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Measuring Brand Equity of Paints in Addis Ababa (the Case of Nefas Silk and DIL Paints)

By

Mahedere Beyene

A Thesis Submitted to the Addis Ababa University, College of Business and Economics, School of Commerce for the Partial Fulfillment of the Requirements of the Degree of Masters of Arts in Marketing Management.

Addis Ababa University

School of Commerce

Post Graduate Program

Department of Marketing Management

June, 2019

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Approved by Board of Examiners

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DECLARATION

I, **Mahedere Beyene Belachew**, declare that the study entitled "Measuring Brand Equity of Paints in Addis Ababa: the Case of Nefas Silk and DIL Paints" is my original work and has not been used by others for any other requirements in any other university and all sources of the materials used for this thesis have been properly acknowledged.

Name: Mahedere Beyene (GSE/0614/07)

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Signature

STATEMENT OF CERTIFICATE

This is to certify that **Mahedere Beyene Belachew** has carried out her research work on the topic of "**Measuring Brand Equity of Paints in Addis Ababa: the Case of Nefas Silk and DIL Paints"** for the partial fulfillment of Masters of Arts Degree in Marketing Management at Addis Ababa University School of Commerce. This study is an original work and not submitted earlier for any degree either at this university or any other university and it is suitable for submission of Master's Degree in Marketing Management.

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Thesis Advisor: - Belaynesh Tefera (PhD)

ACKNOWLEDGEMENTS

First of all my special thanks goes to the almighty God for strengthen me to accomplished my study. I would also like to thank my families and friends for their support and encouragement during working my thesis. I am indebted to the valuable comment of my thesis advisor Belaynesh Tefera (PhD). I also would like to thank Nefas Silk and DIL Paint companies as well as Addis Ababa Housing Project Office for their support providing me with the necessary data for my study.

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ACRONYMS AND ABBREVIATIONS

AMA -	American Marketing Association
BAV -	Brand Asset Evaluator
B2B -	Business to Business
EIC -	Ethiopian Investment Commission
GDP -	Gross Domestic Product
ISO -	International Organization for Standardization
MBI-	Modern Building Industries Pvt. Ltd. Co
MoC-	Ministry of Construction
MoI -	Ministry of Industry
MoT-	Ministry of Trade
NSPF -	Nefas Silk Paint Factory
SPSS-	Statistical Package for Social Sciences
USD -	United States Currency
VIF -	Variance Inflation Factors
WoM-	Word of Mouth

ABSTRACT

The growth in construction of commercial and residential buildings resulted for the growth of paint companies in Ethiopia market. Paint market in the major cities of the country has become increasingly competitive, thus indicating the need to build strong brand to increase the loyalty of their customers and increase company's market share. Therefore this study aimed to verify the determinants of brand equity of paint products based on consumers' perception of paint market. The study is based on Aaker brand equity model Aaker (1996), which comprise the four brand equity constructs, such as: brand awareness, perceived quality, brand loyalty and brand association. A multistage sampling technique was used to determine the sample size of the respondents. A self administered questionnaire was distributed to 140 respondents from which 132 were obtained to be valid with a response rate of 94 percent. Reliability test was performed to check the reliability of data. All items were found to have a Cronbach's alpha value greater that 0.7 and the entire scale value of alpha was found to be 0.854 indicating the data was reliable for further analysis. Correlation test was conducted to find out relationships among four components of brand equity. The result of the analysis indicated all dimensions of paint brand equity were positively related and significant at (p=0.000). The findings of multiple regression analysis also indicated that all the dimensions had positive significant effect on customer value of Nefas Silk and DIL paints. The strong dominant factors was brand loyalty (0.276) followed by perceived quality (0.226) and brand association (0.200). This study forward an implications to researchers to consider industry specific scale items that can measure adequately brand equity and to managers to focus on marketing strategies that leads to higher brand loyalty and perceived quality of Nefas Silk and DIL paint brand equity.

***Keywords**: Brand Awareness, Brand Association, Perceived Quality, Brand Loyalty, Brand Equity, Customer Value, Nefas Silk and DIL Paints*

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The introduction part of the study start with the topics related to the background of the study, problem of the study area, research questions to be answered, objectives of the study, significance of the study, scope and limitation of the study. Definitions of terms and organization of the study is presented at the end of this chapter.

1.2 Background of the Study

With the growth of e-commerce and global competition in the industrial market, simply providing great products and services is not sufficient to have a competitive advantage (Kotler & Pfoertsch, 2006, p. 34). With the rapid technological advancement and a change in need and preferences of consumers firms are concerned not only about their generic products but also adding value through brand equity. Establishing strong brand equity helps firms in positioning their products and services to their customers mind.

Successful brand management can be achieved from understanding and managing brand equity correctly to identify the strong attributes that will influence consumer's choices (Moisescu, 2005, p. 212; Ukpebor & Ipogah, 2008, p. 3). Understanding the measurements of their brand equity and investing to its development can be sources of competitive barriers and lead to brand asset (Yoo, Donthu & Lee, 2000, p. 208). Brand equity plays a strategic role in guiding company's brand managers to gain competitive advantage and make wise management decisions (Tong & Hawley, 2009, p. 3).

Studies indicated that building and measuring brand equity is industry specific (Davcik 2013, p. 4). For instances dimension of brand equity applied for consumer market may not be applicable to industry or B2B market. Paints are industrial products which are used for construction, automotive and business applications. In Ethiopia context the numbers of paint companies are rising as a result of the boom in the construction industry. As a result customers are exposed to a number paint brands who basically offer similar products.

Among the major local paint producers, two companies namely Nefas Silk paint factory and Modern Building Industries Pvt. Ltd. Co. (MBI) which have a long established brand in the country market is the basis of this study. The general over view of these companies are discussed below.

Nefas Silk Paints Factory (NSPF) is the oldest Paints Factory in Ethiopia which was founded in 1967 as a private company. NSPF produces water based and oil based paints, each with more than 53 varieties of colors regularly. Apart from these two basic types, it also produces quartz, adhesives, antirust, varnishes and other related products. It has an attainable production capacity of 32 million liters of paints per annum and produces more than 1500 types of paints and paint related products. The company produce paints for walls, metallic objects and woods; Varnishes, Antirusts, Board Paints, Automotive Paints, Glues, Traffic and Road Markings, Industrial Paints and others.

The company is well known in its Paint brands such as Wubet, Super, Mica, Kokeb and SP. NSPF products quality attributes include highly durable and washability, good hiding power, excellent flow and coverage, and superior adhesion.

The company carried out its marketing activities through its 11 branches at country level and 9 sales outlets at Addis Ababa. The branches serve whole sale customers only. It has retail sales offices at Saris and Mexico. Besides, the company uses cars for door-to-door delivery to sale its products around Addis Ababa. According to the company it has 70 percent of the country market share. During 2019, NSPF has 533 permanent employees out of which 53 were women. The companies also have 478 temporary workers (NSPF, 2019).

The promotion method of the company is through advertising using TV, Radio channels and billboards. The company tired to differentiation its products through quality and packaging. NSPF is an ISO certified company. The other paint company considered for this study was modern building industries.

Modern Building Industries Pvt. Ltd. Co. (MBI), a member of the MIDROC Technology Group, was established in 1995 and has been engaged in the production and marketing of different types of paints, non metallic filler materials, concrete blocks and tiles, plastic floor tiles and glue products. Currently, MBI in its paint production section employs a total number of 57 permanent employees (MBI, 2019).

The paint factory manufactures different types of decorative and protective paints for construction, automotive and industrial applications. The products are used for wall paints, synthetic paints, Primers, Wood Paints, Textured paints. The company is known for its brand named as DIL, for example: DIL-mica, DIL-super and DIL-Wubet etc.

The company produces 16,000 liters of different types of DIL paints per day in a single shift. According to the company it has a market share of 40 percent. The company marketing activities are carried out establishing relations ship with Construction Companies, private companies, sales outlets, government offices, and dealers. The company has around 5 regional sales outlets and 1 sales outlet in Addis Ababa (MBI, 2019).

1.3 Statement of the Problem

One of the most important assets of a company is its brand equity. It is a critical success factor to differentiate companies and service providers from its competitors (Farjam & Hongyi, 2015, p. 14). Brand to have value; it must be valued by the customer (Tong & Hawley, 2009, p. 7). A brand which has no value or meaning to the mind of the customer is meaningless to investors, manufacturers or retailers (Farjam & Hongyi, 2015, cited in Cobb-Walgren et al., 1995).

Despite the development of marketing literatures and studies on measuring brand equity and its role in increasing equity of companies, to the best of the researcher knowledge measuring brand equity in paint industry is scarce and under researched. A number of previous studies focused on consumer market and specific sectors for example banking, telecommunication and insurances. Besides majority of the scale development for measuring brand equity focused on commodity consumer market giving little attention to institutional consumers.

Paint market is an industrial market which involves different channel members. Considering the Ethiopian paint market majority of them have distinguishable brand identifiers. Because of the boom in the building construction, the increase of professional interior designers, and change in the life style of urban areas, the entries of more paint brands in Ethiopian market has increased particularly in Addis Ababa where highly competitive and limited market is found (MoI, 2014, p. 25). Despite the significant effect of strong brand equity on company's competitive advantage, there are gaps in research related to factors affecting brand equity of Ethiopian paint brands in general and of Nefas Silk and DIL paint brands in particular.

Therefore, this research tries to give a clear picture of the brand equity of paint products and the alternative marketing strategies for Nefas Silk and DIL paint brands measuring empirically the dimensions of Aaker brand equity, that is brand loyalty, brand awareness, perceived quality and brand association.

1.4 Research Questions

This study tried to address the following research questions.

1.4.1 Main Question

How do brand equity dimensions influence customer value of Nefas Silk and DIL paints?

1.4.2 Sub Questions

- How does brand awareness affect customer value of Nefas Silk and DIL paints?
- Is there a relationship between perceived quality and customer value of Nefas Silk and DIL paints?
- How does brand loyalty affect customer value of Nefas Silk and DIL paints?
- Is there a relationship between brand association and customer value of Nefas Silk and DIL paints?

1.5 Research Objective

The study was aimed to achieve the following general and specific objectives.

1.5.1 General Objective of the Study

The general objective of the study is to determine the relationship between Aaker brand equity dimensions (brand awareness, perceived quality, brand loyalty and brand association) and customer value towards brand equity of Nefas Silk and DIL paints.

1.5.2 Specific Objectives of the Study

1. To examine the effect of brand awareness on customer value of Nefas Silk and DIL paints.
2. To assess the effect of perceived quality on customer value of Nefas Silk and DIL paints.
3. To investigate the effect of brand loyalty on customer value of Nefas Silk and DIL paints.
4. To assess the way brand association affects customer value of Nefas Silk and DIL paints.

1.6 Significance of the Study

The topic of this study is of importance because brand equity is very important subject to all companies from all sectors that are concerned with marketing subject. Measuring brand equity across products and markets gives the insight how to manage and build brand equity effectively (Aaker, 1996, p. 313). According to Aaker (1991, p. 1) the concept of brand equity are becoming significantly more important to decide industrial purchasing alternatives. However the power of brand has been highly acknowledged for company's competitive advantage, researchers differs in their opinion on brand building.

Moreover the nature and importance of brand building in B2B market is unclear and under researched (Mudambi, 2002 p. 525). According to Davcik (2013, p. 4) brand equity measurement should be addressed from industry specific context. Particularly in highly competitive product industrial market, price and tangible attributes of products is often differ only slightly. To prevent their products from becoming commodities, companies need to differentiate themselves with service, companies brand and with brands at the product level (Mudambi, 2002, p. 525).

Measurement of brand equity helps managers to develop valid instruments for individual brands. According to Aaker (1996 p. 119) the scale measurement could vary across markets and countries. Management team could create or adapt measures of the major constructs. Therefore theoretical contribution of this study is that it includes more sets of items for organizational association as additional scale measurement of brand equity for paint brands in addition to the scale measurement used by Pappu et al. (2005), Tong et al. (2009) and Mudanganyi (2017). This is because data obtained from the two companies indicated that establishing relationship with business customers is one of their marketing programs to promote their product brands. The present study measured brand equity in the paint product category which was not used in the previous study based on brand equity perspective.

This study also have practical contribution for Nefas Silk and DIL paints companies giving them the opportunity to focus their effort on the most influential factors that determine paint brand equity.

1.7 Scope of the Study

This study focused on the measurement of brand equity within the context of product category of which is Nefas Silk and DIl paints in Ethiopia. This study used the four constructs of Aaker's brand equity model which are the most dominant constructs namely brand awareness, perceived quality, brand associations and customer brand loyalty. In terms of coverage the study restricted to the two companies paint market in Addis Ababa. Unlike other studies measurement scale item for measuring the constructs of brand equity include more items for organizational association. Therefore this study provides information about the significance of measuring brand equity of Nefas Silk and DIL paints.

