

**TO EXAMINE HOW BRAND LOYALTY, BRAND AWARENESS & BRAND ASSOCIATION AND PERCEIVED QUALITY DETERMINE THE BRAND EQUITY IN TELECOMMUNICATION INDUSTRY IN SOMALIA**

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**ABSTRACT**

*The aim of this study was to examine how brand loyalty, brand awareness, brand association and perceived quality determine the brand equity in telecommunication industry in Somalia. A quantitative approach was adopted for numerical measurement and analysis. The nonprobability sampling method specially convenience sampling was used to study behavior of consumers of telecommunication industry. 300 respondents were selected as the sample size and data was collected through a self-administered questionnaire. Based on the completed 2008 respondents who had experienced telecommunication products and services in private telecommunication industry in Somalia, the data was analyzed using SmartPLS3 to test measurement and structural Model. The result from this study suggest that the all factors of brand equity namely, -brand association, brand loyalty, and brand awareness- has got a significant and positive effect on brand equity. Except only the brand Image which has got somewhat insignificant relationship with brand equity. The study recommended the focus on key factors of brand loyalty like the awareness and trust of the customers to the brand must be maintained so that the customers continue being loyal in the long run. The mobile or cellular service providers must also arrange for incentives such as training to employees so that they continue serving the customers in the best way possible, establish high ability of innovation that will entice consumers to stay loyal to the brand. Finally, consumers' demographic characteristics research should be used to find the weak areas in which Telecom companies brand performed not very well.*

**Field of Research:** Brand Equity; Brand Loyalty; Brand Awareness; Perceived Quality; Brand Association; Somalia Telecommunication Industry

## 1. INTRODUCTION

The theory of branding has materialized as a top and significant management discipline in last three decades, and it has become one of the most prized 'intangible assets', that any firm has. However, many scholars have made a lot of progress in terms of developing the theory much is still to be done, the theory is still fertile, and further research can be done in terms of geography. On the other hand, brand equity is closely related to customer's equity as one study previously revealed (Lebar, et al ,2005). Hence, the brand equity has come out from the deliberations that have been evolving since then. Accordingly, the study is looking at the brand equity from the Somali perspective in the telecommunication industry where, for these companies to stay complete in the local and international business, they are required to identify their own brand values accurately for better management.

Consequently, since the research is about the brand equity's' determinants it is paramount to shed some light on telecommunication industry, where it is under the segment 'of information and communications technology'. It consists of mainly two things telephone companies and it also facilitates internet, and by doing so the sector is witnessing an information culture revolution on its own (Line, 2017). Additionally, in recent years, researchers have shown an increased interest in the telecommunication industry's brand equity and the factors that affect it. Hence, notwithstanding with some reports that the mobile industry is slowing down, there is still strong evidence that the growth is simply robust in the recent years by almost anywhere else in other industries (Westcott, 2017).

The writings on brand equity have highlighted that the telecommunication industry can boost brand equity by focusing on brand image and brand loyalty; therefore, marketing efforts can be directed towards developing the brand equity by the industry. Results showed that brand knowledge could, in turn, build the brand equity to be improved, hence all variable are pointing towards contributing to creating brand equity in telecommunication industry the study revealed (Hilal, 2017).

There is also another study which examined the determinants of brand equity of Mobile users and showed that all the determining factors, which are Brand Image, Perceived Quality, Brand Loyalty, and Brand Strength, have a substantial effect on brand equity and this is in contrary to brand response which has insignificant impact on brand equity dimension (Sharif & Bukhari, 2014).

The term brand equity come out from the comparison of the relationship between customers and brands in the marketing literature (Wood, 2000). Thus, the brand equity has come to live around 1990 in past century. Besides, main dimensions have been discussed by different scholars (Farquhar, 1989), the concept can be looked from three different dimensions; first from cognitive psychology and information economics (Mazzei, 1999). Other studies looked at the concept from another point of view and divided it into three lengths namely; managerial concept (product level), financial concept (firm level) and finally customer based concept (individual consumer) (Farquhar, 1989; Keller, 1993). Therefore, customer based brand equity is where the researcher will focus on, when it comes to the determinants of brand equity.

Brand equity when looked from the customer-based perspective is not well perceived or well defined, since it is about just fashioning difference and benefit for the owners of that brand in application. But some scholars including but not limited to Keller (1993, 2003) defined the concept as 'The description of having a renowned brand name that can be centred on the knowledge that renowned brand name can give to its owner more proceeds than those ones that are less renowned, and the difference is simply the brand recognition. The reason here is based on consumers attitudes and believes that products with the renowned name are superior to the ones that less renowned name (Mazzei, 1999; Keller, 1993, 2003).

