Step 2 - Regression Results of Brand Management Attributes and Corporate Image**

### 5.9a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544 <sup>a</sup>	.295	.289	.945

a. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)



### 5.9b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.680	1	42.680	37.340	.000 <sup>b</sup>
	Residual	101.760	89	1.143		
	Total	144.440	90			

a. Dependent Variable: Corporate Image

b. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

### 5.9c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.409	.357		3.948	.000
	BMA	.588	.085	.544	6.915	.000

a. Dependent Variable: Corporate Image

Source: Researcher (2018)

The results in Table 5.9 indicates that brand management attributes explains 29.5 percent of the variation in Corporate Image ( $R^2 = 0.295$ ). The overall model results reveal that the relationship among Brand management attributes and Corporate Image is statistically significant at  $\alpha = 0.05$  ( $F = 47.814$ ,  $p\text{-value} = 0.000$ ). This shows that brand management attributes predict corporate image outcome of the public universities. The beta coefficients also indicate that there is a statistically significant linear relationship between corporate image and brand management attributes ( $\beta = .544$ ,  $p = .000$ ). The ANOVA results in Table 5.9(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

The third step of the test for the intervening effect of corporate image on the relationship between brand management attributes and customer satisfaction involved testing the influence of corporate image on customer satisfaction. Finally, the process involved testing for the influence of brand management attributes on customer satisfaction while controlling for corporate image. The results for the two steps are presented in Table 5.10.

**Table 5. 10: Step 2 - Regression Results of Brand Management Attributes and Corporate Image**

**5.10a) Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.752 <sup>a</sup>	.565	.560	9.76190
2	.809 <sup>a</sup>	.654	.646	8.75706

a. Predictors: (Constant), Corporate Image

a. Predictors: (Constant), Corporate Image, Brand management attributes

Source: Researcher (2018)

**5.10b) ANOVA<sup>a</sup>**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	10783.187	1	10783.187	113.156	.000 <sup>b</sup>
	Residual	8290.633	87	95.295		
	Total	19073.820	88			
2	Regression	12478.822	2	6239.411	81.363	.000 <sup>b</sup>
	Residual	6594.998	86	76.686		
	Total	19073.820	88			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Corporate Image, Brand management attributes

Source: Researcher (2018)

### 5.10c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	21.281	4.700		4.528	.000
	CI	.906	.085	.752	10.637	.000
2	(Constant)	9.696	4.883		1.986	.050
	BMA <sub>s</sub>	.202	.043	.372	4.702	.000
	CI	.638	.095	.530	6.695	.000

a. Dependent Variable: Customer Satisfaction  
Source: Researcher (2018)

At step two, brand management attributes, adds significantly to the customer satisfaction as the variation increased from 0.565 to 0.654 ( $R^2$  change = .089 p-value = .000). The results reveal that the variance explained by corporate image is significant ( $F=113.156$ , p-value=.000). The ANOVA results in Table 5.10(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable. The results revealed that the regression coefficients for brand management attributes was statistically significant after adding corporate image to the regression implying that corporate image may be wielding a complete mediating effect. This implies that changes in the corporate image positively affect the relationship between brand management attributes and customer satisfaction.

### Regression Results of the Mediation effect– Private Institutional Owned Universities

**Table 5.11: Step 1 – Effect of Brand Management Attributes on Customer Satisfaction**

#### 5.11a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650 <sup>a</sup>	.423	.417	.933

a. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

### 5.11b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.668	1	58.668	67.434	.000 <sup>b</sup>
	Residual	80.066	92	.870		
	Total	138.734	93			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

### 5.11c) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.774	.282		6.302	.000
	Brand Management Attributes	.590	.072	.650	8.211	.000

a. Dependent Variable: Customer Satisfaction

Source: Researcher (2018)

The results in Table 5.11a) show that Brand management attributes explain 42.3 % of the variation in customer satisfaction among students in public University ( $R^2 = .423$ ). The results indicate that the overall model is statistically significant at 95% level of confidence. The first step implies that the relationship between brand management attributes and customer satisfaction is positive and statistically significant. The ANOVA results in Table 5.11(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

In the second step, a regression analysis to assess the relationship between brand management attributes and corporate image was conducted. In this step, brand management attributes were treated as the independent variable and corporate image as the dependent variable. The results are summarized in Table 5.12.

**Table 5.102: Step 2 - Regression Results of Brand Management Attributes and Corporate Image**

**5.12a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.663 <sup>a</sup>	.439	.433	1.008

a. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

**5.12b) ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	73.294	1	73.294	72.139	.000 <sup>b</sup>
	Residual	93.482	92	1.016		
	Total	166.777	93			

a. Dependent Variable: Corporate Image

b. Predictors: (Constant), Brand management attributes

Source: Researcher (2018)

**5.12c) Coefficients**

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.242	.304		4.083	.000
	Brand Management Attributes	.660	.078	.663	8.493	.000

a. Dependent Variable: Corporate Image

Source: Researcher (2018)

The results in Table 5.12a) portray that brand management attributes explains 43.9 percent of the variation in Corporate Image ( $R^2 = .439$ ). The overall model results reveal that the relationship between brand management attributes and corporate image is statistically significant at  $\alpha = 0.05$  ( $F = 63.180$ ,  $p\text{-value} = 0.000$ ). This indicates brand management attributes predicts corporate image outcome of the public universities. The

beta coefficients also indicate that statistically significant linear relationship between corporate image and brand management attributes was detected ( $\beta=.527$ ,  $p=.002$ ). The ANOVA results in Table 5.12(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

The third step of the test for the intervening effect of corporate image on the relationship between brand management attributes and customer satisfaction involved testing the influence of corporate image on customer satisfaction. Finally, the process involved testing for the influence of brand management attributes on customer satisfaction while controlling for corporate image. The results for the two steps are presented in Table 5.13.

**Table 5. 113: Step 3 and 4 - Regression Results for the mediating effect of corporate image on relationship between Brand Management Attributes and Customer Satisfaction**

**5.13) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804 <sup>a</sup>	.647	.643	.730
2	.819 <sup>b</sup>	.671	.664	.708

a. Predictors: (Constant), Corporate Image

a. Predictors: (Constant), Brand management attributes, Corporate Image

Source: Researcher (2018).

**5.13b) ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.759	1	89.759	168.719	.000 <sup>b</sup>
	Residual	48.975	92	.532		
	Total	138.734	93			
2	Regression	93.151	2	46.576	92.966	.000 <sup>c</sup>
	Residual	45.583	91	.501		
	Total	138.734	93			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Brand Management Attributes, Corporate Image

### 5.13c) Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.254	.221		5.686	.000
Corporate Image	.734	.056	.804	12.985	.000
2 (Constant)	1.020	.232		4.394	.000
Corporate Image	.607	.073	.666	8.297	.000
Brand Management Attributes	.190	.073	.209	2.602	.011

a. Dependent Variable: Customer Satisfaction

Source: Researcher (2018)

At step 2, brand management attributes contribute significantly to the change in customer satisfaction as the variation increased from .647 to .671 ( $R^2$  change=.024 p-value =.000). The results reveal that the variance explained by corporate image is significant ( $F=92.982$ , p-value=0.000). The ANOVA results in Table 5.13(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable. The results revealed that the regression coefficients for brand management attributes was statistically significant after adding brand management attributes to the regression implying that corporate image may be wielding a partial mediating effect. This implies that changes in the corporate image positively affect the relationship between brand management attributes and customer satisfaction.

**Regression Results of the Mediation effect - All universities combined**

**Table 5.124: Step 1 –Effect of Brand Management Attributes on Customer Satisfaction**

**5.14a) Model Summary - Brand Management Attributes and Customer Satisfaction**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.488 <sup>a</sup>	.238	.236	1.007

a. Predictors: (Constant), BMA  
Source: Researcher (2018)

**5.14b) ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	114.829	1	114.829	100.815	.000 <sup>b</sup>
	Residual	368.004	323	1.139		
	Total	482.833	324			

a. Dependent Variable: Customer Satisfaction  
b. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.14c): Coefficients**

<b>Model</b>		<b>Unstandardized</b>		<b>Standardized</b>	<b>t</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Coefficients</b>		
				<b>Beta</b>		
1	(Constant)	2.339	.173		13.512	.000
	BMA	.475	.045	.488	10.643	.000

a. Dependent Variable: Customer Satisfaction  
Source: Researcher (2018)

The results in Table 5.14a) show that brand management attributes explain 23.8% of the variation in customer satisfaction among students in public University ( $R^2 = .238$ ). The results indicate that the overall model is statistically significant at 95% level of confidence. The first step implies that the relationship between brand management attributes and customer satisfaction is positive and statistically significant. The ANOVA



results in Table 5.14(c) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable. In the second step, a regression analysis to assess the relationship between brand management attributes and corporate image was conducted. In this step, brand management attributes were treated as the independent variable and corporate image as the dependent variable. The results are summarized in Table 5.15.

**Table 5.135: Step 2 - Regression Results of Brand Management Attributes and Corporate Image**

**5.15a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.553 <sup>a</sup>	.306	.304	.999

a. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.15b) ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	159.506	1	159.506	142.289	.000 <sup>b</sup>
	Residual	362.182	323	1.121		
	Total	521.688	324			

a. Dependent Variable: Corporate Image  
b. Predictors: (Constant), Brand management attributes  
Source: Researcher (2018)

**5.15c) Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.664	.172		9.689	.000
	BMA's	.560	.044	.553	12.644	.000

a. Dependent Variable: Corporate Image  
Source: Researcher (2018)

The results in Table 5.15a) indicates that brand management attributes explains 30.6 percent of the variation in Corporate Image ( $R^2 = .306$ ). The overall model results reveal that the relationship between brand management attributes and corporate image is statistically significant at  $\alpha = 0.05$  ( $F=63.180$ ,  $p\text{-value} = 0.000$ ). This shows that brand management attributes predict corporate image outcome of the public universities. The beta coefficients also indicate that statistically significant linear relationship between corporate image and brand management attributes was detected ( $\beta = 0.527$ ,  $p = 0.002$ ). The ANOVA results in Table 5.15(b) show a  $p\text{-value}$  of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable.

The third step of the test for the intervening effect of corporate image on the relationship between brand management attributes and customer satisfaction involved testing the influence of corporate image on customer satisfaction. Finally, the process involved testing for the influence of brand management attributes on customer satisfaction while controlling for corporate image. The results for the two steps are presented in Table 5.16.

**Table 5. 16: Step 3 and 4 - Regression Results of mediating effect of corporate image on Brand Management Attributes and Customer Satisfaction**

**5.16a) Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.592 <sup>a</sup>	.350	.349	.929
2	.623 <sup>b</sup>	.388	.384	.904

a. Predictors: (Constant), Corporate Image

b. Predictors: (Constant), Corporate Image, Brand management attributes

Source: Researcher (2018)

### 5.16b) ANOVA

	<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	169.231	1	169.231	174.465	.000 <sup>b</sup>
	Residual	313.602	323	.970		
	Total	482.833	324			
2	Regression	187.104	2	93.552	101.908	.000 <sup>c</sup>
	Residual	295.729	322	.918		
	Total	482.833	324			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Corporate Image

c. Predictors: (Constant), Corporate Image, Brand Management Attributes

Source: Researcher (2018)

### 5.16c) Coefficients

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	
1	(Constant)	1.968	.159		12.341	.000
	CI	.570	.041	.592	13.996	.000
2	(Constant)	1.595	.174		9.153	.000
	CI	.447	.047	.464	9.406	.000
	BMA	.225	.048	.231	4.678	.000

a. Dependent Variable: CS

Source: Researcher (2018)

**Key:** BMA = Brand Management Attributes; CI = Corporate Image; and CS = Customer Satisfaction

At step two, brand management attributes significantly influence customer satisfaction as the variation increased from 0.350 to 0.388 ( $R^2$  change= 0.038 p-value = 0.000). The results reveal that the variance explained by corporate image is significant ( $F=195.887$ , p-value=.000). The ANOVA results in Table 5.16(b) show a p-value of 0.000 which is less than 0.05 indicating that the model is statistically significant in explaining the impact of the independent variables on the dependent variable. The results revealed that the regression coefficients for Brand management attributes was statistically significant after adding corporate image to the regression implying that corporate may be wielding a

complete mediating effect. This implies that changes in corporate image positively affect the Brand management attributes and customer satisfaction relationship since there was a positive direction in their relationship.