1.8 Limitation of the Study

The study has a limitation that it has not covered all regions that products of the two companies being distributed and sold. The non probability sampling method was employed which have limitation for generalizing the findings to the population at large. The questionnaires were distributed to respondents at their work place. Hence some respondents might show a tendency to give biased information to finish filling up the questionnaire quickly.

1.9 Definition of Terms

Paint: a substance composed of solid coloring matter suspended in a liquid medium and applied as protective or decorative coating to various surfaces, or to canvas or other materials in producing a work of art (Dictionary.com, 2018). Paint is a type of coating material that often comes in various coloring and can hold various functionalities with such as waterproofing, stain proofing, fire proofing, electromagnetic wave shielding, insulation matched with special purpose. Paint can also extend the life-time of raw materials and finished products, preventing them from aging and oxidization by putting a protecting filming on the exterior of the substrate (MoI, 2014, p. 1). Paint is a term to refer the pigmented materials that used for the protection of interior walls and exterior buildings, masonry, and traffic coatings.

Brand: According to the American Marketing Association (AMA), a brand is a "name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition." Technically speaking, then, whenever a marketer creates a new name, logo, or symbol for a new product, he or she has created a brand (Keller, 2013, p. 30).

Brand equity: brand equity is "a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm/or to that firm's customers (Aaker, 1996, pp.7-8). According to Kotler and Keller (2012, p. 243) Brand equity is the added value endowed on products and services. It may be reflected in the way consumers think, feel, and act with respect to the brand, as well as in the prices, market share, and profitability the brand command.

Brand Awareness: Aaker (1991, p. 43) defined brand awareness as the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category.

Brand Loyalty: It is the attachment that a customer has with a brand (Aaker, 1991, p.39). The strongest measure of a brand's value is the loyalty (repeat buying; word of mouth) that engenders among customers (Pradhan and misra, 2014, p. 53).

Perceived Quality: It is customer's perception (subjective evaluation) of the overall excellence or superiority of the product (or service) with respect to its intended purpose, relative to alternatives (Zeithmal, 1988, p.3).

Brand Association: It is about brand-related thoughts, feelings, perceptions, images, experiences, beliefs, attitudes and is anything linked in memory to a brand (Kotler & Keller, 2006, p. 154; Aaker, 1991, p.109).

Customer Value: The emotional bond established between a customer and a producer after the customer has used a salient product or service produced by that supplier and found the product to provide an added value (Butz & Goodstein, 1996, p. 63). It is also defined "as the customer's overall assessment of the utility of a product based on the perception of what is received and what is given" (Zeithaml, 1988, p. 14).

1.10 Organization of the Study

The study is organized as follows. Chapter one focused on the introductory part of the study which includes introduction, back ground of NPFS and MBI, problem identification, research question and objectives. Literature review which consisted of theoretical and empirical study, formulation of hypothesis and conceptual framework was discussed in section two. Chapter three deals with methodology of the study that includes description of the study area, design of the study, data collection and sampling methods, method of data analysis techniques, and reliability and validity of the scale measurements. In chapter four the collected data were analyzed using descriptive and inferential statistical methods, the result of the findings was also discussed. Finally summary, conclusion and recommendation were given in chapter five.

CHAPTER TWO
LITERATURE REVIEW

2.1. Introduction

This chapter is devoted to reviewing theoretical literature and empirical studies about measuring brand equity. The theoretical literature focused on two known brand equity models namely Brand Asset Valuator Model and Aaker brand equity model. This study focused on reviewing these models because they are more appropriate to measure brand equity across different products and markets. Each models components for measuring brand equity was discussed in detail. Moreover empirically studies are reviewed, the research is hypothesized and the conceptual frame work is developed based on Aaker's brand equity model.

2.2. Theoretical Review

Brand equity is recognized as a key business strategic asset of a company. The nature and scope of brand Equity continue to be topic of debate. Since 1980 brand equity was being viewed by different authors from various perspectives. In the marketing literature the concept of brand equity has greatly been discussed and researches tried to offer different approaches to conceptualize and measure brand equity as well as the factors that influence brand equity (for example: Young & Rubicam,1990; Aaker, 1996; Keller, 1993). Brand was proposed to generate its values from three different markets, that is customer-based, product-based, and financial-based. This study focused on consumer perspective of brand equity. This perspective focused on cognitive psychology view known as consumer based brand equity (Christodoulides & Chernatony, 2009, p. 8). Consumers develop favorable attitude to a particular product because of the value added by its brand. The strategy based marketing is mainly to improve market productivity. This perspective arises for firms seek to increase the efficiency of their marketing expenses through the understanding of consumer behavior in order to make a better strategic decision (Keller, 1993, p. 2).

2.1.1 Brand Equity Models

In most contemporary marketing literatures customer oriented approach is the dominant and most preferred one by majority of academics and practitioners for it incorporates all practical information on customer behavior for the formulation of marketing strategies (Zhou, 2010, p. 91). The pioneer effort to design customer oriented brand equity model across products was known as Brand Asset Valuator, which was a work of Yong & Rubicam (Y & R), a major global advertising agency. In 1990, Yong & Rubicam established a model named Brand Assets Valuator (BAV).

2.1.1.1 Brand Asset Valuator Model

Yong & Rubicam measure brand equity for 450 global brands and 8000 local brands in 324 countries. This model assumed that customers' perception measurements regarding universal brand characteristics can be used to determinate brand value (Cătălin & Laurențiu, 2014, p. 257). There were four sets of measure targeted by the model which includes Differentiation, Relevance, Esteem and Knowledge. They provide insight into what construct brand equity measures. They hypothesized brand is built sequentially by these four dimensions/pillars.

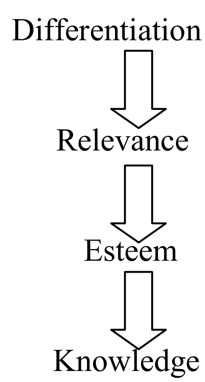

Figure 2.1: Brand Asset Valuator Model (Yong & Rubicam)

According to Yong & Rubicam differentiation is one which provides basis for brand strength. That is a brand value will be low if there is not point of difference. For a new brand to be strong it must first start by developing a point of real differentiation. The result of their study indicated that “up and coming” brands which gained sales and popularity on average were high on differentiation. This dimension indicates the perceived distinctiveness of the brand and its ability to differentiate from competitors (Cătălin & Laurențiu, 2012, p. 257).

As shown in figure 2.1, the next step is brand relevance. Once brand can be differentiation, it needs to have a relevance to a significant segment so that it can attract a large customer base. Hence product that was differentiated need also be relevant to the market segment. They come to a consensus that small brands tend to be low on both relevance and market penetration where as brands with high relevance tends to have high market penetration. Hence differentiation and relevance together constitute brand strength.

The third step is gaining esteem for the brand which is largely based on perceived quality. But some brands esteem can be affected by decline or growth in popularity. The last stage is Knowledge which indicates customers not only aware of the brand but also understands what the brand stands for. According to Yong & Rubicam, knowledge is the accumulation of the brand building effort and it is gained by real customer intimacy of the brand rather that exposure or awareness of the brand. It measures consumers' awareness and understanding of brand identity. Hence greatest brand equity is gained through creating knowledge of the brand to customers. The relationship between these dimensions shows the true picture of the brand’s intrinsic value, its ability to generate margin and to protect against competitive brands.

The main advantage of the BAV model is, it is easy to understand and use by any brand manager and it can be applied to almost any type of brand or product (Cătălin & Laurențiu, 2014, p. 257).

2.1.1.2 Aaker Brand Equity Model

The other influential brand equity model was the one proposed by Aaker (1991). Aaker provides a clear definition of brand equity and delineate a set of factors that underlie brand equity and its measurement. Aaker in his brand equity model demonstrated how brand equity derives value for both customers and firms. He established five general categories of brand assets that give rise to brand equity which include Brand Loyalty, Perceived Quality, Brand awareness, and Brand Associations, and brand assets.

As depicted in figure 2.2, the five dimensions have direct effect on building positive brand equity. Maintaining customers loyalty to the brand results for reduction of marketing costs, attract potential customers and provide competitive advantage in the trade. According to

Aaker brand loyalty is a sufficient importance that other measures of brand equity such as perceived quality and brand associations can often be evaluated based on their ability to influence it.

Achieving brand awareness at the recognition level and familiarity of the brand at recall level affects choice of brand from the consideration set. A familiar brand perceived quality can be a factor for differentiation and positioning, allowing brand extension, and premium price. On the other hand, brand association can be an influential factor for differentiation, a reason to buy and a basis for brand extensions. Similarly brand assets such as patents, channel relationships and trade mark can provide competitive advantage to firms. Later Aaker modified his model and changed the fifth dimension by market behavior measures that represent information obtained from market based information rather than directly from customers. The overall effect of these components brings positive brand equity value for both customers and firms.

Figure 2.2: Aaker's Brand Equity Model (Aaker, 1996)

The first four components of Aaker brand equity model, that is Brand loyalty, Brand awareness, Perceived quality and Brand association which represents customer perception and reactions to the brand is discussed in detail as follows**.**

Brand Awareness

Brand awareness is about how well a brand is known by its consumers. It refers to the strength of a brand presence in the consumer minds (Aaker, 1996, p. 10) and reflects the salience of the brand in the customers mind (Aaker, 1996, p. 114). It has two components that are brand recall and brand recognition (Wani, 2017, p. 84). Brand recognition is customer's ability to recognize brand given certain cue. At the recognition level it can provides signal of substance and commitment to the brand and at the recall level affects choice consideration (Moisescu, 2005, p. 213). Brand recall is the ability of customers to retrieve the brand from their memory given the product class as a cue (Aaker, 2006, p. 11). Aaker (1991, p. 54) indicated it is easier to recognize a brand than to recall it from memory. Aaker (1996, p. 12) also indicated that for new or niche brands, brand recognition can be important where as for well known brand recall is important. Brand awareness can be established when consumer exposed repeatedly to one of a brand's element. It is the strength of a brand's presence in consumer's minds (Pappu et al., 2005, p. 145). Creating a high level of brand awareness derives advantages such as increase the chance for the brand to be included in the consideration set and signal of commitment to the brand (Aaker, 2006, p. 9).

According to Senthilkumar et al. (2015, p. 5) brand awareness is one of the easiest and most effective ways to promote product commodity this is because identical products have relatively fewer differentiations. Consumers make quick decisions if they know the brand. Hence the more customers can recognize a firms brand the more likely they shop products from the familiar firm than others.

Achieving brand awareness involves gaining brand name identity and linking it to the product class (Aaker, 1991, p. 52). Aaker further discussed that a brand awareness message should be different and memorable from the communication of other brands. It should involve a slogan or jingle to make a big difference and establish strong links to the brand and the product class. Jingle can be powerful to gain higher level of recall for new products. Symbol exposure can be source of creating and maintaining awareness. This is because symbol involves visual image which is easier to learn or recall a brand than to use a word or phrase. Publicity is also another way to generate awareness. Advertising is one way to communicate message to audiences and is generally an efficient way to gain exposures. But publicity is most effective and less costly communication way than media advertising. Publicity to be more effective events associated with the brand should be newsworthy. Event sponsorship also creates or maintains awareness. Brand extensions are another way to get brand recall and to make the brand name more salient. Using cues of the product class or the brand can generate awareness. Package is one of the important cues which stimulus customer to buy and can sometimes be used to remind people to link its advertising.

Perceived Quality

Perceived quality is not the actual quality of the product but what consumers perceived about the overall quality of the product with respect to its intended purpose (Aaker, 1991, P. 62; Zeithaml, 1998, p. 3). It is one of the key dimensions of brand equity and can be a strong factor for product differentiation and positioning. The perceived quality of brand derives benefits by attracting channel members interest, enabling product extensions and generating higher profit (Moisescu, 2005, p. 214).

Wani (2017, p. 89) also pointed out perceived quality can bring a positive brand equity if consumers believe that the overall brand quality is of superior and excellent. Hence higher perceived quality is the reason for customer to buy the product, to differentiate the product from its alternatives, to charge premium price and to extend the brand. Aaker (1996, p. 109) also indicated that perceived quality is associated with price premiums, price elasticity, brand usage, and, stock return.

Aaker (1991, pp. 62-63) discussed that perceived quality differs from satisfaction and it is not consistent with expectation. Perceived quality is an intangible, overall feeling about a brand which is usually based on underlying dimensions the brand is attached such as reliability and performance.

Maintaining actual quality of a product or services is not sufficient for creating perceived quality. Aaker (1996, pp. 19-20) discussed that perceived quality may differ from the actual quality for a number of reasons such as previous image of poor quality from product use experience, a company might achieved the quality that was not considered important by consumers (for example, increasing efficiency of internal process of activities at back office which is not observed by customers), customers may rely on one or two cues that associate with quality, customers may not know how best to judge quality. Hence to create favorable perceived quality company's need to protect the brand from gaining bad reputation from inferior quality for its is difficult to recover such perception, invest in quality areas that resonate with customer and understand minor things customers uses as a basis for judgment of quality.