Therefore, brand equity's' determinants in the case of and in accordance of the objectives of the study are brand loyalty, brand awareness, brand image and brand associations (Farquhar, 1989; Kayaman & Arasli, 2007; Keller, 1993; Mazzei, 1999). Hence, Brand equity is of interest to managers because of

brand loyalty. Brand equity has got a 'positive relationship' with brand loyalty (Lassar, Mittal, & Sharma, 2008), then according to Aaker and Joachimsthaler (2000), if a firm has got a number of loyal customers, the company has high consumer-based brand equity (Lassar et al., 1995).

There is very little published research on branding in Somalia, However, one study premeditated 'effects of service quality management on the competitive advantage of telecommunication industry in Mogadishu Somalia'. In addition, among the issues that was searched was brand image and its effects on the company's competitive advantage, the result 'showed that customer loyalty, price fairness, and brand image have significant and positive effects on competitive advantage in the mobile providers in Somalia, hence a consideration of the brand equity of this sector. On the other hand, customer loyalty and price fairness were the factors that were considered to be developed and nurtured by the mobile industry managers in Somalia (Yusuf & Fridah Theuri, 2016).

Beyond, this may perhaps be that Hormuud's brand loyalty is moderately reflected and the customers are satisfied, which can, in turn, cause the consumer to be loyal to the brand. Keeping in mind, that brand loyalty is one of the determinants of brand equity. and the other elements that was pointed out will also be measured in this study, then it will be used in the Somali telecommunication industry to understand the relationship between the four elements namely, brand loyalty, brand awareness, brand image and brand association, and the brand equity in context of the country is growing telecommunication sector.

The main objective of this research is to examine how brand loyalty, brand awareness, brand association and perceived quality determine the brand equity in the telecommunication industry in Somalia, but specifically, the following are the objectives of this study.

## **2. LITERATURE REVIEW**

### **2.1: Brand image and brand equity**

The other determinant of brand equity is brand image according to Keller (2001) which deals with 'extrinsic properties' of product or services, which means the methods used in meeting customers psychological and social needs, it is how people think about a brand conceptually rather than what that same brand can do for them in actual sense (Kevin Lane Keller, 2001). And as research suggest customers or consumers attribute 'high quality' to the well established companies brands since it's the image they associate with it (Rubio, Oubiña, & Villaseñor, 2014).

In recent years, there has been an increasing amount of literature on brand image including this study that discussed the quality and quantity of measuring brand perceptions, come up with that consumer experiences, marketing communications and/or word of mouth strongly influence brand image (Driesener & Romaniuk, 2006). Part of the strategies to build brand image is the validation from the celebrities as was found by the study 'Impact of celebrity endorsement in advertising on brand image among Chinese adolescents'(Chan, Leung Ng, & Luk, 2013). Based on the above, the following hypothesis is developed:

***H1. Brand image has a positive relationship with brand equity.***

### **2.2: Brand awareness and brand equity**

Brand awareness is an essential element that sometimes is discounted by the practitioners and also scholars, and it refers to "the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category" (D. A. Aaker, 1991).

Some studies have shown the beneficial mediating relationship amongst the dimensions of brand equity on brand equity. Furthermore, for the purpose of the study cited in this research, brand equity dimensions include brand association, brand awareness, brand loyalty, perceived quality and brand image. According to the findings; brand awareness as an independent variable significantly affected the brand association as a mediator; brand awareness as an independent variable significantly impacted the brand equity as a dependent variable also; both brand awareness as an independent variable and brand association as a mediator considerably impacted the brand equity as a dependent variable (Severi & Ling, 2013).

Some schoolwork have presented the advantageous mediating association in the midst of the dimensions of brand equity on brand equity itself. In addition, for the perseverance of the study mentioned in this research, brand equity dimensions include brand association, brand awareness, brand loyalty, perceived quality and brand image. According to the findings; brand awareness as an independent variable significantly affected the brand association as a mediator; brand awareness as an independent variable significantly influenced the brand equity as a dependent variable also; both brand awareness as an independent variable and brand association as a mediator considerably affected the brand equity as a dependent variable (Severi & Ling, 2013). Based on the above, the following hypothesis is developed:

**H2. Brand awareness has a positive relationship with brand equity.**

### **2.3: Brand Association and Brand Equity**

When the consumer is choosing among different products or services, the association plays an important role in finalizing this; therefore, brand association is a very imperative determinant of brand equity (Lynch, Jr. et al., 2007). Hence, brand association can be looked or associated with the image, choice and preference of the brand (Kevin Lane Keller, 1993), its credibility and whether it delivers its promise and its trustworthiness (Cand, 2011; Kai, Xiaofan, & Yongjun, 2009; Lökken & Nayar, 2012; Piaralal & Mei, 2015; Severi & Ling, 2013).