A summary of the mediated regression analysis is presented in Table 5.17.

**Table 5. 17: Mediating Effect of Corporate image on the relationship between Brand management attributes and customer satisfaction**

Analysis	R	R2	R <sup>2</sup> Change	B	(p- value)
<b>Analysis one:</b> Brand management attributes on Customer satisfaction	.386 <sup>a</sup>	0.149	0.143	0.385	0.000
<b>Analysis two:</b> Brand management attributes on Corporate image	.559 <sup>a</sup>	.312	.308	.527	0.000
<b>Analysis three:</b> Corporate image on Brand management attributes and customer satisfaction	.462 <sup>a</sup>	0.213	0.202	0.77	0.002

Source: Researcher (2019)

The results in Table 5.17 reveal that the correlation between Brand management attributes and customer satisfaction was moderate and statistically significant at  $p < .05$  ( $r = .386$ ,  $p\text{-value} = .000$ ) while that of Brand management attributes on corporate image was strong and statistically significant ( $r = .559$ ,  $p\text{-value} = .000$ ).

The current research findings, presents the regression model that estimated the mediation effect of corporate image on the relationship between brand management attributes and customer satisfaction as follows:

$$CS = 2.001 + 0.442CI + 0.077BMA \quad (5.2)$$

Where; CS is the customer satisfaction; BMA is Brand Management Attributes and CI is the Corporate Image

**Figure 5.2: Modified Mediating Effect of Corporate image on the Relationship between Brand management attributes and customer satisfaction**

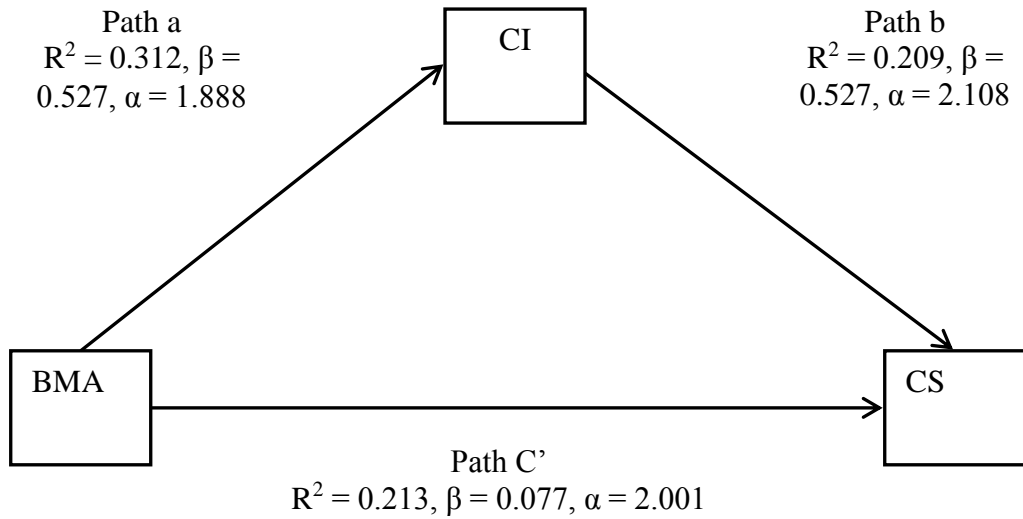
Part A: Overall Direct Effect

**Path C**  
 $R^2 = 0.386, \beta = 0.385, \alpha = 2.498$



Source: Primary Data.

Part B: Path Diagram for Mediation Effect of Corporate Image



The results in Figure 5.2 support the hypothesis that Brand management attributes influence customer satisfaction through routes of intermediate factors. The pertinent

results indicated that  $R^2$  moved from 0.209 to .213 when corporate image was added (.213-.209=.004). This implied that corporate image explained the additional 0.4% of the difference in customer satisfaction. Further, the outcome indicates that the effect of Brand management attributes on customer satisfaction in the last major step of the analysis (path c) is statistically insignificant at 0.05 implying complete mediation. This explains the influence of the Brand management attributes mediated by corporate image.

#### **5.4 Brand Management Attributes, Customer Characteristics and Customer Satisfaction - Moderation Analysis.**

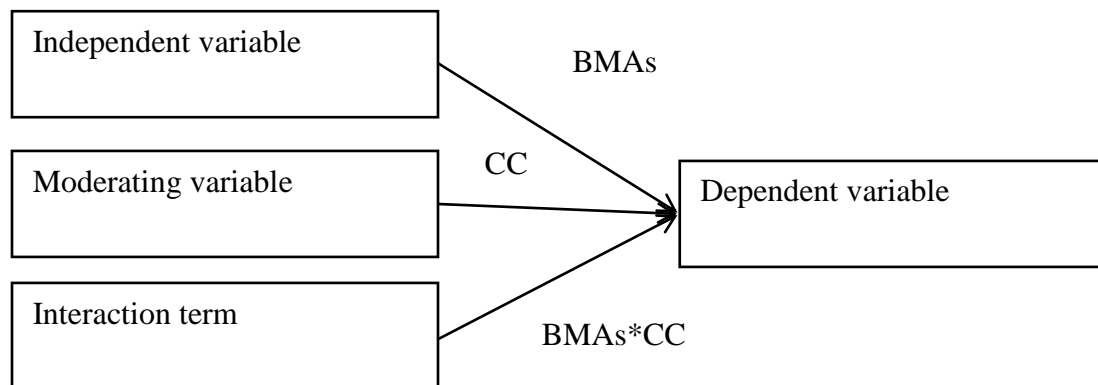
The third objective of the study was to establish the moderating influence of customer characteristics on the relationship between brand management attributes and customer satisfaction among university students in Kenya. As underscored by Baron and Kenny (1986), to assess the moderating effect, the study applied hierarchical regression method. Baron and Kenny (1986) defined a moderator as a variable that affects the direction and/or strength of the relationship between a predictor and a criterion variable. They posit that moderation can only be supported if path C (which is the interaction of paths A and B) is significant. The hypothesis is stated thus;

*H<sub>3</sub>: Customer characteristics have significant moderating effect on the relationship between brand management attributes and customer satisfaction among universities in Kenya.*

To test for moderation effect, a hierarchical regression analysis was conducted by first using the following two steps. Step one, tested the influence of brand management attributes and customer satisfaction. Step two tested the influence of customer characteristics on customer satisfaction. Then in step three, the interaction term was

introduced in the equation and its significance evaluated when controlling for brand management attributes and customer satisfaction. The interaction term was computed as the product of the standardized scores of brand management attributes and customer characteristics. To confirm moderation, the influence of the interaction term should be significant. The significance of the predictor variable and the moderator variable is not mostly relevant in determining moderation (Yzerbyt, Muller, Batailler, & Judd, 2018).

The relationship was depicted in Figure 5.2.



**Figure 5. 3: Test of moderation – path diagram for direct and indirect effects**

Figure 5.3 illustrates that each arrow in the path represents a causal relationship between two variables to which are assigned the change statistics ( $R^2$  and F ratio). This shows direction and magnitude of the effect of one variable on the other. Using hierarchical regression analysis, both direct and indirect causalities were determined by first regressing Brand Management Attributes (BMAs) on Customer Satisfaction (CS) for the direct causality. The same procedure was repeated with the inclusion of customer characteristics (CC) where the indirect causality was determined.

**Table 5. 18: Regression Results of the Moderation effect - Public Universities**

**Goodness of Fit**

Model	R	R Square	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	.386 <sup>a</sup>	.149	.143	1.104
2	.441 <sup>b</sup>	.194	.182	1.079
3	.515 <sup>c</sup>	.265	.249	1.034

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.480	1	29.480	24.163	.000 <sup>b</sup>
	Residual	168.313	138	1.220		
	Total	197.793	139			
2	Regression	38.394	2	19.197	16.499	.000 <sup>c</sup>
	Residual	159.399	137	1.163		
	Total	197.793	139			
3	Regression	52.473	3	17.491	16.506	.000 <sup>d</sup>
	Residual	145.320	136	1.069		
	Total	197.793	139			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.498	.302		8.283	.000
	BMA	.385	.078	.386	4.916	.000
2	(Constant)	2.301	.303		7.596	.000
	BMA	.241	.092	.242	2.613	.010
	CC	.215	.078	.256	2.768	.006
3	(Constant)	1.793	.322		5.566	.000
	BMA	.197	.089	.198	2.205	.029
	CC	.095	.081	.114	1.174	.243
	BMA*CC	.298	.082	.317	3.630	.000

Model 1. Predictors: (Constant), Brand management attributes

Model 2. Predictors: (Constant), Brand management attributes, Customer Characteristics



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Model 3. Predictors: (Constant), Brand management attributes, Customer Characteristics, Brand management attributes\*Customer Characteristics  
Dependent variable Customer Satisfaction  
Source: Researcher (2018)

**Key:** BMA = Brand Management Attributes; CC = Customer Characteristics; and CS = Customer Satisfaction

As shown in Table 5.18, the effect of brand management attributes and customer characteristics on customer satisfaction were both positive and statistically significant ( $p < 0.05$ ). The change in  $R^2$  due to the interaction term was 0.071 (0.265-0.194) and the interaction term was statistically significant ( $p < 0.05$ ).

This shows that CC has a positive moderating effect on the relationship between brand management attributes and customer satisfaction though it is not significant as indicated by p value 0.243 against the threshold of  $p \leq 0.05$ .

Moreover, since absolute value of the t-value ( $t=1.174$ ) is less than the critical value ( $t = 1.962$ ) the researcher rejected the alternative hypothesis. Therefore, it was established that customer characteristics have no significant moderating effect on the relationship between brand management attributes and customer characteristics among students in public universities.

The resultant single moderation regression equation is:

$$CS = 1.793 + 0.198BMA + 0.114CC + 0.317(BMA * CC) \quad (5.3^a)$$

Where; CS = the customer satisfaction

BMA = Brand Management Attributes

CC = Customer Characteristics

BMA\* CC = Interaction term

**Table 5. 19: Regression Results of the Moderation effect – Private Individual Owned Universities**

**Goodness of Fit**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.559 <sup>a</sup>	.312	.306	.772
2	.623 <sup>a</sup>	.388	.377	.735
3	.657 <sup>b</sup>	.431	.416	.712

**ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	30.565	1	30.565	40.376	.000 <sup>b</sup>
	Residual	67.383	89	.757		
	Total	97.948	90			
2	Regression	37.964	2	18.982	27.833	.000 <sup>b</sup>
	Residual	59.975	88	.682		
	Total	97.939	90			
3	Regression	42.241	3	14.080	22.000	.000 <sup>c</sup>
	Residual	55.697	87	.640		
	Total	97.939	90			

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.057	.294		7.002	.000
	Brand Management Attributes	.500	.070	.559	7.159	.000
2	(Constant)	1.715	.297		5.769	.000
	BMA	.467	.073	.501	6.390	.000
	CC	.151	.049	.242	3.081	.003
3	(Constant)	.507	.505		1.004	.318
	BMA	.761	.123	.816	6.168	.000
	CC	.723	.202	1.158	3.571	.001
	IBMA*CC	-.134	.046	-1.081	-2.907	.004

Model 2. Predictors: (Constant), Brand management attributes, Customer Characteristics  
 Model 3. Predictors: (Constant), Brand management attributes, Customer Characteristics, Brand management attributes\*Customer Characteristics  
 Dependent variable Customer Satisfaction  
 Source: Researcher (2018)

As shown in Table 5.19, the effect of brand management attributes and customer characteristics on customer satisfaction were both positive and statistically significant ( $p < 0.05$ ). The change in  $R^2$  due to the interaction term was 0.043 (0.431-0.388) and was statistically significant ( $p < 0.05$ ). Therefore, the study concluded that customer characteristics have a statistically significant moderation effect on the relationship between brand management attributes and customer satisfaction in individual owned universities. The resultant single moderation regression equation is:

$$CS = 0.507 + 0.761BMA + 0.723CC - 0.134(BMA*CC) \quad (5.3^b)$$

Where; CS = Customer satisfaction; BMA = Brand Management Attributes

CC = Customer Characteristics; BMA\* CC = Interaction term

**Table 5. 20: Regression Results of the Moderation effect – Private Institutional Owned Universities**

**Goodness of Fit**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.650 <sup>a</sup>	.423	.417	.933
2	.703 <sup>a</sup>	.494	.483	.878
3	.737 <sup>b</sup>	.543	.528	.839

**ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	58.668	1	58.668	67.434	.000 <sup>b</sup>
	Residual	80.066	92	.870		
	Total	138.734	93			
2	Regression	68.561	2	34.281	44.463	.000 <sup>b</sup>
	Residual	70.173	91	.771		
	Total	138.734	93			
3	Regression	75.328	3	25.109	35.616	.000 <sup>c</sup>
	Residual	63.406	90	.705		
	Total	138.734	93			

**Coefficients**

<b>Model</b>		<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>		<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	
1	(Constant)	1.774	.282		6.302	.000
	BMA	.590	.072	.650	8.211	.000
2	(Constant)	1.239	.304		4.070	.000
	BMA	.490	.073	.539	6.684	.000
	CC	.269	.075	.289	3.582	.001
3	(Constant)	-.468	.623		-.751	.455
	BMA	.966	.169	1.065	5.718	.000
	CC	.855	.202	.917	4.229	.000
	IBMA*CC	-.155	.050	-.986	-3.099	.003

Model 2. Predictors: (Constant), Brand management attributes, Customer Characteristics

Model 3. Predictors: (Constant), Brand management attributes, Customer Characteristics, Brand management attributes\*Customer Characteristics

Dependent variable Customer Satisfaction

Source: Researcher (2018)

As shown in Table 5.20, the effect of brand management attributes and customer characteristics on customer satisfaction were both positive and statistically significant ( $p < 0.05$ ). The change in  $R^2$  due to the interaction term was 0.049 (0.543-0.494) and the interaction term was statistically significant ( $p < 0.05$ ). Therefore, the study accepted that Customer characteristics have a statistically significant moderation effect on the relationship between brand management attributes and customer satisfaction in institutional owned universities. The resultant single moderation regression equation is:

$$CS = -0.468 + 1.065BMA + 0.917CC - 0.986(CC*BMA) \quad (5.3^c)$$

Where; CS = the customer satisfaction

BMA = Brand Management Attributes

CC = Customer Characteristics

BMA\* CC = Interaction term

**Table 5. 21: Regression Results of the Moderation effect – All Universities**

**Goodness of Fit**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.488 <sup>a</sup>	.238	.236	1.007
2	.519 <sup>a</sup>	.269	.265	.987
3	.534 <sup>b</sup>	.285	.279	.978

## ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	114.829	1	114.829	100.815	.000 <sup>b</sup>
	Residual	368.004	323	1.139		
	Total	482.833	324			
2	Regression	129.848	2	64.924	59.237	.000 <sup>b</sup>
	Residual	352.985	322	1.096		
	Total	482.833	324			
3	Regression	137.466	3	45.822	42.586	.000 <sup>c</sup>
	Residual	345.367	321	1.076		
	Total	482.833	324			

## Coefficients

Model		Unstandardized		Standardized		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	2.339	.173		13.512	.000
	BMA	.475	.045	.488	10.643	.000
2	(Constant)	2.003	.190		10.534	.000
	BMA	.441	.045	.453	9.880	.000
	CC	.146	.037	.180	3.925	.000
3	(Constant)	1.034	.391		2.643	.009
	BMA	.704	.103	.722	6.836	.000
	CC	.470	.121	.577	3.901	.000
	IBMA*CC	-.085	.030	-.537	-2.822	.005

Model 2. Predictors: (Constant), Brand management attributes, Customer Characteristics

Model 3. Predictors: (Constant), Brand management attributes, Customer Characteristics, Brand management attributes\*Customer Characteristics

Dependent variable Customer Satisfaction

Source: Researcher (2018)

As shown in Table 5.21, the effect of brand management attributes and customer characteristics on customer satisfaction were both positive and statistically significant ( $p < 0.05$ ). The change in  $R^2$  due to the interaction term was 0.016 (0.285 - 0.269) and the interaction term was statistically significant ( $p < 0.05$ ). Therefore, the study accepted the third hypothesis H3 that Customer characteristics significantly moderate the relationship between brand management attributes and customer satisfaction in public, private-individual owned and private-institutional owned universities in Kenya. The resultant single moderation regression equation is:

$$CS = 1.034 + 0.722BMA + 0.577CC - 0.537(BMA*CC) \quad (5.3^d)$$

Where; CS = the customer satisfaction;      BMA = Brand Management Attributes;

CC = Customer Characteristics;      BMA\* CC = Interaction term

**Figure 5. 4: Summary Results of Moderation Testing**

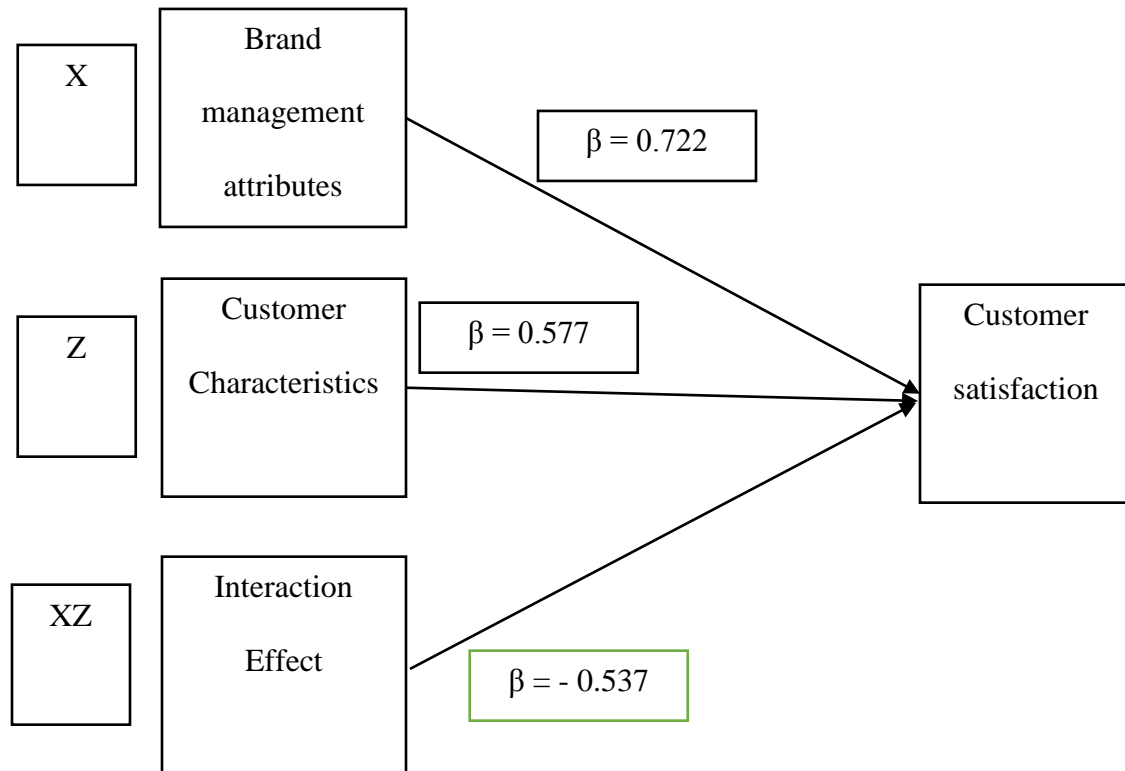


Figure 5.4 represents a summary of the results for moderation testing. It shows the regression coefficients along the tested variable relationships as a result of the interaction term. The current study findings are in line with assertion of previous studies that selected customer characteristics demographics such as Age, gender, income, social status, ethnic background etc. moderate the relationship between brand management attributes and customer satisfaction. The hypothesis that customer characteristics moderate brand management attributes and customer satisfaction relationship is supported.

#### **5.5 Brand Management Attributes, Corporate Image, Customer Characteristics, and Customer Satisfaction - Joint Effect Analysis**

This study had one broad objective to determine the joint influence of brand management attributes, corporate image and customer characteristics on customer satisfaction in universities in Kenya. It is against the backdrop of this proposition that the fourth hypothesis, *H4* was formulated. In order to test the relationship, the following hypothesis was formulated and tested;

*H4: There is a significant combined influence of brand management attributes, corporate image and customer characteristics on customer satisfaction among undergraduate university students in Kenya.*

To test this relationship, first the joint influence was undertaken using a stepwise regression analysis. The results of these tests and analyses are presented in Table 5.21.



**Table 5. 22: Regression Results of the Joint effect – Public Universities**

**Goodness of fit**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.386 <sup>a</sup>	.149	.143	1.104
2	.500 <sup>b</sup>	.250	.239	1.041
3	.555 <sup>c</sup>	.308	.293	1.003

a. Predictors: (Constant), BMA

b. Predictors: (Constant), BMA, CI

c. Predictors: (Constant), BMA, CI, CC, CS

Source: Researcher (2018)

**Key: BMA** = Brand Management Attributes; **CI** = Corporate Image; **CC** = Customer Characteristics; **CS** = Customer satisfaction

**ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	29.480	1	29.480	24.164	.000 <sup>b</sup>
	Residual	168.313	138	1.220		
	Total	197.793	139			
2	Regression	49.372	2	24.686	22.794	.000 <sup>c</sup>
	Residual	148.421	137	1.083		
	Total	197.793	139			
3	Regression	60.891	3	20.297	20.156	.000 <sup>d</sup>
	Residual	136.901	136	1.007		
	Total	197.793	139			

a. Dependent Variable: CS

b. Predictors: (Constant), BMA

c. Predictors: (Constant), BMA, CI

d. Predictors: (Constant), BMA, CI, CS

Source: Researcher (2018)

**Key: BMA** = Brand management attributes; **CI** = Corporate Image; **CC** = Customer Characteristics and **CS** = Customer Satisfaction

The results of the joint effect of brand management attributes, corporate image and customer characteristics on customer satisfaction are presented in Table 5.22. It indicates

that 14.9% variation in customer satisfaction was explained by brand management attributes ( $R^2 = 0.149$ ), and brand management attributes and corporate image explain 25.0% ( $R^2 = 0.250$ ). When an additional variable (Customer characteristics) is added, it explains 30.8% ( $R^2 = 0.308$ ). The adjusted  $R^2$  for the joint effect was 0.293, and the P values were 0.000, 0.000, 0.000 respectively all of which were less than 0.05.

**Table 5. 23: Regression Results of the Joint effect – Private Individual Owned Universities**

**Goodness of fit**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.579 <sup>a</sup>	.335	.329	.762
2	.708 <sup>b</sup>	.501	.493	.663
3	.724 <sup>c</sup>	.524	.511	.651

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.835	1	32.835	44.918	.000 <sup>b</sup>
	Residual	65.103	89	.731		
	Total	97.939	90			
2	Regression	49.141	2	24.570	44.270	.000 <sup>c</sup>
	Residual	48.798	88	.555		
	Total	97.939	90			
3	Regression	51.289	3	17.096	31.896	.000 <sup>d</sup>
	Residual	46.649	87	.536		
	Total	97.939	90			

a. Dependent Variable: CS

b. Predictors: (Constant), BMA

c. Predictors: (Constant), BMA, CI

d. Predictors: (Constant), BMA, CI, CC

Source: Researcher (2018)

**Key: BMA** = Brand Management Attributes; **CI** = Corporate Image; **CC** = Customer Characteristics and **CS** = Customer Satisfaction

### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.881	.303		6.201	.000
	BMA	.540	.072	.579	7.516	.000
2	(Constant)	1.377	.276		4.983	.000
	BMA	.280	.076	.300	3.695	.000
	CI	.412	.068	.494	6.090	.000
3	(Constant)	1.306	.273		4.779	.000
	BMA	.251	.075	.270	3.338	.001
	CI	.380	.068	.457	5.606	.000
	CC	.100	.044	.160	2.251	.026

a. Dependent Variable: CS  
Source: Researcher (2018)

**Key:** BMA = Brand Management Attributes; CI = Corporate Image; CC = Customer Characteristics and CS = Customer Satisfaction;

The results in Table 5.23 indicates that 33.5% variation in customer satisfaction was explained by brand management attributes ( $R^2 = 0.335$ ); Brand management attributes and corporate image explain 50.2% ( $R^2 = 0.502$ ). When an additional variable (Customer characteristics) is added, it explains 52.4 % ( $R^2 = 0.524$ ). The adjusted  $R^2$  for the joint effect was 0.511, and the P values were 0.000, 0.000, and 0.000 respectively all of which were less than 0.05 and hence statistically significant. This indicates that there is a significant joint effect of brand management attributes, corporate image and customer satisfaction on the customer satisfaction among students in private individual owned universities in Kenya. The change 18.9% in  $R^2$  (.524-.335) indicates that corporate image and customer characteristics have a significant mediation and moderation effects respectively on the relationship between brand management attributes and customer satisfaction.