Aaker (1991, pp. 62-63) explained that perceived quality provides value in several ways such as being a reason to buy, differentiate/position a product, a price premium, channel member interest, and brand extensions. Perceived quality provides a reason to buy influencing which brand to be selected. It is linked to purchase decisions. It can make marketing program more effective. For instance, high perceived quality makes advertising and promotion more effective. On the other hand, perceived quality provides the option of charging a premium price which can increase profits and resource to reinvest in the brand. This resource in turn can be used to build the brand by increasing brand awareness or associations or research and development activities to improve the product. Perceived quality results in a large customer base, higher brand loyalty and development in marketing program. Perceived quality can also help in gaining more acceptances by retailers, distributors, and other channel members, to carry brands that are well considered by customers. Moreover, perceived quality can used to introduce brand extensions using the brand name to enter to new product category.

Brand Loyalty

Brand loyalty is a core dimension of brand equity that refers to how loyal the consumers are towards a brand. It is showed by repeated purchase of brand, (Wani, 2017, p. 84). It promises and creates value to the brand reducing costs of marketing and enhancing trade (Wani, 2017, p. 84; Moisescu, 2005, p. 213). Kotler and Keller (2013, p. 242) explained that brand loyalty makes available predictability and security of demand for the firm. It is difficult for other firms to attract loyal customers for they have low interest for other alternatives (Moisescu, 2005, p. 213). Farjam & Hongyi 2015 (cited in Aaker 1992) indicated that brand loyalty is often an effective strategy to manage equity. Increasing the size of loyal segments could be a goal of the brand-building program (Aaker, 1996, p. 109). A brand has little equity if customers are indifferent to the brand taking little concern to brand name where as it has high equity/value if customers continue to buy the brand even if other competitors have superior brand features. Brand loyalty reduces vulnerability to competitors. It is linked to future profits (Aaker, 1991, p.27). Aaker showed loyalty can be built through five stages. These are:

Levels of Brand Loyalty

Brand loyalty involves several levels each representing different marketing strategy and management. Aaker (1991, pp. 29-30) explained the different level of brand loyalty that can take and how it impacts upon brand equity. He demonstrated loyalty pyramid that comprises fives levels of brand loyalty.

Switcher: - The bottom of the pyramid represents non loyal buyer who is completely indifferent to the brand. At this situation the brand name plays littler role in purchase decision. A brand is preferred based on convenience. These buyers might be termed as switcher or price buyer.

Habitual: - The second level is represented by buyers who are satisfied or at least not dissatisfied consuming the product. There is no reason for such segment to look out for alternatives. This group might be termed as habitual buyers.

Satisfied: - The third level includes buyers who are satisfied and in addition have switching costs in time, money or performance risk. Competitors need to induce such buyers by offering benefit large enough to compensate for switching costs. These segments might be called switching-cost loyal.

Likes: - The fourth level represented by buyers who truly like the brand. These buyers preference may be based on the brand symbol, a set of cue experiences, a high perceived quality or long term relationship with the brand. The buyers at this group might be termed as friends of the brand.

Committed: - Buyers at the top level are committed customers. These group feel pride for being users of a brand and the brand is very important to them either functionally or being self expression. Customers at this level recommend the brand to others.

Unlike other dimensions of brand equity (Awareness, associations, and perceived quality) brand loyalty is tied more closely to the use experience. In contrast the other dimensions have characteristics of a brand a person has never used before. Brand loyalty can in part be influenced by these dimensions, in some cases it could largely arises from brand's perceived quality or brand association and in many cases it occurs quite independent of them.

Brand loyalty has a strategic value to marketers if it is properly managed and exploited (Aaker, 1991, p. 32). Brand loyalty reduces marketing costs of doing business. It is much less costly to retain existing customers than to get new ones for these ones lack motivation to change from their current brands. Loyal customers are also substantial entry barriers to competitors to enter the market and provide trade leverage ensuring preferred shelf space in a supermarket or store. It can also attract new customers for large stratified existing customers and dealers provide brand image and recognition and assurance to prospect customers.

Loyal customers can be a source of word of mouth for firm's product or service promotion. (Wani, 2017, p. 89; Farjam & Hongyi 2015, p. 17) Word mouth communication (WoM) can take both institutional and non institutional forms. WoM communication in practice mostly serves for positive information and experiences. Companies can also use brand-loyal customers for potential WoM communications. On the other hand, negative WoM emanated from customers who were dissatisfied for consumption of the brand. Negative WoM related to poor brand image and positive WoM enhances brand image (Jing & Chan, 2010, p. 181).

Brand loyalty could provide a firm time to respond to competitive threats/innovations (Aaker, 1991, p. 34). Even if the brand competitors have developed a superior product, loyal customers will have little incentive to change by giving time for the firm to improve its product.

Brand Association

Brand association is the other brand equity component which is related to person's life style or personality (Moisescu, 2005, p. 215) and is anything linked to the memory of a brand (Aaker, 1991, p. 81). A set of brand association consumer links to the brand includes the logo, color, the country of origin, distribution channel, and brand ambassador (Wani, 2017, p. 84). Identical products can be differentiated because of their distinctive brand association. It creates reasons to buy and also is a significant factor in differentiation and positioning as well as a reason to buy (Moisescu, 2005, p. 215). It provides competitive advantage being barrier for competitors and a basis for brand extensions.

Brand association can be structured into three basics, that is the brand-as-product (value), the brand-as person (brand personality) and the brand-as-organization (organizational associations) (Aaker, 1996, p. 111). Brand value which involves functional benefit is basic to a product brand. If a product doesn't generate the value proposition it will be vulnerable to competitors. Aaker (1996, p. 111) explained based on the research of Yong & Rubicam that the value and perceived quality of a product brand represent different dimensions. Perceived quality is highly associated with the prestige the brand holds while value involves the functional benefit of using the brand.

Among the elements of brand association brand personality and organizational associations are the most important ones to have influence on brand equity Pappu et al. 2005 (cited in Aaker 1991, 1996b). Brand personality link brands emotional and self-expressive benefits as well as a basis for brand differentiation (Aaker, 1996, p. 112). On the other hand, organizational associations can be useful for attributes that are visible as a durable goods or services, when there is a corporate brand and an innovative organization. Organizational association play significant role indicating a brand shows more than products and services (Aaker, 1996, p. 112).

Value to Customer

According to Aaker (1996), brand equity provides value to customers through use satisfaction, developing purchase confidence, ease of process information, reason to buy, willingness to pay premium price and creating positive attitude. Offering a product or service that has superior value to customer is considered to be the alternative to gain competitive advantage (Hanzaee & Norouzi, 2012**,** cited in, Woodruff, 1997). The value of a brand is derived in the market through the actions of consumers (Chernatony et al., 2013, p. 62).

Strength of Aaker's model is that, his model addressed the absence of measureable strategic objectives by setting a set of objectively measureable that are clearly linked to marketing actions at a brand level (Zinkhan, 1992, p. 125).

Several academicians proposed different conceptualization and model to measure brand equity. However most of them were aimed to measure brand equity in the consumer market. Little research was done in the product and B2B market. Aaker brand equity model was widely used by a number of researchers to test it practically both in the consumer and business market. The four dimensions proposed in Aaker model was tested for different product category and the findings of researchers showed that Aaker brand equity model could be used to practically measure brand equity. Likewise, this study was aimed to measure the brand equity from customer point of view for Nefas Silk and DIL paints based on the four dimensions of Aaker model.

2.3. Empirical Review

Empirical studies on the measure constructs of brand equity based on Aakers Brand Equity Model and their findings are reviewed as follows.

Ahmad & Sherwani (2015) to examine the relationship between brand equity dimensions, overall brand equity and customer satisfaction for mobile hand set in the capital city of India; they used the four dimensions of Aaker brand equity model. The result of the regression analysis showed all variables had positive significant effect on mobile set brand equity. Brand loyalty was found the most dominant factor followed by brand awareness. He also found there was a positive relationship between brand loyalty and customer satisfaction which in turn increase the customer value of the mobile phone brands.

The study of Pappu et al. (2005) was aimed to improve the measurement of customer based brand equity in two product category (televisions and cars) and six brands capital city of

Australia. They used Aaker brand equity model to examine the dimensionality of the four construct. They empirically measured brand equity constructs and their findings indicated that the four factor model supported empirically the conceptualization of Aaker's brand equity model.

Yoo & Donthu (2000) to explore the concept of brand equity used four dimensions of Aaker brand equity but combined brand awareness and brand associations into one group and deal with three assets; brand awareness/associations, perceived quality and brand loyalty. Their findings indicated that Brand loyalty, perceived quality, and brand awareness/associations are positively related to brand equity. These authors extended Aaker's (1991) brand equity model by considering brand equity as a separate construct between dimensions of brand equity and the derived value for the customer and the firm.

The dimensions of Aaker's brand equity was also practically assessed by (Chernatony, Martinez & Buil, 2013) to investigate the effects of the four construct on consumer responses on three product categories; sports ware, electronics and cars and six brands in two different countries UK and Spain. The result showed all these dimensions contribute to enhance brand equity across countries and products. In addition their findings indicated the positive impact of brand equity on consumers' responses.

Literatures in the Ethiopia context mainly focused on service market. Two studies that were carried out on product market are reviewed as follows.

Shewanesh (2018) to find the effect of brand equity in the bottle water industry of Ethiopia used the extended Aaker's brand equity model proposed by Yoo & Donthu (2000). Her finding indicated that all the dimensions positively interrelate with each other. Moreover, all the dimensions were found to have a positive significant effect on overall brand equity of bottled water brands. On the other hand, Mekte (2018) attempted to measure brand equity in petroleum industry, based on the four dimensions of Aaker's model. His data was analyzed only descriptively. From the mean values of the respondents he concluded that the four dimensions had effect on brand equity in the petroleum industry.

The effect of the four dimensions on brand equity that was proposed by Aaker brand equity model was also supported by empirical studies reviewed above. The studies were carried out for different product category across different countries indicating Aaker's brand model is the most widely used by different researchers and in most cases proved to be applicable across different markets and countries.

2.3.1. Relationship between the Dimensions of Brand Equity

Studies indicated that significant interrelationships occur among the dimensions of brand equity. For instance according to Aaker as explained by Moisescu (2005, p. 215) the first three brand equity dimension increase brand loyalty. Perceived quality could also be influenced by brand awareness, brand association and brand loyalty. Aaker (1996, p. 64) also indicated that the higher perceived quality the higher other elements of customer's perception of the brand.

Study of Senthilkumar et al. (2015, p. 3) indicated that brand awareness has strong impact for repeated purchases decisions if the product consumed before fulfilled the customer's expectations. Pappu et al. (2005, p. 145) explained there is a positive associative relationship among the brand equity variables, that is the more a customer is brand loyal the more the perception of superior quality and vice versa. Similarly the more the customer have favorable association to the brand, the more their brand loyalty and vice versa. Brand awareness is also likely to be high when customer have strong brand association and high perceive quality of the brand and vice versa. In addition strong association is likely to higher perception of quality and vice versa.

In addition Yoo, Donthu, & Lee (2001, p. 207) indicated that brand equity and its consequences are likely to have reciprocal relationships by affecting one another. Further Atilgan, Aksoy & Akinci (2005, p. 246) argued that the four constructs are somehow interlinked with one another and cannot be completely isolated from the whole brand equity phenomenon. Moreover Chernatony et al. (2013) indicated brand awareness had a positive impact on perceived quality and brand associations, where as brand loyalty was mainly influenced by brand associations. Other studies attempted to measure brand equity also showed there exist a significant relationship between brand equity dimensions and overall brand equity.

2.3.2. The Relationship of Brand Equity Dimensions and Customer Value

2.3.2.1. Brand Awareness and Customer value

Senthilkumar (2015, p. 3) discussed that brand awareness is one of the two most important variables in marketing of any business followed by brand loyalty. Consumers buying products for the first time, they make tactical decision based on brand awareness. But when making subsequent purchase their decisions depend on the product's practical attributes, such as quality, functionality, affordability, taste or fragrance. Brand awareness has strong impact on frequent product choices if the products consumed once have fulfilled customer’s expectation. Brand awareness generates high level of purchase enhancing firm’s profitability this is because customers are likely to buy those brands they are familiar (Hongyi & Farjam, 2015, p. 18). A higher level of brand awareness reduces the consideration set when customers make purchase decision and pay a price premium. Thus, the following hypothesis is formulated as:

H1: Brand awareness has a significant positive direct effect on customer value

2.3.2.2. Perceived Quality and Customer value

Customer usually feels comfortable with brands that are high quality. Perceived quality gives value to customer by enhancing customer satisfaction, good reason to buy the brand and set barrier to competitors, charge premium price and basis for brand extension (Tong & Hawley, 2009, p. 9). Hence the hypothesis is posited as:

H2: Perceived quality has a significant positive direct effect on customer value.