Based on the grounds that brand associations and brand liking are crucial to brand equity, therefore, Using this approach, the researcher have been able to get results that showed that brand associations do affect brand liking and intron brand equity, which means that brand equity is positively associated with brand association (Cand, 2011). Moreover, for that reason, the positive relation between brand equity and brand association will be one of the hypothesis that this study will build on and try to come up with that at the conclusion.

Much of the brand equity research has focused on identifying and evaluating the relationship between brand equity and brand association. Therefore, there is study that found out the higher the advertisement of the brand the higher the brand equity of that brand and it preference form the customers and finally purchase intensions are forthcoming because of the customer's quality association of that brand (Cobb-walgren et al., 2016).

Publications that concentrate on brand equity more frequently adopt a historical or chronological approach to the findings therefore, same findings with the above study when it comes to high advertisement spending that is related with high brand equity. But this study by Yoo et al (2000) found that repeated 'price promotions, such as price deals, are related to low brand equity' (Yoo, Donthu, & Lee, 2000).

Brand associations are intellectualized in this paper at hand are referred to as 'brand image, brand attitudes, and consumer quality perceptions' and it found that 'that promotional-based messaging is

detrimental to all three brand associations', with quality ratings having no significant effect on brand association (Clayton & Heo, 2011). Based on the above, the following hypothesis is developed:

**H3. Brand association has a positive relationship with brand equity.**

**2.3: Brand Loyalty and Brand Equity**

The American Marketing Association defines brand loyalty as “the situation in which a consumer generally buys the same manufacturer-originated product or service repeatedly over time rather than buying from multiple suppliers within the category” or “the degree to which a consumer consistently purchases the same brand within a product class”. And according to Aakar when the product is available the loyal always attract others to use the product, therefore, retaining the existing customers is much less costly than enticing new ones (Asker, D. A, 1991).

On the other hand, perceived quality is necessarily very important and acknowledged strategic consideration in brand equity model and it will traditionally influence the customer's purchase judgments and 'brand loyalty', especially when a consumer is not inspired to conduct a detailed analysis of the perceived quality of the product (Asker, D. A, 1991).

Therefore, brand equity's determinants in the case of and in accordance of the objectives of the study are brand loyalty, brand awareness, perceived quality and brand associations (Farquhar, 1989; Kayaman & Arasli, 2007; Keller, 1993; Mazzei, 1999). Hence, Brand equity is of interest to managers because of brand loyalty. Brand equity has got a 'positive relationship' with brand loyalty (Lassar et al., 2008), then according to Aaker and Joachimsthaler (2000), if a firm has got a number of loyal customers, the company has high consumer-based brand equity (Lassar et al., 1995).

The strength of the company's brand is a sign of the success of that company, which can also cause the customers retention and continuous growth. There is a study that showed that customer loyalty has 'significant positive relationship' with brand image hence prompt customer services, network coverage and sales promotion were also very important factors discussed in the study (Adjei & Denanyoh, 2014).

Another study that was carried out by Michele et al, (2016) found out that the four factors of brand equity namely, -brand trust, brand loyalty, perceived quality and brand awareness- has got a significant and positive effect on brand equity. They also establish that there is a mediated effect on brand awareness and brand equity; this study can be expected also to come up with these findings at the end of the research.

There are several important areas where this study makes an original contribution to 'customer loyalty in the South African mobile telecommunications sector' and it found that customer satisfaction has no significant effect on customer loyalty, but the perceived value and brand image has got indirectly consequence on customer loyalty, through prompting customer satisfaction sometimes. Finally, if the telecommunication companies want to have loyal customers they need to concentrate on customer satisfaction as the single most important factor to increase their brand equity (Morgan, Govender, & Govender, 2017).

Thus far, previous studies have examined the association between the four factors of brand equity and showed 'significant positive prelatship' among them. The study also revealed that three variables namely -brand awareness, perceived quality and brand associations have a fragile relationship with brand loyalty. The same three variables have equally got a relatively strong association with each other (Nasir et al., 2013).