This shows that the situational factors such as mode of study and programme enrolled, as well as personal factors such as age and social status influenced the students' judgment

on the role of branding and marketing initiatives in influencing their level of satisfaction with the university services. This may further indicate that branding initiatives such as university brand identity, positioning and personality influences the students' choice of a private individual owned university. Increase in brand management attributes may lead to increase in satisfaction among certain categories of customer.

**Table 5. 24: Regression Results of the Joint effect – Private Institutional Owned Universities**

**Goodness of fit**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.650 <sup>a</sup>	.423	.417	.933
2	.819 <sup>b</sup>	.671	.664	.708
3	.832 <sup>c</sup>	.692	.682	.689

**ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	58.668	1	58.668	67.434	.000 <sup>b</sup>
	Residual	80.066	92	.870		
	Total	138.734	93			
2	Regression	93.151	2	46.576	92.966	.000 <sup>c</sup>
	Residual	45.583	91	.501		
	Total	138.734	93			
3	Regression	96.060	3	32.020	67.553	.000 <sup>d</sup>
	Residual	42.674	90	.474		
	Total	138.734	93			

- a. Dependent Variable: CS
  - b. Predictors: (Constant), BMA
  - c. Predictors: (Constant), BMA, CI
  - d. Predictors: (Constant), BMA, CI, CC
- Source: Researcher (2018)

**Key:** BMA = Brand Management Attributes; CI = Corporate Image and CS = Customer Satisfaction; CC = Customer Characteristics

### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.774	.282		6.302	.000
	BMA	.590	.072	.650	8.211	.000
2	(Constant)	1.020	.232		4.394	.000
	BMA	.190	.073	.209	2.602	.011
	CI	.607	.073	.666	8.297	.000
3	(Constant)	.777	.246		3.157	.002
	BMA	.164	.072	.180	2.287	.025
	CI	.561	.074	.615	7.616	.000
	CC	.151	.061	.162	2.477	.015

a. Dependent Variable: CS  
Source: Researcher (2018)

**Key:** BMA = Brand Management Attributes; CI = Corporate Image and CS = Customer Satisfaction; CC = Customer Characteristics

For private institutional owned universities, the results indicate that there is a joint effect of Brand management attributes, corporate image and customer characteristics on customer satisfaction as presented in Table 5.24. It indicates that 42.3% variation in customer satisfaction was explained by brand management attributes ( $R^2 = 0.423$ ), and brand management attributes and corporate image explain 67.1% ( $R^2 = 0.671$ ). After introducing the third variable (customer characteristics), it explains 69.2% ( $R^2 = 0.692$ ). The adjusted  $R^2$  for the joint effect was 0.689, and the P values were 0.000, 0.000, 0.000 respectively all of which were less than 0.05 and hence statistically significant.

**Table 5. 25: Regression Results of the Joint effect – All Universities**

**Goodness of Fit**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.488 <sup>a</sup>	.238	.236	1.007
2	.623 <sup>b</sup>	.388	.384	.904
3	.632 <sup>c</sup>	.400	.395	.896

**ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	114.829	1	114.829	100.815	.000 <sup>b</sup>
	Residual	368.004	323	1.139		
	Total	482.833	324			
2	Regression	187.104	2	93.552	101.908	.000 <sup>c</sup>
	Residual	295.729	322	.918		
	Total	482.833	324			
3	Regression	193.095	3	64.365	71.279	.000 <sup>d</sup>
	Residual	289.738	321	.903		
	Total	482.833	324			

a. Dependent Variable: CS

b. Predictors: (Constant), BMA

c. Predictors: (Constant), BMA, CI

d. Predictors: (Constant), BMA, CI, CC

Source: Researcher (2018)

**Key: BMA** = Brand Management Attributes; **CI** = Corporate Image, **CC** = Customer Characteristics and **CS** = Customer Satisfaction; **CC** = Customer Characteristics

### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.339	.173		13.512	.000
	BMA	.475	.045	.488	10.643	.000
2	(Constant)	1.595	.174		9.153	.000
	BMA	.225	.048	.231	4.678	.000
	CI	.447	.047	.464	9.406	.000
3	(Constant)	1.417	.185		7.676	.000
	BMA	.216	.048	.221	4.513	.000
	CI	.424	.048	.441	8.877	.000
	CC	.094	.034	.115	2.732	.007

a. Dependent Variable: CS  
Source: Researcher (2018)

**Key:** **BMA** = Brand Management Attributes; **CI** = Corporate Image, **CC** = Customer Characteristics and **CS** = Customer Satisfaction; **CC** = Customer Characteristics

The summary model on the joint effect of Brand Management Attributes, Corporate Image, Customer Characteristics, and Customer Satisfaction is presented below.

$$CS = 1.417 + 0.221BMA + 0.441CI + 0.115CC \quad (5.4)$$

BMA = Brand Management Attributes; CI = Corporate Image; CC = Customer Characteristics and CS = Customer Satisfaction;

When considering all the three categories together, as presented in Table 5.25, the results indicates that 23.8%% variation in customer satisfaction was explained by brand management attributes ( $R^2 = 0.238$ ), and brand management attributes and corporate image explain 38.8% ( $R^2 = 0.388$ ). When an additional variable (Customer characteristics) is added, it explains 40.0% ( $R^2 = 0.40$ ). The adjusted  $R^2$  for the joint

effect was 0.395, and the P values were 0.000, 0.000, 0.000 respectively all of which were less than 0.05 and hence statistically significant and consequently, the findings confirmed the fourth objective thereby supporting hypothesis four (H4) that there is a significant combined influence of brand management attributes, corporate image, customer characteristics and customer satisfaction among university students in Kenya. The changes in  $R^2$  in the results for all universities can be explained by the fact that majority of respondents (140) were from public universities category that posted a low effect of the three predictor variables on the independent variable (customer satisfaction).

The above results indicate that the joint effect of the three variables is more pronounced in the private institutional owned universities as compared to public and private individual owned universities. The joint effect is lowest in public universities compared to other two categories. This indicates that students in public universities pay less attention to the branding initiatives by their respective institutions as compared to their private university counterparts. Going by the findings, investments in brand management attributes is more justified in private as compared to public universities.



**Table 5. 26: Summary of Test of Hypotheses**

<b>Hypothesis</b>	<b>Empirical evidence</b>	<b>Decision</b>
H1: There is a significant relationship between brand management attributes and customer satisfaction among university students in Kenya.	Customer satisfaction is supported. $R^2=0.238$ ; p-value= .000	Accepted
H2: Corporate image significantly mediates the relationship between brand management attributes and customer satisfaction among university students in Kenya.	Customer satisfaction is supported. $R^2=0.388$ ; p-value= .000	Accepted
H3: Customer characteristics significantly moderate the relationship between brand management attributes and customer satisfaction among university students in Kenya.	Customer satisfaction is supported. $R^2=-0.285$ ; p-value= .000	Accepted
H4: There is a significant combined influence of brand management attributes, corporate image and customer characteristics on customer satisfaction among university students in Kenya.	Customer satisfaction is supported. $R^2=0.395$ ; p-value= .000	Accepted

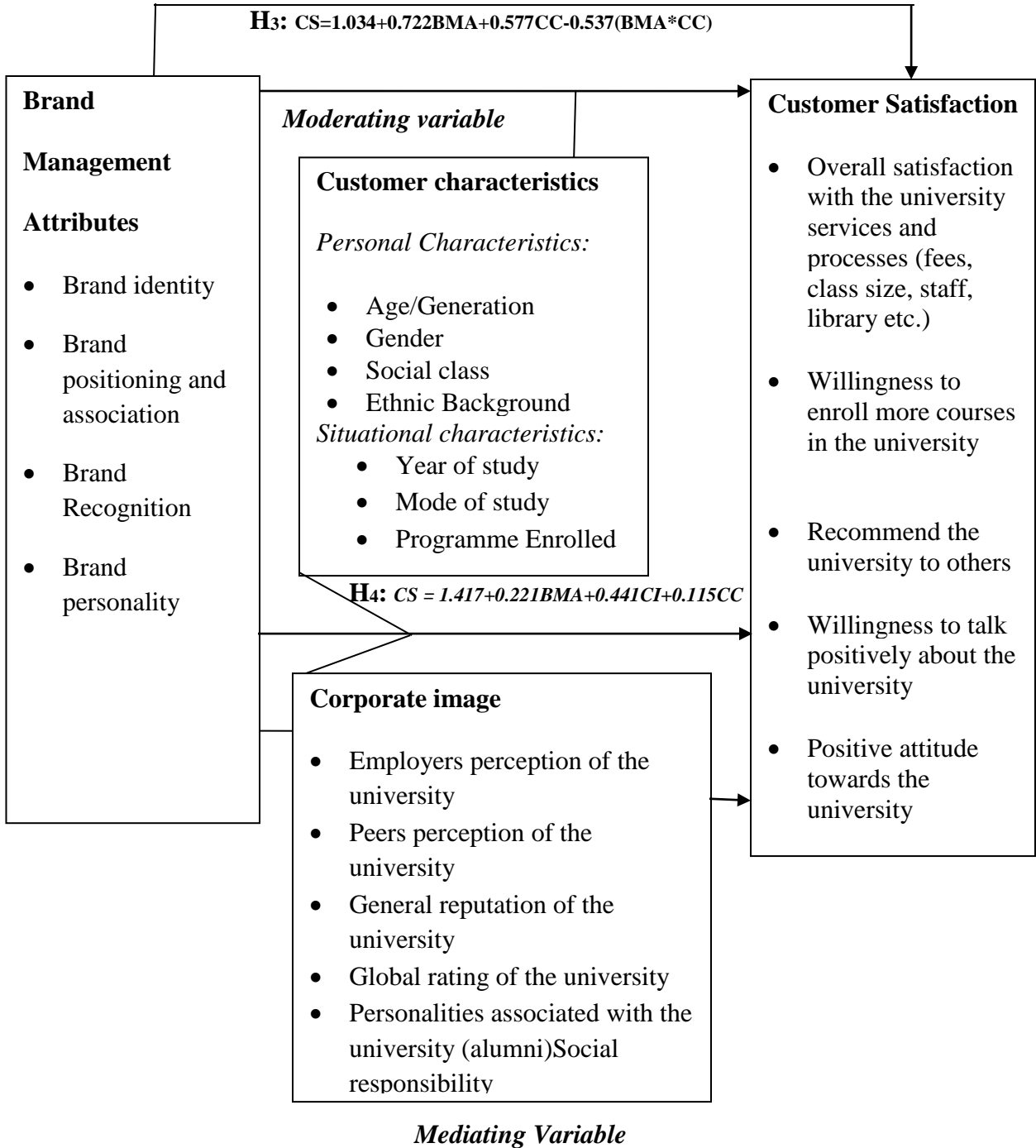
Source: Researcher (2018)

All the four hypotheses were supported with moderate fit. The relationships between the predictor variables and the dependent variable were found to be statistically significant as graphically presented in Figure 5.3.

**Figure 5.5: Revised Conceptual Model**  
**Independent Variable**

**Dependent Variable**

$$H_1: CS = 2.339 + 0.488BMA$$



Source: Researcher, 2018

## **5.6 Discussion**

This section presents discussions of the various tests carried out on the study. The results of each of the hypothesis in this study are discussed. The literature and the findings are compared and the conclusions of the same explained. The discussion comprises the relationship between brand management attributes and customer satisfaction; brand management attributes, corporate image and customer satisfaction; brand management attributes, customer characteristics and customer satisfaction; and finally, the combined relationship of brand management attributes, corporate image, customer characteristics and customer satisfaction.