2.3.2.3. Brand Loyalty and Customer Value

Brand loyalty adds considerable value to a brand and/or its firm because it provides a set of habitual buyers for a long period of time. Loyal customers won’t switch to another brand because of price and they create brand awareness by recommending to others (Tong & Hawley, 2009, p. 11). Therefore the hypothesis for relationship between brand loyalty and customer value is:

H4: Brand loyalty has a significant positive direct effect on customer value

2.3.2.4. Brand Association and Customer Value

Similarly brand association provides customer value by enhancing their satisfaction. Customer based brand equity occurs when consumers gain strong, favorable, and unique associations in their memories (Tong & Hawley, 2009, p. 10). Therefore the relationship between brand association and customer value is proposed as:

H4: Brand association has a significant positive direct effect on customer value

2.4. Conceptual Framework

The conceptual framework of this study is based on Aaker (1991) brand equity model. His concept was found to be applicable across different markets including B2B markets (Aaker, 1996, p. 103). His model was empirically tested by a number of studies and was found to explain most of the dimensions of brand equity (Tong & Hawley, 2009, p. 8). Moreover his model explained brand equity from customer point well because it takes into account perceived quality aspect (Moisescu, 2005, p. 219). The four components of Aaker brand equity which pertain to measuring brand equity is used to test empirically the consumer's preference of Nefas Silk and DIL paint brand equity.

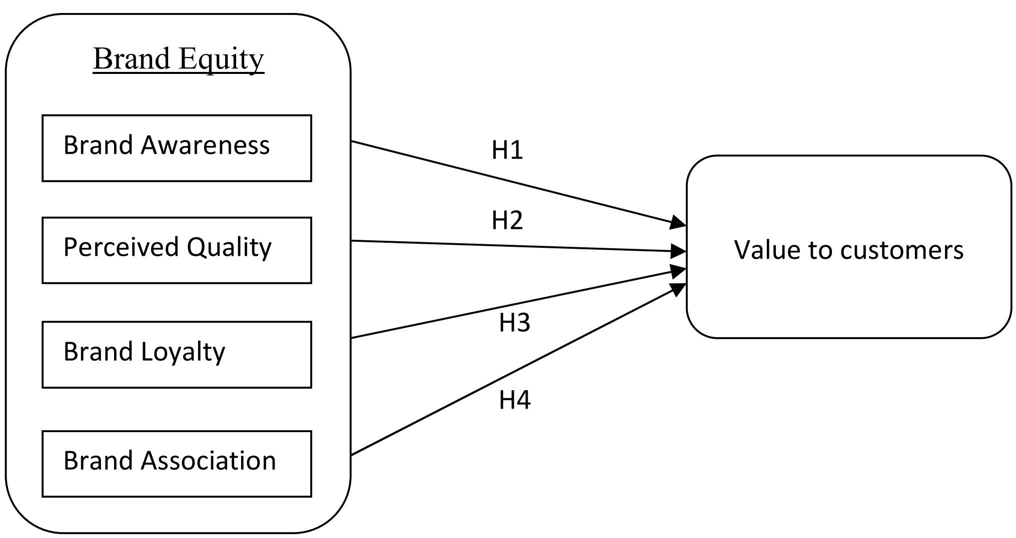

Figure 2.3: A conceptual framework of Brand Equity (source: adopted from Aaker, 1996)

CHAPTER THREE
RESEARCH METHODOLOGY

3.1. Introduction

Chapter three discussed about the methods used to analyze the research questions and to test research hypothesis. First the area of study that is paint industry situation in Ethiopia market is discussed. The research approach of the study was deductive approach and the research design used was both descriptive and explanatory methods were also explained. The population of the study was building contractors who have been working in the government housing development programs. For data analysis SPSS version 25 was used. Statistical methods such as; Pearson Correlation and Regression was used to analyze the data.

3.2. Description of the Study Area

3.2.1. Paint Industry in Ethiopia

In Ethiopia the painting market is one of the fastest expanding segments which are linked to the growth in the construction industry and the rapid urbanization of the country. In 2017 urban population was 20.4 percent with annual urbanization rate of 4.64 perccent (Index Mundi, 2018). In 2014 construction had contributed 2.2 percentage points to GDP growth and accounted for 81 percent of the total growth contribution of the industry sector (World Bank, 2015). During 2013, Ethiopian paint and adhesive industry (there were 11 paint industries) had a total capital of Birr 147.3 million (7.4 million USD) and the contribution generated from native entrepreneurs was 97 percent MoI 2014 (cited in EIC, 2014). During 2011 national paint production were around 14.9 million litters.

The first paint formulation industry in Ethiopia has been situated in 1960s with foreign investors. With the boom in the construction of permanent housing structures, the painting industry, which involves many players, is also growing in the country. Consequently the need for decorative and protective paints has risen. This situation derives the growth in the decorative paints segment. Till 1990s, there were only two locally operated paint factories (MOI, 2014, p. 25). According to MoT (2019) currently there are 54 paint manufacturing industries operating in Addis Ababa which are privately owned by Ethiopian and non-Ethiopian entrepreneurs.

The major local producers are Nefas Silk Paint Factory, Modern Building Industries (DILl Paint Factory), Zemilli Paint Factory, Rainbow Paint Factory, KADISCO Paint Factory, and Addis Paint Factory (MoI, 2014, p. 27). In 2010/11, Paint and Adhesive manufacturing industry has created an employment opportunity for 955 persons of which 949 are Ethiopians by citizenship (MoI, 2014, p. 33). Moreover the growth in technical and vocational schools also contributed to the rise in people that have mastered in painting business.

Ethiopian Paint industry sector is more expressed as a formulation and packaging industry. The largest product segment by volume is estimated to be the architectural and decorative paints segment. Included in this category are household paints, such as interior and exterior aqueous (latex) paints and interior and exterior non-aqueous (oil) paints. Architectural and decorative paints are applied on-site to new and existing residential, commercial and industrial buildings and are used by consumers, painters and contractors. Wall paints that are interior and exterior wall and ceiling paints account for the majority of all architectural and decorative paint sales. Import paints cover 20 percent to 25 percent of Ethiopian architectural and decorative paint demand (MoI, 2014, p. 67).

Marketing of paint products involves both direct and indirect distribution channels. Consumers in paint marketing are largely categorized into two segments, that is consumer market and institutional market. According to Alam and Faridi (2014, p. 665) institutional consumers (Construction firms, painters, dealers, contractors) in paint industry are typically consuming paint for business purpose. Consumers in the institutional market are professionals who have strong product knowledge (Alam and Faridi, 2014, p. 667). They look for brands that have quality product, better service and competitive price (Alam and Faridi, 2014, p. 665).

The Paint and Adhesive industries distribute their products to the customers in two ways, retail sales to household consumers and trade sales to tradesmen and construction firms. Although both ways of distribution had a huge sale, trade sales are increased at a faster rate than retail sales in recent times (MoI, 2014, p. 67). Trade sales account roughly 55 percent of architectural and decorative paint sales, compared to 45 percent for retailed customers. Distribution channels used by the major manufacturers include company owned stores, specialist paint stores, and trade dealership arrangements with corporate and building materials merchandisers (MoI, 2014, p. 67). According MoT (2019) there are 876 (118 wholesalers 758 and retailers) legally registered distribution channels for paint products.

Competitiveness of the paint industry in Ethiopia is based on product performance in cost and product quality, and marketing strategy and arrangements covering such diverse factors as packaging, sales networks, and after-sales service (MoI, 2014, p. 30). These factors are closely inter-related. Some of the industries have a distribution shops and whole sellers, but most of the companies don't have sales outlets. Geographical distribution of all paint and adhesive industry is also limited in number of cities (MoI, 2014, p. 30).

In terms of the domestic market, competition has become very intense due to penetration of low priced foreign products in the Ethiopian market. They are concentrated in Addis Ababa, Oromia and Mekele Cities, where highly competitive and limited market is found. Most of the imported paints are disposed in Addis Ababa City.

3.2.2. Contractors in Ethiopia

In Ethiopia all contractors who desire to carry any construction related activity is required to register with the Ministry of Construction (MoC) in accordance with the Guidelines for the Registration of Construction Professionals and Contractors. All contractors to register at MoC first they need to secure a registration certificate from MoT in accordance with the Commercial Code of Ethiopia and related directives of the MoC.

In Ethiopia there are four categories of contractors namely General Contractors, Building Contractors, Road Contractors and Specialized Contractors. Building contractors which are the subject of this study are contractors who are qualified to undertake building construction and related works. There are ten grades which are categorized accordingly based on the construction cost of the project that the contractor is seeking to undertake. Building contractors can register in one of these grades on the cost of the construction or installation of the specialized trades.

3.3. Research Approach

The choice of the research methodology depends on the nature of the research problem and the type of data the research will going to examine. Epistemology is the theory of knowledge which deals with how we know things and what we can regard as acceptable knowledge in a discipline (William, 2011, p. 17). There are two basic approaches the one is known as empiricism which is knowledge gained by sensory experiences which use inductive reasoning and the other is rationalism which is knowledge gained by reasoning that uses deductive reasoning (William, 2011, p. 17).

The epistemology for this study is empirical one which applies the deductive approach using empirical evidence to test theory or hypothesis (Bhattacherjee, 2012, p. 3). In deductive research, the goal of the researcher is to test concepts and patterns known from theory using new empirical data (Bhattacherjee, 2012, p. 3). Deductive approach entails from general principle or premise to a conclusion to a particular case (William, 2011, p. 37). Since the study is a quantitative in nature the deductive process was used to test the hypothesis formulated for the variables operationalized in the Aaker brand equity model for Nefas Silk and DIL paint brands.

3.4. Research Design

This research was undertaken to analyze the brand equity of Nefas silk and DIL Paints. To accomplish the study objective and test the research hypothesis a combination of the descriptive and explanatory parametric statistical tests was used. Descriptive research attempts to examine situations in order to establish a norm and tests how the values of a variable are distributed (William, 2011, p. 116), examines the what, where, and when of a phenomenon (Bhattacherjee, 2012, p. 7). Descriptive research is applied to portray the characteristics of a particular individual, situation or a group. The methods used in descriptive research are survey methods of all kinds, including comparative and correlation method (Kothari, 2004, p. 2).

An explanatory research seeks answers why and how a particular event occurs by indentifying causal factors and outcomes of the target phenomenon (Bhattacherjee, 2012, p. 39) as well as to build, elaborate, extend, or test theory (Newman, 2014, p. 40). It suggests or infers results from a sample in relation to a population (William, 2011, p.116). A casual analysis which is termed as regression analysis is concerned with how one or more variables affect changes in another variable (Kothari, 2004, p. 130). A casual method was used in this research to analyze the relationship among determinants of brand equity and customer value.

3.5. Population and Sampling Technique

The target population of this study is building contractors who are experienced working in the construction of residential buildings. Particularly building contractors who are working in the construction of housing development program of Ethiopian government was the population of the study. This group of consumers was considered for they consume local paint products frequently and in bulk to finish or design housing building projects. Multistage sampling was used to select samples from the population.

There are 18 project sites in Addis Ababa Housing Project Office. First five sample sites were conveniently selected on the basis of the ease of access to the researcher and to accommodate the level of understanding of the respondents (Bhattacherjee, 2012, p. 73). According to Addis Ababa Housing Project Office (2019) currently there are 215 number of building contractors working in the selected five project sites of Addis Ababa Housing Project Office.

In determining the sample size for this study, the researcher calculated the number of observation by using a simplified formula Yamane (1967:88) provides. This formula is used to calculate the sample sizes at 95% confidence level and P=0.05

$$n = \frac{N}{1+N(e)^2}$$

Where n= Sample size

N= Population size

e= level of precision

Hence sample size for number of building contractors is calculated using the formula = 140.

3.6. Data Types and Sources

To carry out this research work both primary and secondary data source was used. The primary data is a more reliable source in this study which includes the use of structured questionnaire. For the primary data collection this study used survey research method which involves the use of standardized questionnaires to collect data about people and their preferences, thoughts, and behaviors in a systematic manner (Bhattacherjee, 2012, p. 73). Usually survey is the most widely used technique in collecting primary data to help researchers to obtain important information about the topic under study (Bhattacherjee, 2012, p. 73). Secondary sources like various government reports such as Ministry of Trade, Ministry of Industry and Addis Ababa Housing Project Office was used.

3.7. Questionnaire Development

To develop the questionnaire for the measurement of brand equity the researcher considered theoretical literatures and practical studies for the same topic. This study utilized four factor model which includes brand awareness, perceived quality, brand loyalty and brand association. To measure brand awareness six items previously used by Tong et al. (2009, p. 16) and Mudanganyi (2017, p. 107) which are related to general awareness, brand recall and ability to recognize the brand from other competing brand was considered. The five items for perceived quality measurement were taken from (pappu et. al., 2005, p. 149; Mudanganyi (2017, p. 107). The scale items consisted of measurement such as high value, reliability, durability, need satisfaction, features of the brand.