A study conducted by Zahid, Naintara, & Raja, (2014) on Effect of Rebranding and Repositioning On Brand Equity Considering Brand Loyalty as a Mediating Variable, showed that brand loyalty doesn't

have any mediation effect on rebranding and repositioning in the case of brand equity. Which means that the organization can put emphasis but there might be no result towards achieving higher brand equity for the organization.

To better, understand the mechanisms of service quality, satisfaction, commitment and trust and its effects on brand loyalty in the telecommunication industry. it has been found that t service quality and satisfaction have an indirect positive influence on loyalty, while service quality alone has significant influence on brand loyalty on study that investigated ‘what Makes Customers Brand Loyal’ (Nawaz & Usman, 2008). Based on the above, the following hypothesis is developed:

**H4. Brand loyalty has a positive relationship with brand equity.**

### 3. THEORETICAL FRAMEWORK & METHODOLOGY

#### 3.1: Theoretical Framework

The theory of branding has materialized as a top and significant management discipline in last three decades, and it has become one of the most prized ‘intangible assets’, that any firm has. However, many scholars have made a lot of progress in terms of developing the theory much is still to be done, the theory is still fertile, and further research can be done in terms of geography. On the other hand, brand equity is closely related to customer’s equity as this study reveals (Kevin Lane Keller, 2005). Hence, the brand equity has come out from the deliberations that have been evolving since then. Accordingly, the study is looking at the brand equity from the Somali perspective in the telecommunication industry where, for these companies to stay complete in the local and international business, they are required to identify their own brand values accurately for better management.

Brand equity when looked from the customer-based perspective, is not well perceived or well defined, since it is about just fashioning difference and benefit for the owners. but some scholars including but not limited to Keller (1993) defined the concept as ‘The description of having a renowned brand name that can be centred on the knowledge that renowned brand name can give to its owner more proceeds than those ones that are less renowned, and the difference is simply the brand recognition. The reason here is based on consumers attitudes and believes that products with renowned name are superior to the ones that less renowned name (Keller, 1993; Mazzei, 1999).

There is also a study that examined the determinants of brand equity of Mobile users and showed that all the determining factors, which are Brand Image, Perceived Quality, Brand Loyalty, and Brand Strength, have a substantial effect on brand equity and this is in contrary to brand response which has insignificant impact on brand equity dimension (Sharif & Bukhari, 2014).

From a theoretical background, this study established and suggested a conceptual framework of brand equity on customer-based brand equity where Aaker’s Customer-Based Brand Equity Framework was adopted for this study. Keller’s Customer-Based Brand Equity (CBBE) also play a very important role because he also looked the brand equity from two dimensions in the first hand i.e. brand image and awareness which combine to make brand knowledge for the customer, and this is in the context of the telecommunications industry.

In this case, the researcher developed theoretical framework to explain and justify the findings that will come forth. Brand equity studies uses many theories to justify their results to be precise, Brand Equity Theory (BET) (Kalampokis, Karamanou, Tambouris, & Tarabanis, 2016; Matin, 2016; Oyedeji, 2007); Contemporary Marketing Theory (Davcik, Vinhas da Silva, & Hair, 2015); strong underlying theory (Brodie, Glynn, & Little, 2006), Customer Based Brand Equity (CBBE) model (Keller, 2008; Keller, Schultz, Hatch, & Larsen, 2000; Kevin Lane Keller, 1993, 2001, 2005); Aakar’s Brand Equity Model

(Aaker, D. A., 1991; Aaker, D. A, 1996); and Expectancy Value Theory (Netemeyer et al., 2004). This work will choose the two models that were developed by Keller and Aaker that the researchers in the field of brand equity use most and it is Customer-Based Brand Equity (CBBE) model and Aaker Brand Equity Model.

From the above review of related theories and concepts; the researcher developed the below conceptual framework for this study. This is conceptual model, which has a number of variable and contexts the determinants of brand equity in the telecommunication industry in Somalia. It is used to make conceptual distinctions and organize the idea of the research into two main variables namely; dependent (brand equity), and independent variables (brand loyalty, brand awareness, brand image and brand associations) (Elaine Botha, 1989). The usefulness of the conceptual framework lies in at least two contributions one is it helps identify the variable and the other it amplifies the relationship amongst variables (McGaghie, Bordage, & Shea, 2001). The proposed conceptual framework in figure (1.1) is illustrating the above discussions of the variables and their relationship.