### **5.6.1 Brand Management Attributes and Customer Satisfaction**

The first objective of this study was to establish the influence of brand management attributes on customer satisfaction. The objective had a corresponding hypothesis which stated that brand management attributes have a significant influence on customer satisfaction among university students in Kenya. To achieve this objective, corresponding hypothesis test was conducted to determine the percentage of variation in the customer satisfaction. The first test was performed and the results confirmed the first hypothesis that brand management attributes has a significant influence on customer satisfaction among universities in Kenya.

The study results indicate that brand management attributes explained 23.6% of the changes in customer satisfaction with F value of 100.815 and significance level p value 0.000. Thus, since  $p < 0.05$ , it is clear that brand management attributes have significant influence on customer satisfaction. The study findings are in line with Mourad et al., (2010) findings that brand management attributes such as brand identity, brand

association, and brand image influenced customer satisfaction. This implies that brand management attributes that are directed towards building a strong corporate image are likely to lead to customer satisfaction. For example, a brand with a unique identity, unique positioning or positive association translates to positive corporate image, hence satisfaction. The findings indicate that an increase in brand management practice leads to a positive increase in customer satisfaction. Students from all university categories; public, private individual owned and private institutional owned, indicated positive preference and satisfaction with university branding initiatives.

Similarly, the findings support Beneke (2010), who established that organizational success of higher education institutions in South Africa highly depended on integration of all brand equity elements in a manner that maximizes institution visibility. Managers should therefore identify the brand management attributes that have a positive and direct return on investment and integrate the same in the institutional strategic goals. This can be justified by the findings of Kotecha (2003) that universities future greatly depends on its branding initiatives and processes.

Notably, with an average mean of 3.883, brand identity was rated as an important brand management practice with the 'university logo is unique' emerging as the highest rated with a mean of 4.08, and 'university brand is consistent across all campuses' being the lowest rated among the brand identity attributes. This demonstrates the symbolic influence of corporate logo and the need to ensure consistency in brand attributes across all branches/campuses. Similarly, majority of respondents agreed that the corporate color, culture, slogan and self-expressive attributes were rated as important brand management

attributes. Based on these findings, universities should conduct extensive consumer research before adopting a specific brand identity strategy.

In brand positioning, the ease to pronounce the name was rated highest with a mean score of 4.17 while university brand global appeal rated lowest in that attribute with a mean of 3.63. All other positioning attributes were rated above average. According to Kotler and Keller (2016), the goal of creating a brand position is to ensure that both the internal and external environment understand what the brand basically stands for and fundamentally represents. This implies that brand positioning is an important brand management practice in the university sector. Similarly, brand recognition and personality were rated above average in influencing customer satisfaction with 'I know the colour of the university and 'the students are cheerful' rated highest in each category respectively and 'I know all programmes offered by the university' and 'the management and staff are honest rated lowest in the respective categories.

### **5.6.2 Brand Management Attributes, Corporate Image and Customer Satisfaction**

The second objective of the study is to establish the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction among university students in Kenya. The study shows that corporate image has significant mediation influence on the relationship between brand management attributes and customer satisfaction. The results of the study revealed that corporate image incrementally explained customer satisfaction by 6.4 % over (0.213-0.149) and above the effect of brand management attributes. The intervening influence change in F ratio had a p value of 0.000, since the calculated p-value for the change was less than 0.05; it meant that the effect was statistically significant. These findings are consistent with Kang and

James (2004) results that noted that image played an important mediating role in influencing an individual's level of satisfaction. Walsh, Dinnie and Wiedmann (2006) demonstrate that corporate reputation has a strong positive relationship with customer satisfaction and that corporate image and customer satisfaction have a significant negative influence on customer defection. A similar finding by Davies (2004) who notes that "reputation and customer satisfaction have been seen as interlinked". These findings are equally supported by Kandampully and Hu (2007), who observe that customer satisfaction and corporate image have a statistically significant positive relationship. Additionally, the findings were supporting those of Kotecha (2003) which established that branding played a critical role in influencing consumer perception and brand performance in South Africa.

This finding was in tandem with the works of Alves and Raposo (2010) and Nguyen and LeBlanc (2001), who attested that image is the construct with the greatest influence on customer satisfaction. University students would therefore be most satisfied with a university with a relatively strong corporate image and service staff who are reliable in core service delivery. A study carried out by Andreassen and Lindestad (1998) established that corporate image plays a critical role in influencing customer overall evaluation of quality and satisfaction with a brand. The attributes related to quality of university education, such as class size, faculty qualification, library services, access to learning materials among others, have been used as determinant of brand equity among the institutions of higher learning and thus the main strategy adopted by the universities to attract students.

### **5.6.3 Brand Management Attributes, Customer Characteristics and Customer Satisfaction**

The third objective of the study was to establish the moderating effect of customer characteristics on the relationship between brand management attributes and customer satisfaction among university students in Kenya. The study reveals that customer characteristics positively moderate the relationship between brand management attributes and customer satisfaction among university students in Kenya. However, in public universities, customer characteristics had a positive influence on the relationship though it was not significant as indicated by  $p = 0.243$  against the threshold of  $p \leq 0.05$ . Hence the conclusion that customer characteristics had no significant moderating effect on the relationship between brand management attributes and customer characteristics among students in public universities.

Further, the findings have revealed that situational characteristics such as mode of study, programme enrolled and year of study had a high influence on the students' judgement of the university branding and marketing initiatives, with a mean of 3.44, 3.43 and 3.26 respectively. Similarly, personal characteristics such as social status, income and age moderately influenced the students' interpretation of the university branding and marketing initiatives, with means of 3.22, 3.13 and 3.01 respectively. On the other hand, income level and ethnic background did not influence the students' judgements, with a mean of 2.97 and 2.90 respectively. The above findings may be due to the fact that personal characteristics are not based on student consumers own initiative as compared to the situational characteristics. Students don't choose their age, gender, social status, ethnic background and income levels, but they choose mode of study and program to

enroll. As the student progress with their studies, their experience with the brand increases hence influencing their overall judgement of the brand. This supports the findings of Walter and Cleff (2013) who established that brand experiences highly influenced brand personality and satisfaction among BMW motor vehicle customer in Canada and Germany. Similarly, Moreira, Silva and Moutinho (2017) established a positive relationship between brand experience and satisfaction. This indicates that the more a student has been in the university the more likely they will become loyal and satisfied with the university brand.

The findings are in line with Mourad et al. (2011), there is a high correlation between customer characteristics and customer satisfaction based on consumers' own socio-economic characteristics and experience with the brand. The trio established that academic qualification, motivations, occupational interest and previous experience with the service provided played a significant role in influencing customer satisfaction in higher education sector in Egypt.

Similarly, the findings are in line with Silvenia and Vukasovic (2015) findings in their study conducted in the higher education sector in Slovenia. The study findings established that customer characteristics such as gender, family life cycle stage, income, customer experience with the service provided and education level, greatly influence customer satisfaction among university students in Slovenia. In a similar study in USA, Mittal and Kamakura (2001) noted a great variation in customer levels of satisfaction based on numerous customer demographic characteristics and the situational characteristics, Additionally, Baumann et al., (2005) established that customer age strongly moderates the relationship between loyalty and satisfaction. In particular, they



concluded that satisfied consumers from the older generation were likely to be more loyal to a particular brand than their counterparts from the younger generation. Conversely, in a different study among grocery consumers, Magi (2003) was of the contrary opinion that age did not have any moderating effect on the relationship between customer satisfaction and loyalty.

Homburg and Giering (2001) established that customer income level inversely affects the relationship between customer satisfaction and loyalty. Consumers in high income market segments are willing to commit more time and resources in favor of a brand with less evaluation effort. Mittal and Kamakura (2001) noted that consumers who are highly educated and are more informed and have a likelihood of lower loyalty levels and less satisfied. This may be attributed to the freedom to choose from variety of products and services. The study also found that income level did not significantly influence the students' satisfaction with the brand, hence agreeing the findings of Farley (1964) who argued that highly educated individuals are associated with high income levels and lower levels of loyalty.

#### **5.6.4 Brand Management Attributes, Corporate Image, Customer Characteristics and Customer Satisfaction**

The fourth objective of this study was to determine the joint influence of Brand management attributes customer characteristics and corporate image on customer satisfaction among university students in Kenya. Hypothesis four was stated as H<sub>4</sub>: There is a joint influence of brand management attributes, corporate image and customer characteristics on customer satisfaction among university students in Kenya. The results from the joint effect was found to be statistically significant, as the findings indicate that

40.0% variation in customer satisfaction was explained by joint effect of brand management attributes, corporate image and customer characteristics ( $R^2 = 0.400$ ), and brand management attributes explain 23.8% ( $R^2 = 0.238$ ). When an additional variable is added, it explains 38.8% ( $R^2 = 0.388$ ) whereas, when customer characteristics is added it explains 40.0% ( $R^2 = 0.400$ ) with the F values of 100.815, 101.908.570 and 71.279, and the P values were 0.000, 0.000, 0.000 respectively all of which were less than 0.05 and hence statistically significant and consequently, the findings confirmed the fourth objective thereby supporting hypothesis four ( $H_4$ ) that there was a significant combined influence of brand management attributes, corporate image and customer characteristics on customer satisfaction among university students in Kenya.

These findings are in tandem with Tse (2001) who observes that corporate image directly or indirectly influences consumer selection process hence affecting the level of satisfaction with the brand. Brand management attributes contribute to creating clearer and more reliable image in customer mind which gradually, result in increased attraction towards an organization's offering. In the long run, such practices influence consumers' judgment towards the brand. The level of satisfaction will depend on the customers' interpretation of the extent to which they perceive the brand has met their expectation. Also, Cooil, et al. (2007) established that customers' social economic characteristics significantly influenced the relationship between satisfaction and behavioral outcomes such as brand loyalty. A survey of automobile customers on how differences in customer characteristics affects satisfaction threshold was investigated by Mittal and Kamakura (2001) and found that different consumer groups as determined by their characteristics had different satisfaction thresholds. Similarly, Rachna and Shaw (2002) compared

customer characteristics and satisfaction. After a series of analysis, they found that satisfaction ratings did not differ significantly on the basis of consumer characteristics. They established a significantly relationship between satisfaction level and customer characteristics. In conclusion, the corporate image mediates while customer characteristics moderate the relationship between brand management attributes and customer satisfaction.

### **5.7 Chapter Summary**

This chapter presented the test for hypothesis using regression analysis from the responses received from 325 students across 21 universities in Kenya. Through hypothesis testing using analysis of variance (ANOVA) where regression models were derived for each hypothesis. Further the chapter presented discussion of the results while linking the findings with the underpinning theories as well as comparing results with existing empirical and theoretical literature. All the variables under investigation; Brand management Attributes, Corporate Image and Customer Characteristics, proved to be statistically significant in influencing customer satisfaction, as illustrated in the discussion of findings.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **6.1 Introduction**

This chapter presents a summary of the study and its findings, the conclusions and its implications of the study as well as recommendations for future study. The chapter further discusses the limitations of the study and provides a roadmap that future studies should consider.

#### **6.2 Summary of the Study Findings**

The principal objective of the study was to examine the influence of brand management attributes, corporate image, and customer characteristics on customer satisfaction in universities in Kenya. The specific objectives of the study were to establish the influence of brand management attributes on customer satisfaction, to establish the mediating effect of corporate image on the relationship between brand management attributes and customer satisfaction, to establish the moderating effect of customer characteristics on the relationship between brand management attributes and customer satisfaction and to determine the joint influence of brand management attributes, customer characteristics and corporate image on customer satisfaction in universities in Kenya.

The study reveals that brand management attributes have significant influence on customer satisfaction among university students in Kenya ( $R^2=0.238$ ; P value < 0.05). The study also establishes that corporate image has a significant mediating effect on the

relationship between brand management attributes and customer satisfaction ( $R^2=0.213$ ; P value < 0.05). Further, the study discloses that customer characteristics have a significant moderating effect on the relationship between brand management attributes and customer satisfaction ( $R^2=0.285$ ; P value < 0.05), except in public universities ( $p=.243$ ). Finally, the study revealed there was a joint effect of Brand management attributes, corporate image, and customer characteristics on customer satisfaction among university students in Kenya ( $R^2=0.400$ ; P value < 0.05).