Brand loyalty items were taken from Tong et al. (2009, p. 16) which comprises measurement such as being loyal to brand, preference, premium price and brand recommendation. On the other hand brand association five items was based on Mudanganyi (2017, p. 108) and the three items that is related to organizational associations that includes company delivery reliability, easy of ordering and company popularity items were taken from concepts of various literatures. Finally Customer value items that include four scale items were adopted from Jordan (2014, p. 15), Zeithaml, (1998, p. 13) and Hanzaee et al., (2012, p. 6657).

3.8. Data Collection Procedure and Instruments

A structured questionnaire was used as an instrument for data collection. First a pilot survey was conducted among building contractors to check the understandability and reliability of the questionnaire (Bhattacherjee, 2012, p. 78). Based on the pilot survey necessary modification was carried out and then the questionnaires were disseminated to respondents by the researcher. The primary data were collected from a convenience sample of building contractors who are presently working in the Addis Ababa Housing Project Office. Building contractors were deemed appropriate for the study for they represent the important group of customers for paint products and to ensure homogeneity of the sample. Homogenous sample ensure better theoretical prediction and desirable for theory driven model testing.

Variables under study were measured through the perceptions of respondents. The questionnaire was based on the four constructs proposed by Aaker (1996). The questionnaire consists of two sections as follows. The first section contains general background which included age, education, building contractors license level, preferred paint brands and frequency of paint usage. Section two contains components of the brand equity and section three contains customer value scale items which were measured by way of an ordinal scale.

Likert scale is a psychometric response scale primarily used in questionnaires to obtain participant's degree of agreement with a statement or set of statements. It is commonly used to attitudes, knowledge, perceptions, values and behavioral changes. Likert scales are a non comparative scaling technique measuring a single trait (Senthilkumar, 2015, et al., p. 5). This study utilized a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree, to measure the level of participants agreement with a given statement for the various components of the brand equity.

The exogenous factors for this study are dimensions of brand equity, that is Brand awareness, perceived quality, brand association and brand loyalty. The research constructs was operationalized in accordance with previous works. The study was conducted in a paint product category and two brands namely Nefas silk and DIL Paints.

A pilot study was conducted to ascertain the suitability of the brand equity construct (n = 10), because in the questionnaire few statements included to suit the Ethiopian paint brand context. A reliability check was performed to know the suitability of the construct for this industry. After ascertaining the suitability of the brand equity construct, a total of 140 questionnaires were administered to potential respondents of building contractors chosen from housing development projects in Addis Ababa.

3.9. Data Analysis Technique

The collected survey data was processed and analyzed using SPSS software. At first the primary data was described by descriptive statistical methods including frequency, mean score and standard deviation. Cross tabulation was also used to analyze the quantitative data. Cross tabulation is a statistical research method appropriate for analyzing the relationship between two or more variables. It is usually performed on categorical data and especially useful for studying survey responses (Bhattacherjee, 2012, p. 125).

Pearson's correlation coefficient is a statistical measure of the strength of a linear relationship between paired data. Pearson correlation is used to test whether two variables are related, that is the change in one viable is met with the similar changes in the other variable. For instance when one variable deviates from its mean the other variable would be expected to deviate from its mean in a similar way (Field, 2009, P. 167). It ranges from -1 to +1. Pearson coefficient of -1 indicates that there is perfectly negative correlation and +1 indicates that there is perfectly positive correlation.

Moreover to understand the extent to which customer value of brand equity is affected by its determinants linear regression analysis was performed using the components of brand equity model as independent and customer value as dependent variable.

3.10. Reliability and Validity Analysis

Reliability is the degree to which the measure of a construct is consistent or dependable (Bhattacherjee, 2012, p. 56). Reliability test need to be conducted in order to test if measurements are consistent internally. To test the reliability of the set of items forming the scale a measure of construct reliability Cronbach's alpha was computed. Cronbach alpha is a reliability coefficient that indicates how well the items are positively correlated to one another. The closer the Cronbach's alpha is to 1, the higher the internal consistency. As a thumb rule, cronbach's alpha should exceed a threshold of 0.70, although a 0.60 level can be used in exploratory research (Hair, Black, & Babin, 2014, p. 123).

Table 3.1: Reliability Test

Brand Equity Measures	No of items	Cronbach's Alpha
Brand awareness	6	0.789
Perceived quality	9	0.846
Brand loyalty	8	0.789
Brand associations	8	0.734
Customer Value	4	0.737
Overall scale reliability	35	0.853

The respondents were asked using a five point likert type scale (1= Strongly Disagree to 5= strongly Agree) to indicate how they perceived the brand equity of Nefas Silk and DIL paint products. A total of 35 attributes were included in the questionnaire. As depicted in table 3.1 alpha score for each dimension were above 0.70 and for the entire scale the value of alpha was found to be 0.853, which indicated that the scale had internal consistency (reliability).

Validity refers to the extent to which a measure adequately represents the underlying construct that it is supposed to measure Bhattacherjee (2012, p.55). In other words, it is the extent to which differences found with a measuring instrument reflect true differences among those being tested (Kotari, p. 73). The two validity approaches that are construct validity and content validity was checked for the scale items.

According to Bhattacherjee (2012, p. 58-59) construct validity refers to the extent to which a measure adequately represents the underlying construct that it is supposed to measure. Whereas content validity is an assessment of how well a set of scale items matches with the relevant content domain of the construct that it is trying to measure. Content and construct validity for this study was justified through the pilot-testing of the questionnaire and using measures that were derived from a theoretical framework and previous empirical researches.

3.11. Ethical Consideration

During data collection issues related to voluntary participation and participants consent was taken under consideration. The participants of the study were fully informed about procedures involved in the research. To protect the privacy of participants, their responses were kept confidential. No personally identifiable data was collected. While dealing with the secondary data, the necessary precaution was taken not to misinterpret information and the issue of plagiarism was avoided by using the Harvard referencing system.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. Introduction

In this chapter, first the preliminary analysis was introduced, which describes the process of preparing the data for the best possible quality prior to the data analysis. Reliability and validity of the data was tested in the earlier stage to purify scale items of the brand equity dimensions. The main study in this chapter contained 35 scale items. A sample statistics of 132 respondents were found valid and were utilized for this study. The SPSS software package 25 version was used for analyzing the data collected for this study. The descriptive data is presented that indicated the respondent's Scio-demographic profile, means score and standard deviation of the scale items. Then to objective of the research the researcher runs statistical tests such as Pearson Correlation Coefficient and Multiple Regression Analysis.

4.2. Data Preparation

In order to answer the research questions and address the research objective the sample data were collected from building contractors who have been working in the government housing projects in five selected project sites. At the project sites respondents were asked to complete the self administered questionnaire on a voluntary basis. Therefore a total of 140 questionnaires were disseminated to respondents and out of these questionnaires 132 were found to be valid and used in the final analysis. Eight questionnaires were eliminated because they were incomplete and or not returned.

The completed questionnaire response rate was account for 94.29 percent of the distributed questionnaire, which was acceptable to further analyze the collected data. Consequently the collected data was coded for each question in the questionnaire in order to transfer the data into SPSS version 25. During the data transferring and editing process each questionnaire was checked for errors and incomplete answers.

4.3. Demographic Characteristics of the Respondents

A demographic profile of the respondents consisted of gender, age, educational level, building contractor's license level, preferred paint brands and frequency of usage.

Table 4.1: Socio-demographic Characteristics of the sample (n=132, %)

Characteristics	Level	frequency	Valid %
Gender	Male	106	80.3
	Female	26	19.7
Age	20-30 years	58	43.9
	31-40 years	61	46.2
	41-50 years	13	9.8
Education level	Diploma	28	21.2
	First Degree	84	63.6
	Second Degree	16	12.1
	Third Degree	4	3.0
Building contractor's license level	Grade 1	36	27.3
	Grade 2	30	22.7
	Grade 3	32	24.2
	Grade 4	20	15.2
	Between grade 5 and 10	14	10.6
Preferred Paint Brands usage	Nefas Silk Paints	92	69.7
	DIL Paints	40	30.3
Frequency of paint brand usage	Monthly	27	20.5
	Quarterly	32	24.2
	Yearly	51	38.6
	More than a year	22	16.7

Source: Own Survey, SPSS Result (2019)

The result of descriptive statistics of table 4.1 showed the distribution of the demographic variables of the respondents tends to be matured, achieved higher educated, and with high level of license level. Respondents of the study were between 20 and 50 years old. The respondent's age were divided into four groups. The maximum number of respondents (46.2 percent) was between age group 31-40. The minimum (9.8 percent) was between age group

41-50. Male respondents were greater in number than female respondents having the ratio 80 percent for male and 20 percent for female.

There were more undergraduate respondents (63.6 percent) than graduate and others. The size of contractors were also considered for the demographic data, which indicated that majority of contractors (27.3 percent) were having a license of grade 1, followed by contractors with grade 3 (24.2 percent) and grade 2 (22.7 percent). The ratio of respondents for the preferred brands was 69.7 percent for Nefas silk and 30.3 percent for DIL paints. Majority of the respondents (38.6 percent) used their preferred paint brand yearly. Significant proportion of the respondents was found (24.2 percent) and (20.5 percent) using paint brands quarterly and monthly respectively.

In line with the conceptual framework described in chapter two, the key measures examined in this research were brand awareness, perceived quality, brand loyalty and brand association. In order to test the proposed hypothesis this study used an empirical tests based on validated approaches used by previous researchers. First mean score value was used to describe the level of agreement with the given statement for each brand equity dimension which is presented as follows.

4.4. Descriptive Analysis of Brand Equity Dimensions

The mean score for each dimension of brand equity measures were calculated to identify the tendency of the respondent's response towards Nefas Silk and DIL paint brand equity. Thus, the higher the mean for the variables the higher the agreement of the respondents towards the given statement whereas the lower the mean value the more respondents disagree with the statement. On the other hand standard deviation indicated the deviation of the response from the mean for the given construct.

To analyze the level of degree of agreement with the respective statements given for each dimensions, perception of the respondent's mean score value was used and the result presented as follows.

4.4.1. Brand Awareness

The items for brand awareness were constructed to measure respondent's ability for paint brand recall and brand recognition. As shown in table 4.2 the descriptive statistics for brand awareness for each statements indicated higher level of respondent's agreement which are above the mid-value of the five point Likert scale (3.00) indicating positive level of agreement. The highest was for the item "I am aware of this brand" with mean value of 4.43 and standard deviation of 0.527. The least mean value was observed for the item "Some characteristics of the brand come to my mind quickly" having mean value of 4.14 and standard deviation of 0.663.

Table 4.2: Item Descriptive Statistics of Brand Awareness (n=132)

Items	Mean	Std. Deviation
I am aware of this brand.	4.43	0.527
I can recognize this brand among other competing brands	4.27	0.628
Some characteristics of the brand come to my mind quickly	4.14	0.663
I know what this brand looks like	4.27	0.721
This paint brand is first choice when I have to make a choice	4.34	0.697
The paint brand comes to my mind whenever I think of buying the product in the same category	4.24	0.722

Source: Own Survey, SPSS Result (2019)

4.4.2. Perceived Quality

Perceived quality is not the actual quality of the product but what consumers perceived about the overall quality of the product (Aaker, 1991, p. 62). The higher customer's perception of a given product, the superior is the overall brand equity (Wani, 2017, p. 89). The measures for perceived quality consisted of 9 items that were related to reliability, performance, durability and value of the brand. Accordingly the statements were asked to respondents and the results of the mean score and the standard deviation is shown in table 4.3.

Table 4.3: Item Descriptive Statistics of Perceived Quality (n=132)

Items	Mean	Std. Deviation
I think this paint brand offers high quality product	4.30	0.615
The likely quality of the brand is extremely high	4.10	0.760
The likelihood that the brand is reliable is very high	4.11	0.738
Overall I think the brand is very good brand	4.33	0.573
The brand offers high value	4.17	0.746
The brand fully satisfies my product needs	4.10	0.809
The brand offers excellent features	4.02	0.746
The brand is very durable	3.98	0.781
The brand have consistent quality	4.00	0.891

Source: Own Survey, SPSS Result (2019)

As can be seen from table 4.3 the mean value of perceived quality ranges between 4.33 and 3.96. The highest level of agreement was observed for the items "Overall the brand is very good with mean score of 4.33 and standard deviation of 0.573 followed by the item "I think this paint brand offers high quality" with mean score of 4.30 and standard deviation of 0.615. The least level of agreement for this dimension was observed for the item "The brand is very durable" having mean score of 3.98 and standard deviation of 0.781.

4.4.3. Brand Loyalty

Loyalty is a core dimension of brand equity. Loyalty is a sufficient relevance that can be the basis for evaluating other possible measures. Satisfied customers can be a barrier to entry, a possible price premium, and time to respond to competitor innovations (Aaker, 1996, p. 319). Accordingly there were 8 items set to understand the attitude of respondents. From table 4.4 it can be seen that most of the items had higher mean value. The highest mean value was 4.32 and standard deviation of 0.634 for the statement "I would love to recommend the brand to acquaintances" followed by the statement "My paint product provider brand is the one I would prefer to use" with mean value of 4.20 and standard deviation of 0.759. The least mean value was 3.42 and standard deviation of 1.056 for the statement "If the current brand is unavailable it would be difficult if I had to use another company paint brand".