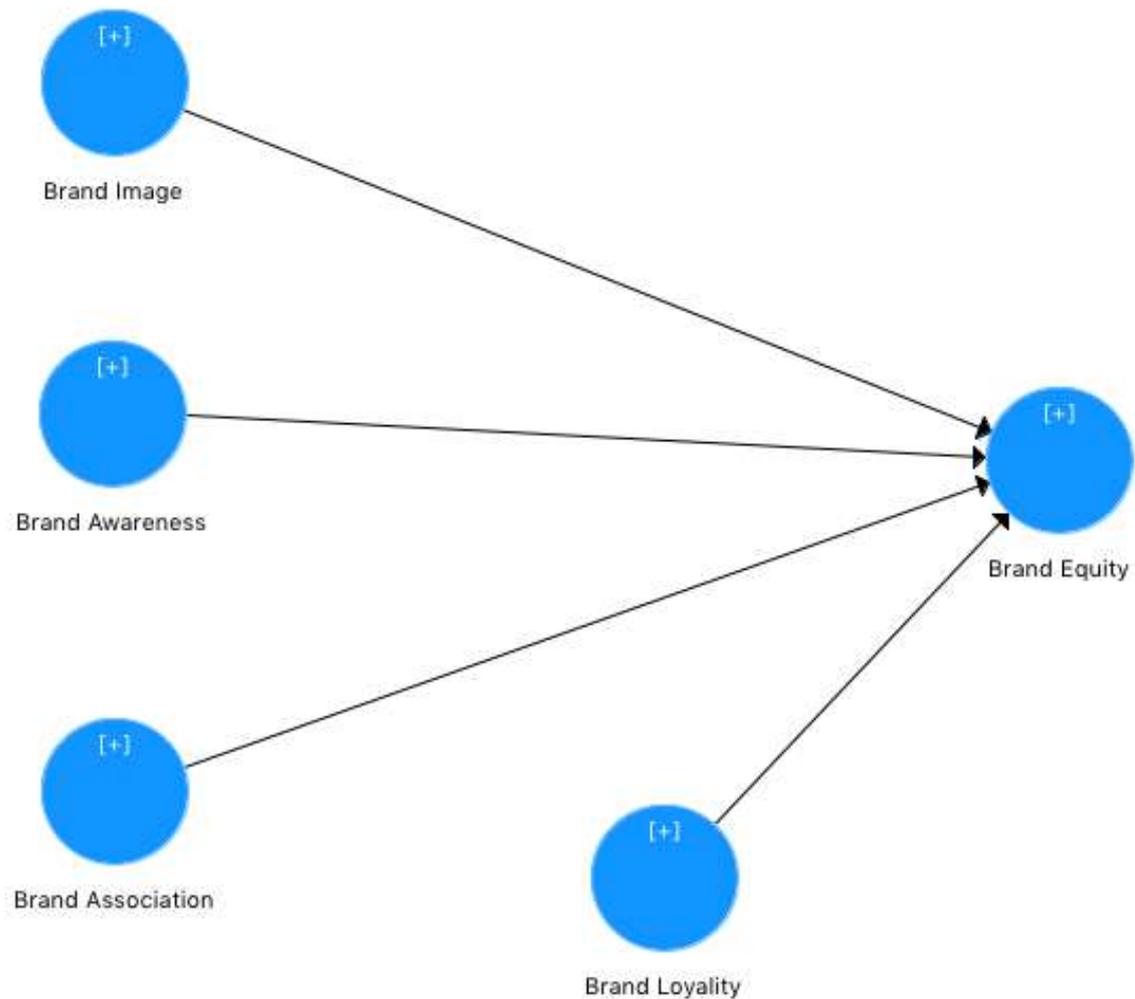


Figure 1: Research Framework

### 3.2: Methodology and Methods

The conceptual research framework that guided this research is presented in Figure (1.1) above. It involves four dependent variables; brand loyalty, brand awareness, perceived quality, brand association and one independent variable; which is brand equity in the telecommunication industry in Mogadishu, Somalia.

The current study will utilize a quantitative research design to address the research questions and objectives. A quantitative method of study will be employed to determine the factors that determine the brand equity in the telecommunication industry in. A self-administered questionnaire design was utilized to obtain the data for this research. Convenience sampling was employed for this research.