### **6.3 Conclusion**

The study concluded that brand management attributes have a significant influence on customer satisfaction among university students in Kenya. Specifically, the four brand management attributes; brand identity, brand positioning and association, brand recognition and brand personality, were found to strongly influence customer satisfaction among the students. An increase in brand management attributes results in an increase in the levels of customer satisfaction. Similarly, corporate image has a significant mediating effect on the relationship between brand management attributes and customer satisfaction. An increase in the value of corporate image strengthens the relationship between brand management attributes and customer satisfaction. Additionally, customer characteristics were found to have a significant moderating effect on the relationship between brand management attributes and customer satisfaction.

Brand management attributes were found to influence customer satisfaction more in the private individual owned and private institutional owned than in public universities, with R square of 0.149, 0.312 and 0.423 respectively. Similarly, corporate image was found to

have a stronger mediating effect on the relationship between brand management attributes and customer satisfaction in private institutional owned universities as compared to the private individual owned and public universities, with  $R^2$  of 0.671, 0.654 and 0.213 respectively. This may be as a result of the approach used in choosing the university. Since private universities are mostly self-sponsored, students are likely to consider corporate image more than those choosing public universities most of which are government sponsored. For public universities, students choose a course that they qualify to undertake based on the Kenya Universities and Colleges Central Placement Service (KUCCPS) cut off points, hence making corporate image secondary. On the other hand, in private universities, both individual and institutional owned, the students have a freedom of choice hence corporate image become a critical factor.

Further, the study established that customer characteristics had a significantly more influence on the relationship between brand management attributes and customer satisfaction in private institutional owned universities ( $\beta = -0.986$ ;  $R^2 = 0.543$ ) as compared to private individual owned ( $\beta = -1.081$ ;  $R^2 = 0.431$ ) and public universities ( $\beta = 0.317$ ;  $R^2 = 0.265$ ). This means that the student situational characteristics such as programme enrolled, mode of study and year of study, as well as the personal characteristics such as age, social status, and income, influence the students' judgment of their respective university branding and marketing initiatives more in private universities than in public universities.

The study also established that that the joint effect of the three variables (brand management attributes, corporate image and customer characteristics) is more pronounced in the private institutional owned universities as compared to private individual owned and public universities. The joint effect is lowest in public universities compared to other two categories. This indicates that students in public universities pay less attention to the branding initiatives by their respective institutions as compared to their private university counterparts. This can be explained by the criteria used in selecting students to join the universities. A large majority of public university students are government sponsored hence their choice is limited cluster cut off points as determined by Kenya Universities and Colleges Central Placement Service (KUCCPS). On the other hand, a large majority of private university students have a freedom of choice since private universities determine the admission criteria as long as the student has met the minimum admission criteria as determined by the Commission for University Education (CUE). This implies that branding, corporate image and customer characteristics play a critical role in influencing the choice of a university, hence satisfaction.

#### **6.4 Implications of the Study**

The preceding data analysis and discussion on the study findings pointed at theoretical and managerial implications. These implications focus on scholarly contribution and contributions to managers and other industry players.

##### **6.4.1 Theoretical Implications**

The findings from this study expands the frontiers of knowledge, adding to the existing literature by confirming empirically, that indeed, brand management attributes influence

customer satisfaction among university students in Kenya. It lends support to the relationship between brand management attributes, corporate image, customer characteristics and customer satisfaction. Empirically testing the extent to which brand management attributes are associated to corporate image and customer satisfaction significantly adds to academic knowledge in several ways by providing evidence pointing towards application of brand management strategies that directly enhances the university marketing efforts. This study has confirmed the assumptions of the contributions by the various theories that lend support for the hypothesized relationships.

The results contribute to the strengthening of the literature by confirming the postulations of Customer Based Brand Equity Model, Expectation Confirmation Theory and Consumer Utility Theory. For CBBE model, the study has confirmed that customer perceptions towards a brand are highly influenced by the brand identity, brand positioning, brand personality and brand recognition of individual institutions. For example, there was a positive relationship between corporate image and brand identity. There is a direct positive relationship between increased investment in branding initiatives and improvement in corporate image. Most students who felt that the university name, logo, corporate colour and slogan were appealing to them were more satisfied with the university offerings.

The findings also tend to support the expectation confirmation theory. According to Churchill and Suprenant (1982), expectations represent the anticipated outcome. Expectations acts as a comparison standard that consumers use to evaluate the product performance and form a judgment that is disconfirmation in nature. The study evaluated the extent to which students were satisfied with the university brand. In most cases, their



rating is based on their expectations before and when they joined the institution. As confirmed in the findings, positive disconfirmation led to satisfaction while a negative disconfirmation led to dissatisfaction.

Finally, the study findings tend to confirm the tenets of consumer utility theory. Most students strongly agreed that brand positioning, brand recognition and brand identity played a critical role in influencing their level of satisfaction with the university brand. For example, brand positioning and associations tend to create a positive picture about a brand in the consumers' mind hence influencing perception and evaluation of the brand. The branding initiatives by the universities are meant to convince the customers that they are getting value for their money. For example, a university which is ranked highly in the global market is assumed to offer more utility than a local university that is ranked poorly in the global market.

#### **6.4.2 Policy Implications**

Anchoring on the study findings, the researcher finds it imperative to make few policy recommendations on areas for further research on the subject matter. The study established that there is a strong relationship between brand management attributes and customer satisfaction. Policy makers in the higher education sector can develop policy guidelines that will encourage universities to pay crucial attention to brand management as a way of enhancing students' satisfaction and overall rating of the university. The Ministry of Education (MOE) has the mandate to ensure that students and staff are happy and satisfied with the services offered by universities in order to enhance the quality of graduates from these institutions. A new policy guideline focusing on branding and corporate image management will help the institutions adopt a customer centric culture

hence improving their ratings in the global market. Most Kenyan universities have been rated poorly in global ratings due to lack of visibility. Investing in initiatives that will increase their brand recognition can boost their visibility hence improving on the global recognition and rankings.

Further, to strengthen the global competitiveness of the local universities, the government and other regulatory bodies in the education sector can develop policies targeted towards university positioning and association. The findings of the study show that students are more satisfied if the university is associated with quality programs, international linkages, reputable alumnus, and strong heritage among other positive associations. A policy can be developed to establish a department within the university that deal with university brand positioning in the global market. Similarly, a policy can be developed to encourage measurement and reporting of performance along brand management attributes as used in this study.

#### **6.4.3 Implications for Methodology**

The results from this study provide several implications on methodology. Descriptive cross section survey applied by the study proved to be reliable, and successful in yielding credible results which can be used for generalization, replicability and predictability. Validity and reliability tests were carried out on the data collection instrument and it was found that the instrument was sufficient. Given that the tests were positive, it is an indication that the data collected was reliable and future research may consider using the same methods for data collection.

A drop and pick method was largely used to administer questionnaire to the respondents. This method yielded a high response rate which is a good indication that the method is reliable for data collection. The operationalization of the study variables got into the heart of customer satisfaction. The variables were disintegrated into fine and understandable meanings that were made up of day to day operations in the universities, hence making it easy for respondents to understand the question items in the questionnaire. The sampling method used in the study was also important. The study utilized regression to analyze the relationship between study variables. This tool is used widely in marketing research and explains relationships clearly. The use of regression made it very easy to test the hypotheses that were developed to achieve the research objectives. At the end of the tests, it was very clear on how the independent, mediating and moderating variables related with the dependent variable.

#### **6.4.4 Implication for Managerial Practice**

The study established a strong positive correlation between brand management attributes and customer satisfaction. The management of universities need to recognize the critical role of branding in influencing the overall satisfaction of their stakeholders, which eventually leads to growth and profitability. Due to the increased competition in the higher education sector, universities must pursue a differentiation strategy. Universities should embrace brand building initiatives in order to improve the institution's visibility in the market. These includes but limited to: establishing a unique identity and culture; developing appealing logos, slogans and corporate colors; identifying and pursuing a clear positioning and differentiation strategy; developing and nurturing positive

associations; creating brand awareness through marketing communication in order to improve brand recognition; identifying and nurturing an appealing personality characteristic for the institution among other branding initiatives. The findings of this study can therefore be used by managers in universities who seek to pursue strategic brand management as a strategy to influence customer satisfaction.

The study suggests to managers to regularly conduct a brand audit of their university brand in order to establish branding gaps that would be negatively affecting their institutional growth. The study identifies four important brand management attributes; brand identity, brand positioning and association, brand recognition and brand personality. As reported in chapter four (table 4.15), all the four elements were found to influence customer satisfaction.

Additionally, as established by Khanna, Jacob & Yadav (2014), brand management attributes play a critical role in every service touchpoint within the university. The findings of this study may help the managers of critical service points in a university service experience such as the registrars, deans, heads of sections among others, to enhance customer satisfaction. These touch points include; the pre-admission, during the course and post the course evaluation (see appendix vii).

Kapferer (2012) argues that strong brands are an asset to an organization; they create wealth for their companies, communities and countries. The value of a brand delivers changes in behavior, securing a future stream of profits for the company and creates business value. Many customers experience the value of a strong brand in their daily consumption of goods and services (Kapferer, 2008). To sustain customer satisfaction

through branding, the universities should identify ways in which a strong brand can create value to customers. Managers at the universities can develop customer-based branding initiative intended to make the students proud to be associated with the university. Aaker (1997) noted that a strong brand gives peace of mind to customers because the consumers trust the owner to produce the right education services. This trust can be enhanced through quality service, superior technology, positive attitude among the employees (both teaching and non-teaching) as well as reputable professors who exhibit high integrity and knowledgeable, among other initiatives. The managers should also strive to integrate branding initiatives into the university marketing activities and exploiting secondary associations such as country of origin, heritage, ranking, institutional cooperation, value for money, integrity, accessibility, among others.

The study findings indicate that a university can be more competitive if its management inculcates student's perception of corporate image in assessing student's satisfaction. Students use beliefs, mental perceptions, emotional attachments and feelings to develop attitude towards the university. Synonymous to findings of Abduh and Alobaad (2015) corporate image can help a management of a firm to maximize their market share, profits, attracting new customers, retaining existing ones, neutralizing the competitors' actions and above all their success and survival in the market. A positive image communicates strong brand equity and makes prospective students more receptive to word of mouth messages about the institution. Development of a strong alumni association can also serve to strengthen the university linkage to the industry and enhances its corporate image.

The study results evidence that corporate image has a strong influence over customer satisfaction. While corporate brand building has so far been highly practiced by business entities, universities are yet to embrace it. This study suggests that managers in universities must now pay attention to brand building strategies as it is reminiscent of their students' satisfaction and overall university performance. Universities must incorporate corporate image as a strategy in their strategic plans as well providing for resources to finance and support activities and initiative intended to strengthen their corporate image.

A study by Wiese, Jordan and Van (2010), established that corporate image played a critical role in influencing student choice of a university in Pretoria, South Africa. This is an indication that university image is a major competitive tool in the higher education sector. This supports assertion by Nguyen and Leblanc (2001) that a positive corporate image can add value to a firm in many ways that gives a firm a competitive edge in the market place.

The study findings also indicate that customer characteristics greatly influence the students, perception towards a university brand. For example, the younger generation is more sensitive to brand attributes such as the name, logo, slogan, association and image. Since majority of students in the undergraduate programme are young, the management must focus on enhancing these attributes in order to win their trust. This eventually gives the institution a positive publicity through the word of mouth and social media. Additionally, the study established that customer personal characteristics such as age, income, gender and social status affects the students' perception towards the brand management practices by institutions, which eventually influence their level of

satisfaction with the overall services offered by the university. The managers must therefore strategically segment their market with special focus on the different demographic categories with customized messages.

### **6.5 Limitations of the Study**

The principal purpose of the study was to establish the influence of brand management attributes, corporate image, and customer characteristics on customer satisfaction among university students in Kenya. While this objective was achieved, it was not devoid of limitations. It was limited in scope and a number of factors including time and distance constraints. The study used cross sectional survey since it is one of the most appropriate methods available to address both financial and time constraints. Additionally, the use of telephone contacts, coupled with competent research assistants, enhanced response considerably.