Table 4.4: Item Descriptive Statistics of Brand Loyalty (n=132)

Items	Mean	Std. Deviation
I consider myself loyal to this paint brand	4.16	0.686
If the current brand is unavailable it would be difficult to if I had to use another company paint brand	3.42	1.056
I feel this is the only brand of paint product I need	3.82	1.040
My paint product provider brand is the one I would prefer to use	4.20	0.759
I would go out of my way to buy the paint product I familiar	4.12	0.731
I buy this brand whenever I can	4.08	0.721
I am still willing to buy this brand even if its price is a little higher than its competitors	3.64	1.021
I would love to recommend this brand to my acquaintances	4.32	0.634

Source: Own Survey, SPSS Result (2019)

4.4.4. Brand Associations

Brand Association consisted of anything liked to the memory of the brand such as, logo, color, country of origin, distribution channel (Aaker 1991, p.81; Wani, 2017, p.84). Items related to brand association were asked to respondents and the result of their response is indicated in table 4.5 as follows.

Table 4.5: Item Descriptive Statistics of Brand Associations (n=132)

Items	Mean	Std. Deviation
This brand is a very good brand	4.46	0.558
This brand is a very attractive brand	4.03	0.890
The brand is an extremely likeable brand	4.20	0.693
I trust the brand and its products and services	4.34	0.616
This brand is high credibility	4.02	0.796
The paint company delivery system is very reliable	3.93	0.849
It is easy to order paints from the company	3.80	0.889
The paint company is very popular	4.23	0.750

Source: Own Survey, SPSS Result (2019)

As illustrated in Table 4.5 above, the mean value of brand association had maximum mean score of 4.46 for the item “This brand is a very good brand” with standard deviation of 0.558. Similarly the item “I trust the brand and its products and services” had the second highest mean score of 4.34 and standard deviation of 0.616. The item “The paint company delivery system is very reliable” has the least mean value of 3.80 and standard deviation of 0.750.

4.4.5. Customer Value

The degree of agreement of the respondents about the value of Nefas Silk and DIL paints brand equity was assessed based on four items. The items were considered to measure customer value according to the brand use experience and the intension to buy brands of Nefas Silk and DIL paints. The mean score value and the standard deviation is shown in table 4.6 below.

Table 4.6: Item Descriptive Statistics of Customer Value (n=132)

Items	Mean	Std. Deviation
Even if another brand has same features as this paint brand, I would prefer to buy this	4.20	0.670
I will likely to buy this brand in the future	4.29	0.636
If there is another brand as good as this paint brand, I prefer to buy this brand	4.08	0.649
This paint brand does meet my needs	4.07	0.679

Source: Own Survey, SPSS Result (2019)

The customer value of Nefas Silk and DIL paints brand equity had highest mean score for the item “I will likely to buy this brand in the future” with mean score value of 4.29 and standard deviation of 0.636 followed by the item “Even if another brand has same features as this paint brand, I would prefer to buy this” having mean value of 4.20 and standard deviation of 0.670.

4.4.6. Summary of Brand Equity Dimensions and Customer Value

Table 4.7 showed the mean and standard deviation value of brand equity dimensions of Nefas Silk and DIL paints brand equity. As indicated in table 4.7 the mean score values of brand equity ranges between 3.97 for Brand Loyalty with standard deviation of 0.54 and 4.28 for Brand Awareness with standard deviation of 0.46. The number of items consisted by brand awareness, perceived quality, brand loyalty, brand association and overall brand equity were 6, 9, 8, 8 and 4 respectively.

Table 4.7: Descriptive Sstatistics for Brand Equity Dimensions and Customer Value

Descriptive Statistics	Brand Awareness	Perceived Quality	Brand loyalty	Brand Association	Customer Value
Mean	4.2816	4.1237	3.9697	4.1269	4.1572
Std. Deviation	0.4628	0.4993	0.5382	0.4514	0.4927
No of Items	6	9	8	8	4

Source: Own Survey, SPSS Result (2019)

It can be seen from the above descriptive statistics table that all factors affecting brand equity that is brand awareness, perceived quality, brand loyalty, brand association had a mean value of above 3.90 out of 5 suggesting high levels of agreement. Brand awareness construct had the highest overall summated mean score of 4.28 followed by customer value and brand association having mean score of 4.15 and 4.13 respectively. This result generally indicated that sample respondents of building contractors agreed most with the statements measuring brand awareness towards Nefas Silk and DIL paint brands.

To further strengthens the fitness of the model, chi-square test was checked for each variable as shown in Appendix 2. It was observed that each variable had a large chi-square statistics ranging from 63 to 112 and significance at p =0.000. Following the descriptive mean score value and chi-square test correlation analysis was computed.

4.5. Correlation Analysis

Numerical values of the correlation coefficients reflect the degree of association between each of the brand equity constructs. Pearson correlation was performed to obtain the understanding of the relationship between the dimensions of brand equity. From table 4.8 it is evident that all dimensions were positively significantly correlated at p = 0.000 levels. In order to determine the strength of relations ship between the components of brand equity, this study used the ranges given by Evans (1996, p. 4). Pearson value (r) from 0.4 to 0.59 is moderate, 0.6 to 0.79 is strong and 0.80 to 1.0 very strong.

Table 4.8: Pearson Correlation Coefficient of Nefas Silk and DIL Paints Brand Equity

	Brand Awareness	Perceived Quality	Brand Loyalty	Brand Association	Customer Value
Brand Awareness	1.000				
Perceived Quality	.481**	1.000			
Brand Loyalty	.615**	.601**	1.000		
Brand Association	.445**	.468**	.477**	1.000	
Customer Value	.558**	.577**	.624**	.522**	1.000

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

Source: Own Survey, SPSS Result (2019)

Likewise "r" value showed strong score with (r=.615, p= .000) for the relation between brand awareness and brand loyalty. Perceived quality and brand loyalty also had strong relationship with value (r= .601, p=0.00). Moreover customer value were found to have a strong relationship with brand loyalty with r value (r= .624, p=.000). The other dimensions had a moderate positive relation with each other that is brand awareness with perceived quality (r= .481, p=.000), brand awareness with brand association (r= .445, p= .000), brand association with brand loyalty (r=.477, p= .000). The customer value of paint brand equity were found to have moderate relation with brand awareness (r=.558, p=.000), with perceived quality (r=.577, p=.000) and brand association (r=.522, p=.000).

Having the result of significant and positive relationship between variables of brand equity, next the researcher run regression statistics to predict the effect of changes of variables on customer value of Nefas Silk and DIL paints. To develop the regression equation four components of brand equity that is brand awareness, perceived quality, brand loyalty and brand association were considered as independent variable and customer value of the paints brand equity was considered as dependent variable.

4.6. Model Assumptions

4.6.1. Normality Test

Testing the normality of variables enables researcher to further conduct analysis. In this study normality was checked using the score value for skewness and kurtosis. Measures of skewness and kurtosis are used to detect normality of a given data. From table 4.9 it can be seen that the score value of skewness and kurtosis were checked, and all dimensions were found showing a value in the range between $\pm$2.58 for skewness and less than 10 for kurtosis which indicated the data were normally distributed.

Table 4.9: Normality Test

Brand Equity	N	Skewness		Kurtosis	
Dimensions	Statistic	Statistic	Std. Error	Statistic	Std. Error
Brand Awareness	132	.258	.211	-1.054	.419
Perceived Quality	132	.355	.211	-.793	.419
Brand Loyalty	132	-.037	.211	-.463	.419
Brand Association	132	.155	.211	-.698	.419
Customer Value	132	.118	.211	-.686	.419

Source: Own Survey, SPSS Result (2019)

The assumption of homoscedasticity and linearity of standardized residuals against standardized predicted value was found to be tenable with the present set of data. As depicted in Appendix 3, standardized residual and standardized predicted value of dependent variable based on model was widespread across X and Y axis.

The assumption of normally distributed error was also checked using the graphs (Histogram and P-P Plot). On the basis of these two graphs as shown at Appendix 3 and 4, it was found that residual of the model was normally distributed and it also proved the difference between model and observed data were very close to zero.

4.6.2. Multi co linearity

Table 4.10 represent the important assumption of regression analysis namely multi co linearity assumption.

Table 4.10: Multi co Linearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	Brand awareness	.583	1.716
	Perceived quality	.586	1.705
	Brand loyalty	.486	2.058
	Brand association	.697	1.435

a. Dependent Variable: Customer Value
Source: Own Survey, SPSS Result (2019)

Multi co linearity was checked for the data of the study using the tests Variance Inflation Factors (VIF) and the Tolerance Values. According to Pallant (2005), the VIF values above 10 and tolerance value below 0.10 indicate multi-co linearity. Hence, both the "tolerance" values (greater than 0.10) and the "VIF" values (less than 10) are all quite acceptable. Accordingly table 4.10 test results indicated that the tolerance values range from 0.486 to 0.697 and the values of VIF indicating all the values were less than 2.1.

4.7. Regression Analysis

For testing conceptual model, the researcher formulated four hypotheses. To test regression model, the items for each variable were summed and averaged and run multiple regression (Enter Method) analysis, the statistical detail of the assumed models is as follows.

Multiple linear regression analysis with SPSS was applied to examine and understand the relationship of dependent variable with the four independent variables. Customer value was considered as dependent variable and brand awareness, perceived quality, brand loyalty and brand association as independent variable. Multiple linear regression method was chosen as it is widely used to understand the impact of multiple factors on a single construct (Hair, et al., 2015, p. 16).

The model for the regression was computed as shown in table 4.11 as follows.

Table 4.11: Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.717[a]	.513	.498	.34906	1.919

a. Predictors: (Constant), Brand Awareness, Perceived Quality, Brand Loyalty, Brand Association

b. Dependent Variable: Customer Value

Source: Own Survey, SPSS Result (2019)

Overall R^2 for the estimated regression model was 0.513, with F value significant at 1% level of significance. The model as shown in table 4.11 explained 51.3 percent of the variance in brand equity among the respondents and thus about 48.7 percent of differences indicated that other factors might have an effect on the brand equity of Nefas Silk and DIL paints among the respondents.

While running multiple liner regression SPSS also automatically performs an ANOVA test with various coefficients to ensure that the findings from the research are significant. An ANOVA test for the F value needs to be over 3 to be statistically significant. Thus, from table 4.12 the F value for this study was (F= 34.279) and significant with (P = .000).

Table 4.12: Overall Variance of the model

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.327	4	4.082	33.500	.000[b]
	Residual	15.474	127	.121		
	Total	31.801	131			

a. Dependent Variable: Customer Value

b. Predictors: (Constant), Brand Association, Brand awareness, Perceived Quality, Brand Loyalty

Source: Own Survey, SPSS Result (2019)

Further to analyze the strength of the effect of independent variables on dependent variables, SPSS displays the standardized beta coefficients (β-coefficient). Table 4.13 illustrates the results from the multiple regression analysis and the relationship between dependent and independent variables.

Table 4.13: Multiple Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.466	.342		1.364	.175
	Brand awareness	.202	.086	.190	2.344	.011
	Perceived quality	.223	.080	.226	2.798	.006
	Brand loyalty	.253	.081	.276	3.111	.002
	Brand association	.218	.081	.200	2.696	.008

a. Dependent Variable: Customer Value

Source: Own Survey, SPSS Result (2019)

The regression model showed that all components of brand equity had a significant relationship with customer value indicating the dimensions of brand equity can explain or predict customer value. From the above table it was observed that the component brand loyalty ($\beta 3= .276$) found as the most important predictor or determinant of Nefas Silk and DIL paints brand equity, followed by perceived quality ($\beta 2= .226$) and brand association ($\beta 4= .200$) and the least important factor in this research was brand awareness ($\beta 1= .190$). The entire beta coefficient was positive showing the higher the determinants of the brand equity the higher will be the customer value for brand equity of Nefas Silk and DIL paints brands.

4.8. Validating the Proposed Hypothesis

Hypothesis One: Brand awareness has a significant positive direct effect on customer value

Having established all the regression assumption meet by this model, the result of standardized coefficient (β) and the significance level was used to indicate the strength of the relationship between brand equity dimensions and customer value. The result of multiple regression revealed that brand awareness had a significant positive direct effect on brand equity with a beta value ($\beta 1= 0.190$), at 95% confidence level with p value less than 0.05. Hence the hypothesis is supported.

Hypothesis Two: Perceived quality has a significant positive direct effect on customer value

As shown in table 4.13 the coefficient of the perceived quality was computed to be ($\beta 2 = 0.226$) at p value less than 0.005 which confirmed the positive and significant relationship between this variables. Thus, the researcher supported this hypothesis that, perceived quality had a positive and significant effect on customer value of Nefas Silk and DIL paints.

Hypothesis Three: Brand loyalty has a significant positive direct effect on customer value

Table 4.16 also showed that, brand loyalty had a positive and significant effect on overall brand equity with a beta value ($\beta 3 = 0.276$), at 95% confidence level ($p < 0.05$). Therefore, the hypothesis that brand loyalty has a positive and significant effect on customer value is confirmed.