For the purpose of this research, a structured questionnaire that follows the quantitative paradigm consisting demographics and item constructs (46 questions) was used to collect data from the respondents. the questionnaire was adapted from the studies of (Anjum & Rizwan, 2013; Asiamah, Owusu-Mensah, Wilson, & Nicholas, 2013; Cand, 2011; Chen, Yeh, & Jheng, 2013; Gill & Dawra, 2010). The variables are divided into dependent variable which has got 9 items, and independent variables which have got the brand loyalty, perceived quality and brand awareness has 9 items each,

and finally, brand association has 10 items, Items will be measured using a 5-point Likert scale (1 strongly disagrees and 5 strongly agrees).

This study uses convenience sampling procedure and data were collected by using self-administered questionnaires distributed to the respondents; of the 300 questionnaires that were distributed, 208 usable questions are received from the respondents.

## **4. DATA ANALYSIS AND RESULTS**

### **4.1: Measurement Model**

To test the goodness of the data collected from respondents and to examine the hypothesis we employed SmartPLS 3.0. The model containing brand loyalty, awareness, association, image, and brand equity was examined, which employed a two-step approach by Chin (1998). The construct item loadings were assessed through the manner consistent with literature, which demands higher loading of above 0.70 (Fornell & Larcker, 1981). Hence, any question item loading less than the rule of thumb and the items cross loaded to other construct should be deleted. Table 1 and 3, below shows that all items are loaded on their different constructs, two items were removed from brand awareness construct, one items from brand image, one from brand association and one from brand loyalty due to low loading. All other items were loaded more than 0.7 and there are no cross loading which confirms that the measurement model has vital content validity.

#### **4.1.1: Convergent validity**

Convergent validity as literature of structural equation model (SEM) defines as the extent to which items measure a particular concept (Hair,2010). Convergent validity uses Composite reliability and average variance extracted as tools to take final decision. The minimum composite reliability loading should be greater than 0.70 where AVE should be more 0.5. The findings in table 1 below displays that both the average variance extracted and composite reliability were above the rule of thumb set, hence the measurement model had acceptable convergent validity (Bagozzi, Yi & Philips, 1991).

Table 1. Composite reliability values

Variable	Items	Loading	Cronbach's Alpha	CR	AVE
Brand Association	BASS01	0.775	<b>0.791</b>	<b>0.863</b>	<b>0.612</b>
	BASS02	0.786			
	BASS03	0.809			
	BASS04	0.758			
Brand awareness	BA3	0.882	<b>0.858</b>	<b>0.904</b>	<b>0.702</b>
	BA4	0.834			
	BA5	0.772			
Brand equity	BEQ1	0.767	<b>0.911</b>	<b>0.927</b>	<b>0.584</b>
	BEQ2	0.792			
	BEQ3	0.814			
	BEQ4	0.727			
	BEQ5	0.793			
	BEQ6	0.720			
	BEQ7	0.725			
	BEQ8	0.752			
	BEQ9	0.782			
Brand Image	BI1	0.894	<b>0.910</b>	<b>0.943</b>	<b>0.847</b>
	BI2	0.935			
	BI3	0.932			
Brand Loyalty	BL1	0.809	<b>0.930</b>	<b>0.950</b>	<b>0.702</b>
	BL2	0.845			
	BL3	0.859			
	BL4	0.811			
	BL5	0.853			

	BL6	0.894			
	BL7	0.847			
	BL9	0.779			

**4.1.2: Discriminant validity**

After the testing convergent validity and met the requirement, discriminant validity was assessed to seen the degree to which a group of items can be different from that other constructs in the model by employing Fornell- Larcker, Cross loading and the HTMT criteria All the item loadings were checked to confirm that the loadings are higher than corresponding constructs than in other constructs. As shown in table; there are no indicators shows cross loading.

The findings in table 2, satisfies the Fornell- Larcker criterion which requires that the square root of average variances obtained for any construct is higher than the association with other constructs. Hence, discriminant validity can be confirmed based on the results in table 2 which shows that diagonal variables are higher than the other values in their respective columns and rows. Another method to assess the discriminant validity involves the HTMT approach. The HTMT approach is employed due to issues related with the low sensitivity of Fornell-Larcker and cross-loading criterion, which only work goo in situation with heterogeneous loading patterns and high sample sizes (Henseler, Ringle & Sarstedt, 2015). The HTMT value of the current study variables is below 0.90 ash shown in table 4 below, which satisfy the threshold standards therefore, discriminant validity has been established between two reflective constructs.