It was also limited in terms of conceptual, contextual and methodological manifestations. From conceptual perspective, the study was limited to brand management attributes, as predictor variable, corporate image as the mediating variable, customer characteristics as the moderating variable and customer satisfaction as the dependent variable, with a specified number of indicators. A combination of these variables without other known factors statistically limits the findings considerably. The choice of this study was motivated by the inconsistencies and lack of evidence on the role of brand management attributes in influencing customer satisfaction among university students, with corporate image and customer characteristics as mediating and moderating variables respectively. Thirdly, the study was limited to the survey of 384 students selected across 21 universities in Kenya. These universities represent a vast majority of higher

education institutions. This contextual limitation could be mitigated by a broad-based approach, incorporating all universities in Kenya.

Methodological limitations were also experienced in terms of the research design, and operationalization of customer satisfaction variable. The study adopted descriptive cross-sectional survey design. The design albeit convenient, does not delve into finer details of the phenomenon being investigated. Since branding is a long-term adventure, whose effects are cumulative in nature, the results of the study could have been more detailed and different if longitudinal research design were adopted as it takes a longer period owing to changes that occur over period of time.

Similarly, the researcher used proportionate distribution of the sample irrespective of the student population in a university. This could have caused some biasness where larger universities ought to have a proportionately larger representation as compared to smaller universities.

Despite these limitations, however, the study was designed in a highly scientific manner following through the literature and theoretical review and considering several available approaches. The study was thus rigorous and thorough in its approach to analysis, interpretation and reporting of the findings. The limitations discussed therefore did not have any material effect on the results and findings of the study.



## **6.6 Suggestions for Further Research**

There are a number of future research possibilities based on the findings of this study. As this was a cross-sectional research that studied the influence of brand management attributes, corporate image, and customer characteristics on customer satisfaction features at a particular point in time, other studies could use longitudinal research design to track changes over time.

This study used general brand management attributes in the university education context. Further studies could concentrate on individual university attributes such as the corporate logo, symbol, slogans, color, and name among others. This will be important especially because different brand management attributes influence decision making in many different ways. Additionally, the survey used in this study was quantitative in nature. One main benefit of quantitative analysis is that hypotheses can be directly tested based on the data collected. However, a future study incorporating qualitative analysis could serve to further explore the relationship between the variables under study. In-depth interviews could allow for deeper exploration of these measures as well as their association with institutional factors such as university ownership, management structure and institutional culture.

This study focused on the customers alone. The value of a brand is determined by all the stakeholders who associate with it. Therefore, the researcher recommends further studies that incorporate all critical stakeholders in the higher education sector in Kenya. These include but not limited to the university employees (both teaching and non-teaching), the management staff, the employers, regulators, among others.

Finally, this study focused on the universities accredited by the Commission for

University Education (CUE). The researcher strongly recommends for future study to look at the role of brand management attributes in influencing students' satisfaction in other institutions of higher learning, such as the Technical Vocational Education and Training Institutions (TIVET). This is based on the fact that these institutions target a different category of students and are differently managed compared to universities.

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## APPENDICES

### Appendix I: QUESTIONNAIRE

I am Stephen Maore, currently pursuing a doctor of philosophy degree (PhD) at the University of Nairobi. As part of my study, am conducting a study on ***“Brand Management Attributes, Corporate Image, Customer Characteristics and customer Satisfaction among universities in Kenya”*** The study is targeting the undergraduate students in both public and private universities. You have therefore been identified as one of the respondents for this study. Kindly answer the questions to the best of your knowledge. The information provided will be treated with utmost confidentiality. Welcome...

1. University Name \_\_\_\_\_

#### SECTION A: DEMOGRAPHIC INFORMATION

2. Kindly tick (✓) the appropriate option relating to your personal characteristics.

i. Age	Under 20 yrs. ( )    20-24 yrs ( ) 25-29 yrs. ( )    30-34 yrs ( ) 35-39 yrs ( )    40 and above ( )
ii. Gender	1. Male ( )  2. Female ( )
iii. Are you working?	Yes ( )                      No ( )
iv. Mode of Study i.e. Students	Full time ( )    Part time ( ) Online ( )    Distance ( Open) ( )
v. Nationality	Kenyan ( )                      Non Kenyan ( )
vi. Residence	On-campus ( )                      Outside Campus ( )
vii. Year of study	1 <sup>st</sup> year ( )    2 <sup>nd</sup> year ( )    3 <sup>rd</sup> year ( ) 4 <sup>th</sup> year ( )    5 <sup>th</sup> year ( )    Other .....
viii. Program Enrolled	_____

## SECTION B: BRAND MANAGEMENT ATTRIBUTES

3. Please indicate with a tick (√) the extent to which you Agree/Disagree with the following statements concerning the university's Brand management strategies. Where; 5=Strongly Agree; 4 = Agree; 3 = Indifferent; 2 = Disagree; 1 = Strongly Disagree.

		1	2	3	4	5
	<b>Brand Identity</b>					
1	The university has a unique identity					
2	The university gives me a sense of belonging					
3	The university expresses who I am					
4	The university has a unique culture					
5	The university enjoys strong heritage/history					
6	The university brand is consistent across all campuses					
7	The university slogan is appealing					
8	The university Logo is unique					
9	The university Logo is attractive					
10	The University Colours are Appealing					
	<b>Brand Positioning and Association</b>					
11	The university name is easy to pronounce					
12	I am proud to be associated with this university					
13	The university brand is associated with prominent people					
14	University programmes are perceived to be of high quality					
15	The university has a good reputation					
16	The university has a global appeal					
17	The university is popular in the local market					
	<b>Brand Recognition</b>					
18	I understand the meaning of this university name					
19	I know the mission and vision of this university					
20	I know the colours of this university					
21	I can remember the logo of this university					
22	I can recall the slogan of this university					
23	I understand the history of this university					
24	I understand the management structure of this university					
25	I know the ranking of this university locally and globally					
26	I know all programmes offered in this university					
	<b>Brand Personality</b>					
27	The staff are Down-to-Earth					
28	The management and staff are honest					
29	The university is up to date					
30	The brand is energetic and vibrant					
31	The university is innovative					
32	The students are Cheerful					
33	There is a culture of sincerity in the university					

**SECTION C: CORPORATE IMAGE**

4. Please indicate with a tick (√) the extent to which you **Agree** with the following statements on the university **Corporate Image**. Use the scale:

1= Not at all (NAA) 2 = Small extent (SE) 3 = Moderate extent (ME) 4 = Large extent (LE) 5 = Very large extent (VLE)

SN	University Corporate Image	1	2	3	4	5
1	This university has a strong brand name					
2	This university makes a lot of contribution to the society					
3	Media reports on the university are generally positive					
4	Employers have a positive perception towards this university					
5	The university conserves the environment					
6	This university is recognized internationally					
7	This university has a superior technology					
8	This university has reputable professors					
9	The university views interests and welfare of the community above its own profitability and interests					
10	The university supports environmental conservation programs					
11	The university offers marketable programmes					
12	This university is preferred by my peers (friends, relatives)					
13	The campus ambience is attractive and conducive					
14	The university location is convenient					

**SECTION D: CUSTOMER CHARACTERISTICS**

5. Please indicate with a tick (√) the extent to which the following **Personal Characteristics** influence your **judgement** towards the university’s marketing and branding initiatives. Where: 1= Not at all (NAA) 2 = Small extent (SE) 3 = Moderate extent (ME) 4 = Large extent (LE) 5 = Very large extent (VLE)

	Characteristic	1	2	3	4	5
1	Age					
2	Gender					
3	Income					
4	Social status					

5	Ethnic Background					
6	Year of study					
7	Programme Enrolled (e.g. Bcom, Engineering, Med. Etc)					
8.	Mode of Study (e.g. Full time, Part Time etc.)					

**SECTION E: CUSTOMER SATISFACTION**

6. Having interacted with this university, please indicate (√) the extent to which you Agree with the following statements. Where; **1 = Strongly Disagree; 2 = Disagree; 3 =Indifferent; 4 = Agree; 5 = Strongly Agree**

	<b>STATEMENTS</b>	1	2	3	4	5
1	The fees charged is equivalent to the value I receive					
2	The university offers good academic programmes					
3	I feel secure when within the university					
4	The students are generally disciplined					
5	Lecturers are highly experienced					
6	The class size is manageable (students/lecturer ratio)					
7	The university offers a conducive learning environment					
8	The university offers satisfactory customer service					
9	The university library is well stocked with relevant material					
10	The university has state of the art infrastructure					
11	I am likely to further my career/education at this university					
12	I am likely to recommend this university to a friend/associate					
13	I am likely to remain committed to supporting this university as an alumnus					
14	I am likely to bring my children or other dependents to this university					
15	I am likely to talk favorably about this university					
16	I am likely to give feedback to the university to help them improve their services					
17	I am likely to look for a job at this university					
18	Generally, I have a positive attitude towards this university					

***“Thank you for your Cooperation”***



## Appendix II: Accredited Universities in Kenya

	<b>ACCREDITED UNIVERSITIES</b>	<b>YEAR OF ESTABLISHMENT</b>	<b>YEAR OF AWARD OF CHARTER</b>
<b>Public Chartered Universities</b>			
1	University of Nairobi (UoN)	1970	2013
2	Moi University (MU)	1984	2013
3	Kenyatta University (KU)	1985	2013
4	Egerton University (EU)	1987	2013
5	Jomo Kenyatta University of Agriculture and Technology (JKUAT)	1994	2013
6	Maseno University (Maseno)	2001	2013
7	Dedan Kimathi University of Technology	2007	2012
8	Chuka University	2007	2013
9	Technical University of Kenya	2007	2013
10	Technical University of Mombasa	2007	2013
11	Pwani University	2007	2013
12	Kisii University	2007	2013
13	Masinde Muliro University of Science and Technology (MMUST)	2007	2013
14	Maasai Mara University	2008	2013
15	South Eastern Kenya University	2008	2013
16	Meru University of Science and Technology	2008	2013
17	Multimedia University of Kenya	2008	2013
18	Jaramogi Oginga Odinga University of Science and Technology	2009	2013
19	Laikipia University	2009	2013
20	University of Kabianga	2009	2013
21	University of Eldoret	2010	2013
22	Karatina University	2010	2013
23	Kibabii University	2011	2015
24	Embu University College (UoN)	2011	
25	Kirinyaga University College (JKUAT)	2011	
26	Garissa University College (MU)	2011	
27	Murang'a University College (JKUAT)	2011	
28	Machakos University College (KU)	2011	
29	Rongo University College (MU)	2011	
30	Taita Taveta University College (JKUAT)	2011	
31	The Co-operative University College of Kenya	2011	

	(JKUAT)		
32	Kaimosi Friends University College (MMUST)	2015	
33	Alupe University College (MU)	2015	
<b>Private Institutional Owned Universities</b>			
1	University of Eastern Africa, Baraton	1989	1991
2	Catholic University of Eastern Africa (CUEA)	1989	1992
3	Daystar University	1989	1994
4	Scott Christian University	1989	1997
5	St. Paul's University	1989	2007
6	Pan Africa Christian University	1989	2008
7	Africa International University	1989	2011
8	Kenya Highlands Evangelical University	1989	2011
9	Africa Nazarene University	1993	2002
10	Kenya Methodist University	1997	2006
11	Strathmore University	2002	2008
12	Presbyterian University of East Africa	2007	
13	UMMA University	2013	
14	Adventist University of Africa	2008	2013
15	Hekima University College (CUEA)	1993	
16	Tangaza University College (CUEA)	1997	
17	Marist International University College (CUEA)	2002	
18	Regina Pacis University College (CUEA)	2010	
19	Uzima University College (CUEA)	2012	
<b>Private Individual Owned</b>			
1	United States International University	1989	1999
2	Kiriri Women's University of Science and Technology	2002	
3	Aga Khan University	2002	
4	GRETSA University	2006	
5	Inoorero University	2009	
6	The East African University	2010	
7	GENCO University	2011	
8	Kabarak University	2002	2008
9	Great Lakes University of Kisumu	2006	2012
10	KCA University	2007	2013
11	Mount Kenya University	2008	2011
12	Management University of Africa	2011	
13	Riara University	2012	

14	Pioneer International University	2012	
15	International Leadership University	1989, LIA (2014)	
16	Zetech University	2014	
17	Lukenya University	2015	
18	KAG - EAST University	1989	