Hypothesis Four: Brand association has a significant positive direct effect on customer value

The result of hypothesis six further indicated that there was a positive and significant relationship ship between brand association and customer value with a beta value ($\beta 4 = 0.200$) and p value 0.008. Therefore hypothesis four was supported.

4.9. Discussion of the Findings

The descriptive analysis of the demographic data of the respondents indicated that majority of building contractors were male gender which was quite expected. A significant proportion of them were middle aged who had higher educated. The other important finding from the demographic data was that above 90 percent of the respondents preferred to use Nefas Silk paints. The respondents consumption pattern also indicated mostly paint was used yearly, followed by quarter consumptions which is reasonable since paint is an industrial product which is considered as one of construction finishing materials. Regarding contractors size more than 70 percent of the respondents were found having a license of grade 1 to grade 3.

To meet the objective of the study four hypotheses was formulated to determine the effect of brand equity dimensions on customer value of Nefas Silk and DIL paints. The findings of the data analysis are discussed as follows.

In order to assess the significance of brand equity dimensions for Nefas Silk and DIL paints brand in Addis Ababa market, the mean score value and the significance of the variables were computed based on the response obtained from building contractors. Overall the mean score for brand equity constructs exhibited a positive high level of agreement towards the two paint brands. This result indicated the items can be applied to measure brand equity of Nefas Silk and DIL paints brands. Moreover the values of the chi-square and ANOVA showed the four components of the band equity model were also found to be high value and significant at $p = 0.000$ indicating that Aaker's brand equity model fit for paint brands of Nefas Silk and DIL Paints.

The four factors which form the predictors of Nefas Silk and DIL paints brand equity are brand awareness, perceived quality, brand loyalty and brand association. The correlation result showed positive significant relationship between the dimensions of brand equity and customer value. Among the dimensions brand loyalty was found to have the strongest relationship with customer value indicating that consumers prefer a paint brands on the basis of their loyalty to the brand. Thus, brand loyalty had the maximum influence on brand equity for paint market of Nefas Silk and DIL paints. The finding of this study result also confirms with other research findings, such as (Ahmad & Sherwani, 2015, p. 65). It also supports the argument of Pradhan & Misra (2014, p. 53) that brand loyalty is the strongest measure of brand value.

Perceived quality, brand awareness and brand association was found to have a moderate level of correlation, indicating they are also an important factor determining brand equity of Nefas Silk and DIL paint brands.

Thus it can be noted that there is a significant level of correlation between brand equity dimensions and customer value of Nefas Silk and DIL paints.

Following the results of correlation analysis, regression equation was computed to find the estimated customer value of the two paint brands. It was found that the multiple regression was significant with $R^2 = 0.513$ at 1% significance level which indicates that 51.3 percent of the observation was due to the dimensions of brand equity. The remaining 48.7 percent could be other factors not included in this model. The beta coefficients (β) for all brand dimensions were in the hypothesized direction, and were used to assess the contribution of dimensions of brand equity to customer value of Nefas Silk and DIL paints.

The results of the regression analysis can be interpreted that more positive the coefficients for the determinants the higher will be the customer value for the paint brands. Looking at each dimensions contribution to the customer value of the paints, the highest coefficient was obtained for brand loyalty dimensions.

The beta coefficient of the regression analysis result indicated that with every unit increase in brand loyalty of customer, paint brand equity will increase by 27.6 percent other factors being held constant. Thus, the higher the value for brand loyalty, the higher would be the customer value for Nefas Silk and DIL paint brands. This revealed that the two paint firms should focus on marketing strategies that result into brand loyalty from their customers. Higher brand loyalty can be brought through promotion activities, through customer past consumption or establishing cordial relationship with customer that could be positive word of mouth for firm's product promotion.

Positive word of mouth communication from a committed customer increases the probability of customers to become a loyal customer and also increase sharing positive comment to a third person Dhurup et al. 2014 (cited in Hawkins et al., 2001). This finding confirms Ahmad & Sherwani (2015, p. 65) who found a similar highest effect of brand loyalty to brand equity of cell phone. Similarly, Yoo et al. (2000, p. 205), Chernatony et al. (2013, p. 68) and Atilgan et al. (2005, p. 247) found brand loyalty to have a dominant effect on brand equity.

The estimated regression analysis also showed that perceived quality was the second dominant factor to have a positive influence of Nefas silk and DIL paints brand equity. The beta computed for perceived quality indicated that for a one unit increase in perceived quality brands value to customer can increase by 22.6 percent other factors remaining constant.

Brand association and brand awareness also had good influence on brand equity of the two paint brands. The reason is maybe that the two paint companies are a prior and a long established company in the Ethiopia paint market and also have already established a good relationship with institutional paint customers.

The findings of this study support all of Aaker's brand dimensions, establishing that all components of brand equity had a significant effect on customer value of Nefas Silk and DIL paints. The major finding of this study is that as previously hypothesized all relationships of brand equity and its sources were significantly positive. Brand loyalty demonstrated the strongest impact, for both correlation and regression analysis indicating the essential role of developing brand loyalty in building brand equity for Nefas silk and DIL paints. The customer value reflects a positive attitude, derived benefit and a willingness to buy the two paint products. Thus, it can be stated that the higher paint brand awareness, perceived quality, brand loyalty or brand association, the higher the brand equity for consumers of Nefas Silk and DIL paints.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1. Introduction

The following chapter discusses summary, conclusion and practical usage of the findings in the form of recommendation to paint managers and theoretical implications for researchers. Moreover, direction of future research is given.

5.2. Summary

The main objective of the study was to measure brand equity of Nefas Silk and DIL paints based on Aaker four factor brand equity model. In order to meet the objective of this study, four hypothesis previously formulated in chapter two were analyzed to examine the dimensions of brand equity to customer value of Nefas Silk and DIL paint brands. Based on the theoretical and empirical review 35 scale items were provided in a 5 point Likert scale to the respondents. The researcher collected valid data from 132 respondents through multistage sampling technique. Descriptive and inferential statistics were analyzed using SPSS version 25.

The descriptive statistics showed that the mean score were above 3.9 indicating high level of agreement among respondents about brand equity dimensions. The chi-square test was significant at p= 0.000 and had higher values ranging from 63 to 105. Moreover the ANOVA test was significant having the value of F = 33.5 indicating Aaker's brand equity model fits to Nefas Silk and DIL paints brands.

In addition, the interrelation of the dimensions of brand equity and customer value was checked through Pearson correlation analysis. All the factors were found to have a positive and significant correlation with each other. Brand loyalty had a strong correlation with customer value showing brand loyalty was the most dominant factor among the others. The other three dimensions had a moderate relationship was customer value.

More over regression analysis was run to examine the effect of the four dimensions on customer value of Nefas Silk and DIL paints. All of the constructs were found to be significant with $p < 0.05$. The standardized beta coefficient indicated that brand loyalty was the strongest factor to influence customer value of the two paints brand equity followed by perceived quality.

5.3. Conclusion

One of the most valuable intangible assets firms have is their brand associated with their products or services. Building strong brand is essential to any product or services to create competitive advantage. Brand managers should measure and understand the most influential component of their brand equity. Paint companies are not expectations, which is highly competitive in Addis Ababa where domestic paint firms compete with limited market.

Hence this study aimed to examine and retest the applicability of Aaker's brand equity model, the most common conceptual framework for the measurement of brand equity in the product market. Four hypotheses were proposed to meet the objective of the study. Based on the result of statistical analysis of the data obtained from a sample of 132 building contractors, it was possible to reach a conclusion regarding the relationship of brand equity dimensions to customer value of Nefas Silk and DIL Paints brands.

The result of data analysis draws the following conclusions. The mean score, test of chi-square and ANOVA indicated the fitness of Aaker brand equity model to Nefas silk and DIL paint brands in Ethiopia. The correlation and regression analysis also proved that brand equity dimensions had positive and significant effect on the paints brand equity. According to the correlation analysis all the dimensions had positive and significant inter correlation with each other. This implies that marketing efforts to enhance one of the brand equity dimensions (for instance: the higher brand awareness the more for brand loyalty and vice versa) increase the other dimensions which leads to the increases customers value of overall brand equity of Nefas Silk and DIL paint brands.

Brand loyalty demonstrated the strongest impact, for both correlation and regression analysis indicating the essential role of developing brand loyalty in building Nefas silk and DIL paints brand equity. Brand loyalty for the paints brand most likely occurred from word of mouth communication, past consumption habit and brand awareness. Strong brand loyalty leads to reduce cost of firms, for the cost of attracting new customers is higher than to maintain the old ones. This means less cost would be incurred on paint products of the two companies with higher brand loyalty.

Perceived quality was the second strong factor to affect customer value of Nefas Silk and DIL paints brands. This means consumer's higher perception for quality paint brands can help firms to make their product differentiated and become a selective brand in consumers' minds. Brand awareness and brand association was also found to have influential effect on the two paints brand equity.

The findings of this study established the significance and associative relationship between brand equity dimensions that was consistent with the conceptualization of Aaker (1996). Thus the theoretical implication of this study finding is that, it provides empirical evidence that the four construct of paint brand equity support Aaker's conceptualization of brand equity. Moreover, the scale development for brand association included items related with organizational association that is popularity of the companies, ease of ordering and product delivery systems was also found to contribute building strong brand equity for Nefas Silk and DIL paint brands.

Thus, all brand equity dimensions should be considered in development of marketing strategy in building strong brand for Nefas silk and DIL paint products. This study forwards the following recommendation.

5.4. Recommendation

This study was targeted to measure paint brand equity of Nefas silk and DIL paints that could provide opportunities to paint firm managers to prioritize and allocate resources across brand equity dimensions. The following possible recommendations were forwarded for the concerned managers of Nefas Silk and DIL Paint companies.

- The companies should concentrate their efforts to maintain the loyalty of their customers which has significant importance to construct brand equity. In doing so, they can retain their customer's loyalty and gain repeated purchase of their brand. To increase their paint brand equity, managers should focus on brand elements that derive for higher loyalty such as word of mouth communication. Painters, dealers and contractors are the major source of word of mouth communication in the paint market. Thus managers should increase the loyalty of these institutional customers who could be a basis to increase their market share thereby retaining consumers and increasing new prospects.

- The other influential factor for positive brand equity of Nefas Silk and DIL paint brands is perceived quality. It is important for the companies brand managers to note that the product quality isn't the only factor that determines the level of success of their company. They also need to worry about how their company's brand is perceived and valued by their customers and prospects. Paint firms in Ethiopia market are most of them ISO certified companies. In order to get the heart of paint consumers, they need to focus on their core competency and their innovativeness in the paint industry. Perceived quality could generate good name of a company which would be a basis for repeated purchase of the company brands.
- The third important point for marketing mangers to consider is the inter correlation between the dimensions of paint brand equity. Brand loyalty which is the most dominant factor for Nefas silk and DIL paint, can be increased if the companies increase the perception of customers for the brand quality, increase its awareness by demonstrating different marketing communication techniques to its customers and establishing long term relationship with customers. Hence, increasing the inter correlation between the factors will lead to increase customer value for their paint brands.

5.5. Suggestion for Future Research

Due to the limited scope, this study has focused on measuring brand equity only from building contractors who are working in the government housing projects in Addis Ababa. Further research needs to be conducted by considering other consumers of the brand such as painters, dealers and household paint consumers. The findings and recommendations generated may not be working for other paint companies in the country. Thus, further research should be done to examine brand equity across different paint brands at country level. Moreover future studies need to focus to establish a consistent and reliable scale measures that would be practically measureable to B2B product market.

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APPENDECIES

Appendix 1: Survey Questionnaire

Addis Ababa University: School of Commerce Marketing Management Graduate Program

Survey Questionnaire: Measuring Customer based brand Equity

Dear Respondent,

This questionnaire is designed to gather data on customers perception regarding various attributes of the below stated brand. Please select the response that best describes the brand that you are currently using. Your response is highly valuable for the output of the study. Thank you for your kind cooperation. Please use the sign ✓ in the box of your choice.