**Table2: Discriminant validity of the model**

Variables	Brand Association	Brand Awareness	Brand Equity	Brand Image	Brand Loyalty
<b>Brand Association</b>	<b>0.782</b>				
<b>Brand Awareness</b>	0.515	<b>0.838</b>			
<b>Brand Equity</b>	0.688	0.599	<b>0.764</b>		
<b>Brand Image</b>	0.419	0.320	0.440	<b>0.921</b>	
<b>Brand Loyalty</b>	0.584	0.674	0.632	0.285	<b>0.838</b>

**Table 3- Indicator item cross loading**

Items	Brand Awareness	Brand Association	Brand Equity	Brand Image	Brand Loyalty
<b>BA1</b>	<b>0.859</b>	0.446	0.469	0.264	0.532
<b>BA4</b>	<b>0.834</b>	0.355	0.470	0.227	0.476
<b>BA5</b>	<b>0.772</b>	0.514	0.558	0.278	0.708
<b>BASSO1</b>	0.378	<b>0.775</b>	0.470	0.299	0.423
<b>BASSO2</b>	0.518	<b>0.786</b>	0.561	0.391	0.482
<b>BASSO3</b>	0.320	<b>0.809</b>	0.430	0.357	0.372
<b>BASSO4</b>	0.373	<b>0.758</b>	0.636	0.271	0.511
<b>BEQ1</b>	0.302	0.628	<b>0.767</b>	0.331	0.384
<b>BEQ2</b>	0.361	0.510	<b>0.792</b>	0.376	0.382
<b>BEQ3</b>	0.386	0.519	<b>0.814</b>	0.436	0.447
<b>BEQ4</b>	0.350	0.490	<b>0.727</b>	0.416	0.354
<b>BEQ5</b>	0.447	0.502	<b>0.793</b>	0.438	0.384
<b>BEQ6</b>	0.520	0.518	<b>0.720</b>	0.267	0.567
<b>BEQ7</b>	0.505	0.475	<b>0.725</b>	0.225	0.607
<b>BEQ8</b>	0.558	0.530	<b>0.752</b>	0.257	0.570
<b>BEQ9</b>	0.627	0.550	<b>0.782</b>	0.310	0.591
<b>BI1</b>	0.285	0.443	0.428	<b>0.894</b>	0.332
<b>BI2</b>	0.324	0.369	0.417	<b>0.935</b>	0.236
<b>BI3</b>	0.270	0.336	0.364	<b>0.932</b>	0.210
<b>BL1</b>	0.593	0.510	0.535	0.288	<b>0.809</b>
<b>BL2</b>	0.599	0.486	0.575	0.176	<b>0.845</b>
<b>BL3</b>	0.561	0.470	0.578	0.205	<b>0.859</b>
<b>BL4</b>	0.537	0.446	0.468	0.262	<b>0.811</b>
<b>BL5</b>	0.541	0.470	0.507	0.247	<b>0.853</b>
<b>BL6</b>	0.591	0.504	0.542	0.232	<b>0.894</b>
<b>BL7</b>	0.500	0.499	0.491	0.292	<b>0.847</b>

<b>BL9</b>	0.584	0.527	0.520	0.225	<b>0.778</b>
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**Table 4: Heterotrait-Monotrait Ratio (HTMT)**

Variable	Brand Association	Brand Awareness	Brand Equity	Brand Image	Brand Loyalty
<b>Brand Association</b>					
<b>Brand Awareness</b>	<b>0.607</b>				
<b>Brand Equity</b>	<b>0.785</b>	<b>0.662</b>			
<b>Brand Image</b>	<b>0.491</b>	<b>0.358</b>	<b>0.486</b>		
<b>Brand Loyalty</b>	<b>0.661</b>	<b>0.739</b>	<b>0.671</b>	<b>0.308</b>	

#### 4.2: Structural Model

Four hypothesis were developed based on the existing literature to determine factors effecting band equity; table 5, figure 1 and 2 shows the regression results of the coefficients of all models. As shown in below table three hypothesis were supported. Only one (H1) rejected. H1 states that Brand Image had significant impact on Brand Equity; the proposition was rejected due to low P value ( $\beta=0.149$ ;  $P>0.05$ ).