Source: Commission for University Education, 2015

### Appendix III: Student Enrolment Per University 2011-2015

INSTITUTION	2011/12		2012/13		2013/14		2014/15*	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>Public Universities</b>								
Nairobi.....	27,084	17,219	30,710	20,185	38,693	25,376	42,328	27,618
Kenyatta.....	21,328	15,892	25,633	31,559	37,758	32,248	43,165	33,714
Moi.....	14,124	11,409	17,372	14,273	18,547	15,684	22,458	20,838
Edgerton.....	7,050	5,095	4,577	3,101	7,044	4,896	8,661	5,267
Jomo Kenyatta (JKUAT).....	9,818	4,119	14,048	9,870	19,729	10,847	20,860	11,469
Maseno .....	2809	1742	3,953	2,159	3,922	2,247	7,356	7,412
Masinde Muliro .....	10,958	6,402	6,295	3,901	5,606	3,445	7,480	4,213
Technical University of Kenya .	187	642	405	135	5,102	1,915	5,391	2,024
Technical University of Mombasa.	1,000	1,038	1,828	524	3,993	1,050	4,186	1,234
Chuka .....	-	-	-	-	7,318	2,663	9,716	3,931
Karatina .....	-	-	-	-	2,700	2,014	3,095	2,209
Kisii.....	-	-	-	-	913	531	4,780	3,495
Meru .....	-	-	-	-	2,001	903	2,825	1,174
Multi Media .....	-	-	-	-	697	331	754	346
South Eastern.....	-	-	-	-	1,988	1,037	3,676	2,138
Jaramogi Oginga Odinga .....	-	-	-	-	1,259	771	2,537	1,638
Laikipia .....	-	-	-	-	857	574	3,260	2,652
University of Eldoret .....	-	-	-	-	8,059	4,507	9,447	6,215
Kabianga .....	-	-	-	-	1,004	681	3,375	2,366
Dedan Kimathi.....	-	-	871	338	1,546	584	4,715	1,578
Pwani.....	-	-	-	-	2,666	1,591	2,981	1,603
Masai Mara.....	-	-	-	-	2,585	1,851	4,118	3,036
<b>SUB-TOTAL.....</b>	<b>94,358</b>	<b>63,558</b>	<b>110,692</b>	<b>86,045</b>	<b>173,987</b>	<b>115,746</b>	<b>217,164</b>	<b>146,170</b>
<b>Private Universities*</b>	<b>33,114</b>	<b>27,598</b>	<b>29,554</b>	<b>24,905</b>	<b>39,980</b>	<b>31,666</b>	<b>42,454</b>	<b>37,994</b>
<b>GRAND TOTAL .....</b>	<b>218,628</b>		<b>251,196</b>		<b>361,379</b>		<b>443,783</b>	

Source: Kenya Economic Survey, 2015

**Appendix IV: Table for Determining Sample Size of a Given Population**

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

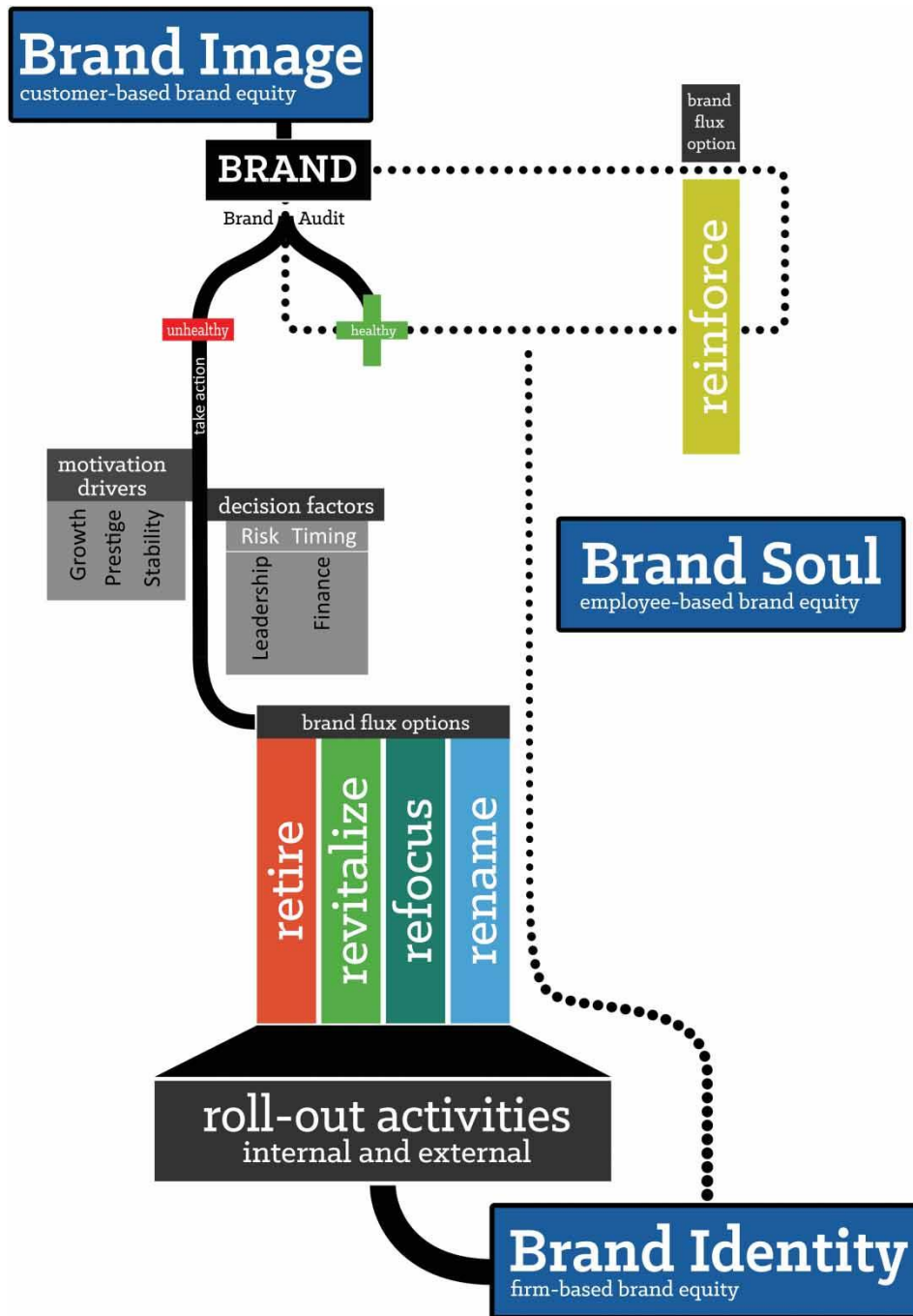
Note. —*N* is population size. *S* is sample size. **Source: Krejcie & Morgan (1970)**

### Appendix V: Factor Analysis Results

	Factor loadings			
	Institutional Owned University	Individual Owned University	Public Owned University	Owned University
BMA1	.632	.511	.632	.612
BMA2	.620	.806	.620	.570
BMA3	.678	.745	.678	.754
BMA4	.689	.627	.689	.576
BMA5	.671	.717	.671	.411
BMA6	.624	.644	.624	.484
BMA7	.554	.696	.554	.758
BMA8	.547	.747	.547	.669
BMA9	.625	.539	.625	.763
BMA10	.558	.556	.558	.764
BMA11	.580	.541	.580	.677
BMA12	.736	.627	.736	.680
BMA13	.624	.752	.624	.673
BMA14	.749	.843	.749	.699
BMA15	.773	.501	.773	.501
BMA16	.682	.551	.682	.496
BMA17	.719	.496	.719	.625
BMA18	.668	.537	.668	.557
BMA19	.754	.616	.754	.598
BMA20	.776	.580	.776	.482
BMA21	.776	.636	.776	.496
BMA22	.793	.694	.793	.418
BMA23	.857	.697	.857	.412
BMA24	.820	.615	.820	.798
BMA25	.750	.756	.750	.462
BMA26	.711	.655	.711	.428
BMA27	.803	.559	.803	.515
BMA28	.817	.732	.817	.563
BMA29	.788	.722	.788	.564
BMA30	.812	.692	.812	.725
BMA31	.809	.457	.809	.497
BMA32	.745	.732	.745	.407
BMA33	.735	.587	.735	.563
CI1	.748	.692	.748	.559
CI2	.743	.648	.743	.658
CI3	.748	.597	.669	.536
CI4	.669	.756	.746	.669
CI5	.746	.878	.766	.468

CI6	.766	.715	.770	.512
CI7	.770	.566	.729	.521
CI8	.729	.804	.765	.640
CI9	.765	.450	.702	.601
CI10	.702	.527	.671	.664
CI11	.671	.512	.775	.678
CI12	.775	.628	.719	.645
CI13	.719	.693	.741	.626
CI14	.741	.608	.679	.588
CC1	.679	.548	.864	.802
CC2	.864	.564	.846	.872
CC3	.846	.896	.819	.719
CC4	.819	.725	.880	.784
CC5	.880	.560	.813	.762
CC6	.813	.591	.845	.728
CC7	.845	.569	.781	.736
CC8	.781	.410	.825	.600
CS1	.825	.785	.626	.704
CS2	.626	.789	.749	.617
CS3	.749	.478	.734	.699
CS4	.734	.618	.648	.580
CS5	.648	.418	.769	.637
CS6	.769	.816	.764	.458
CS7	.764	.801	.678	.576
CS8	.678	.544	.702	.402
CS9	.702	.465	.723	.440
CS10	.723	.716	.638	.548
CS11	.638	.712	.760	.719
CS12	.760	.578	.765	.518
CS12	.765	.457	.789	.585
CS14	.789	.568	.751	.725
CS15	.751	.520	.741	.756
CS16	.741	.744	.733	.620
CS17	.733	.716	.699	.552
CS18	.699	.489	.752	.644

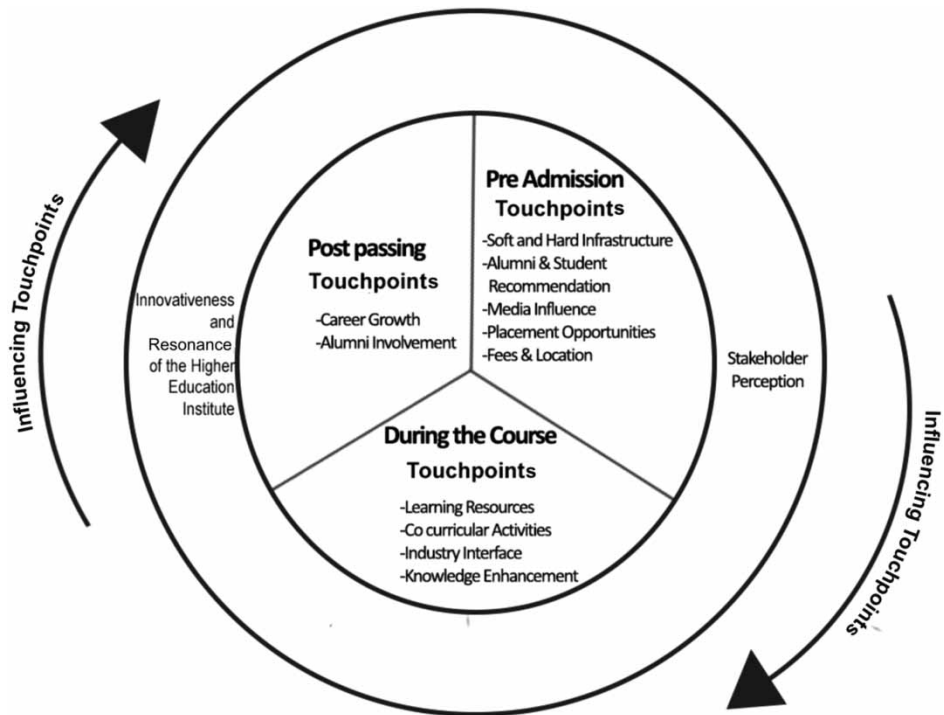
## Appendix VI: Branding Process Model



Source: Branding process model (William, 2012)



## Appendix VIII: Touchpoints for Building a Higher Education Brand



Adopted from; Khanna, M., Jacob, I., & Yadav, N. (2014). Identifying and analyzing touchpoints for building a higher education brand. *Journal of Marketing for Higher Education*, 24(1), 122-143

## **Appendix IX: Introductory Letter**

**Appendix X: NACOSTI Authorization Letter**