Section I: Demographic Information

Age	18-30	31-45	46-60	60+
Gender	Male	Female		
Education	Diploma or less	First degree	Second degree	Third Degree

Contractor's license level	BC1	BC2	BC3	BC4	BC5 to BC10

Which of the following paint product company is your main paint supplier?		
1	Nefas Silk Paints	
2	DIL Paints	

How often you use your preferred brand	Monthly	Quarterly	Yearly	More than a year

Section II: Dimensions of Brand Equity

On a scale of 1 to 5 where 1 is 'strongly disagree' and 5 is 'strongly agree', indicate the extent to which you agree with each of the following statements

	Brand Awareness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BA1	I am aware of this brand.	1	2	3	4	5
BA2	I can recognize this brand among other competing brands	1	2	3	4	5
BA3	Some characteristics of the brand come to my mind quickly	1	2	3	4	5
BA4	I know what this brand looks like	1	2	3	4	5
BA5	This paint brand is first choice when I have to make a choice	1	2	3	4	5
BA6	The paint brand comes to my mind whenever I think of buying the product in the same category	1	2	3	4	5

	Perceived quality	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
PQ1	I think this paint brand offers high quality product	1	2	3	4	5
PQ2	The likely quality of the brand is extremely high	1	2	3	4	5
PQ3	The likelihood that the brand is reliable is very high	1	2	3	4	5
PQ4	Overall I think the brand is very good brand	1	2	3	4	5
PQ5	The brand offers high value	1	2	3	4	5
PQ6	The brand fully satisfies my product needs	1	2	3	4	5
PQ7	The brand offers excellent features	1	2	3	4	5
PQ8	The brand is very durable	1	2	3	4	5
PQ9	The brand have consistent quality	1	2	3	4	5

	Brand Loyalty	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BL1	I consider myself loyal to this paint brand	1	2	3	4	5
BL2	If the current company paint product was unavailable, It would be difficult if I had to use another company paint brand	1	2	3	4	5
BL3	I feel this is the only brand of the paint product I need	1	2	3	4	5
BL4	My paint product provider brand is the one I would prefer to use	1	2	3	4	5
BL5	I would go out of my way to buy paint product I am familiar.	1	2	3	4	5
BL6	I buy this brand whenever I can	1	2	3	4	5
BL7	I am still willing to buy this brand if its price is a little higher than of its competitors	1	2	3	4	5
BL8	I would love to recommend this brand to my acquaintances	1	2	3	4	5

	Brand Association	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BS1	This brand is a very good brand	1	2	3	4	5
BS2	This brand is a very attractive brand	1	2	3	4	5
BS3	The brand is an extremely likeable brand	1	2	3	4	5
BS4	I trust the brand and its products and services	1	2	3	4	5
BS5	This brand is high credibility	1	2	3	4	5
BS6	The paint company delivery system is very reliable	1	2	3	4	5
BS7	It is easy to order paints from the company	1	2	3	4	5
BS8	The paint company is very popular	1	2	3	4	5

Section III: Customer Value of Brand Equity

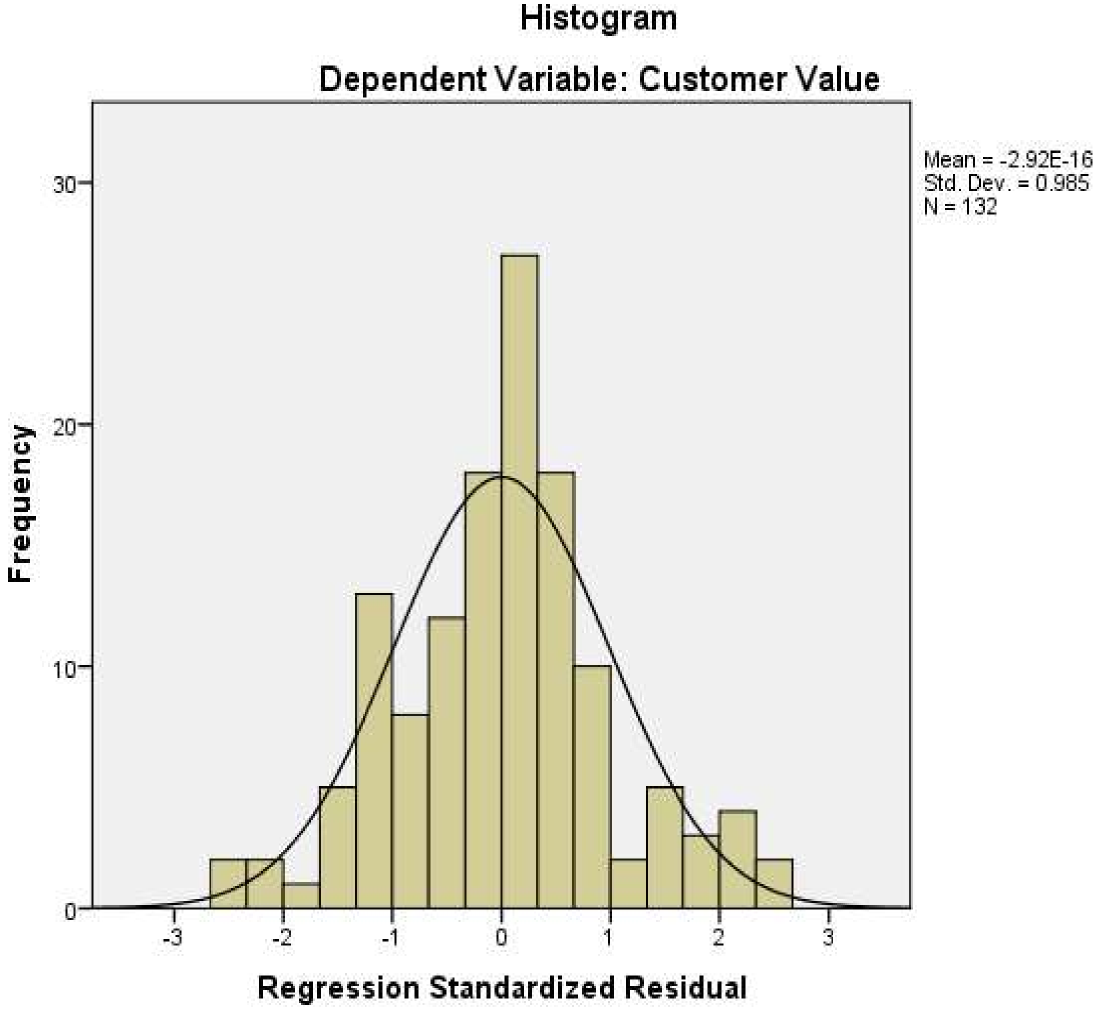
	Customer Value	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
OB1	Even if another brand has same features as this paint brand, I would prefer to buy this	1	2	3	4	5
OB2	I will likely to buy this brand in the future	1	2	3	4	5
OB3	If there is another brand as good as this paint brand, I prefer to buy this brand	1	2	3	4	5
OB4	This paint brand does meet my needs	1	2	3	4	5

Appendix 2

Table 1: Chi-Square Test of Nefas Silk and DIL paint Brand Equity

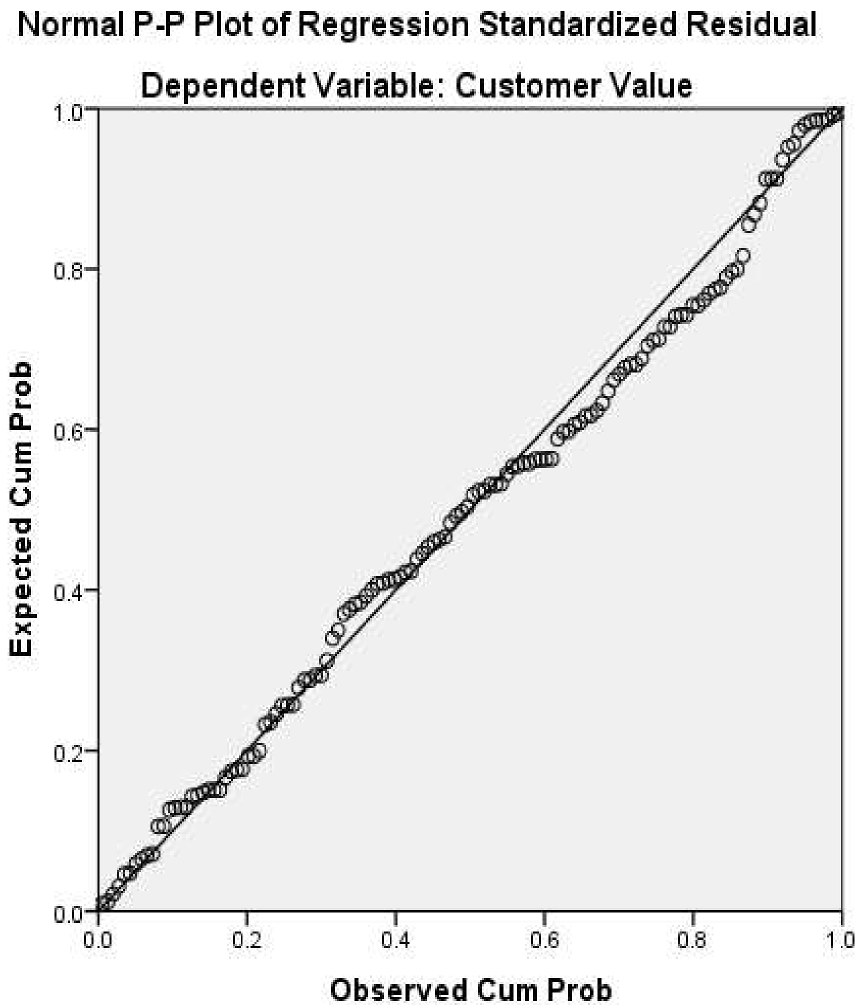
Dimensions	**Chi-Square**	**Sig**
Brand Awareness	63	0.000
Perceived Quality	105	0.000
Brand loyalty	112	0.000
Brand Association	105	0.000

Appendix 3



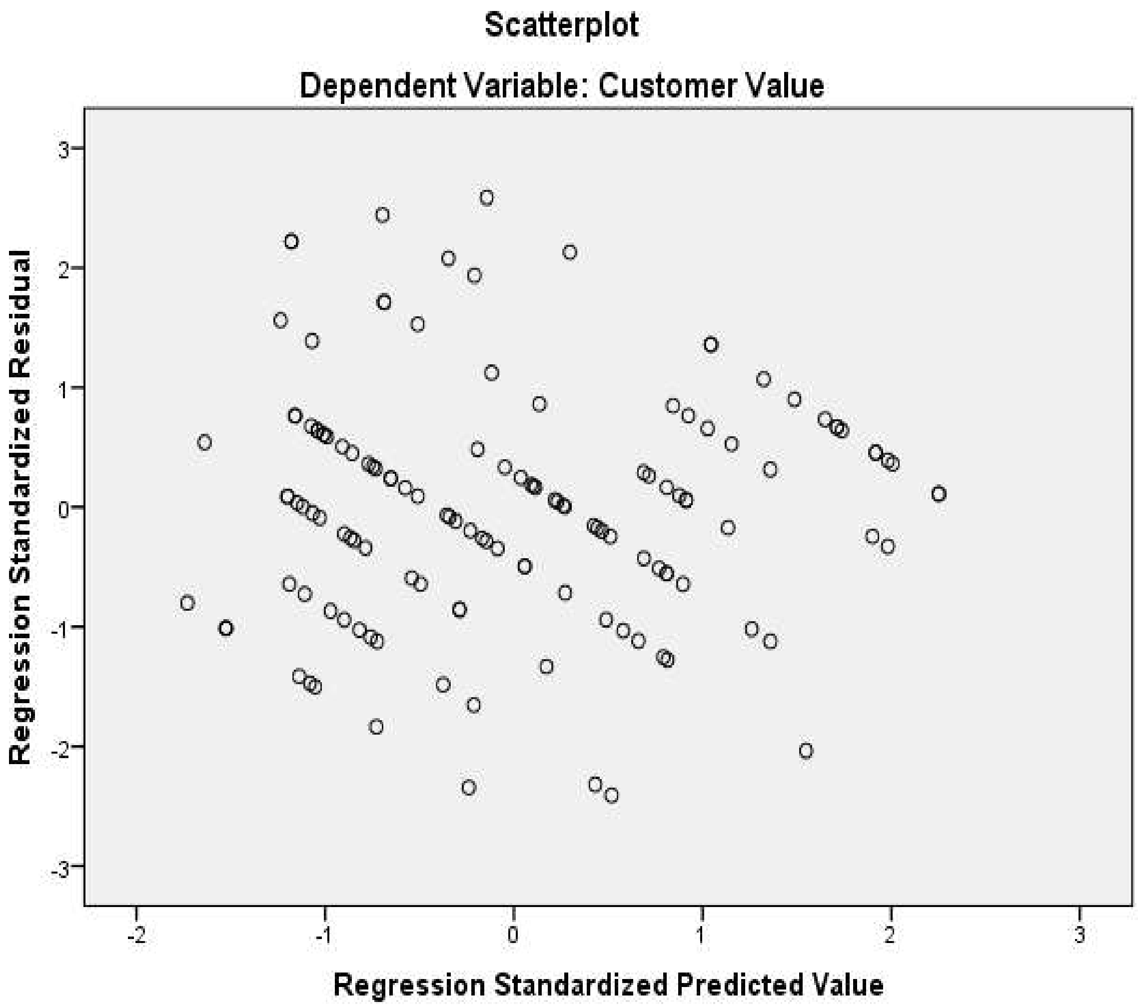
Graph 1: Histograms of Normally Distributed Residuals

Appendix 4



Graph 2: P–P Plots of Normally Distributed Residuals

Appendix 5



Graph 3: Homoscedasticity and linearity of standardized residuals against standardized predicted value