The analysis of the structural model confirmed that brand association had a positive related to the ( $\beta=0.391$ ;  $P<0.05$ ) to the brand equity thus H3 is supported. With regard to the path coefficient of brand awareness and brand loyalty in relation to brand equity ( $\beta=0.196$ ;  $P<0.05$ ), ( $\beta=0.229$ ;  $P<0.05$ ) shows positive relationship with the two models. Hence H2 and H4 are supported. The result of this study shows that all criterion variables explains 59% of the change to brand equity.

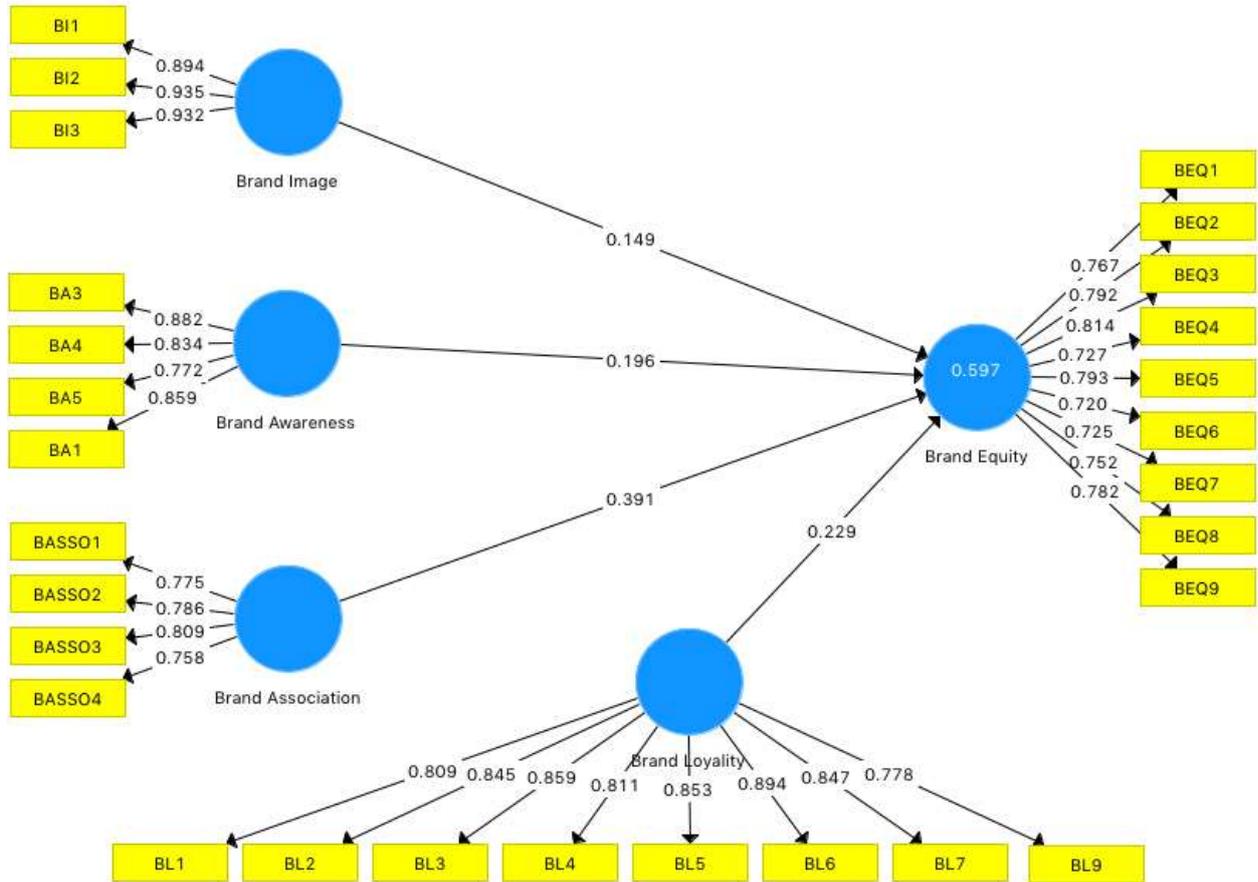


Figure 2: Result of Structural Model

Table 5: Structural Model (Path coefficient & hypothesis testing)

Hypothesis	Relationship	Coefficient	T Statistics ( O/STDEV )	P Values	Decision
H1	Brand Image -> Brand Equity	0.149	1.920	0.055	Rejected
H2	Brand Awareness -> Brand Equity	0.196	2.864	0.004	Supported
H3	Brand Association -> Brand Equity	0.391	5.410	0.000	Supported
H4	Brand Loyalty -> Brand Equity	0.229	2.704	0.007	Supported

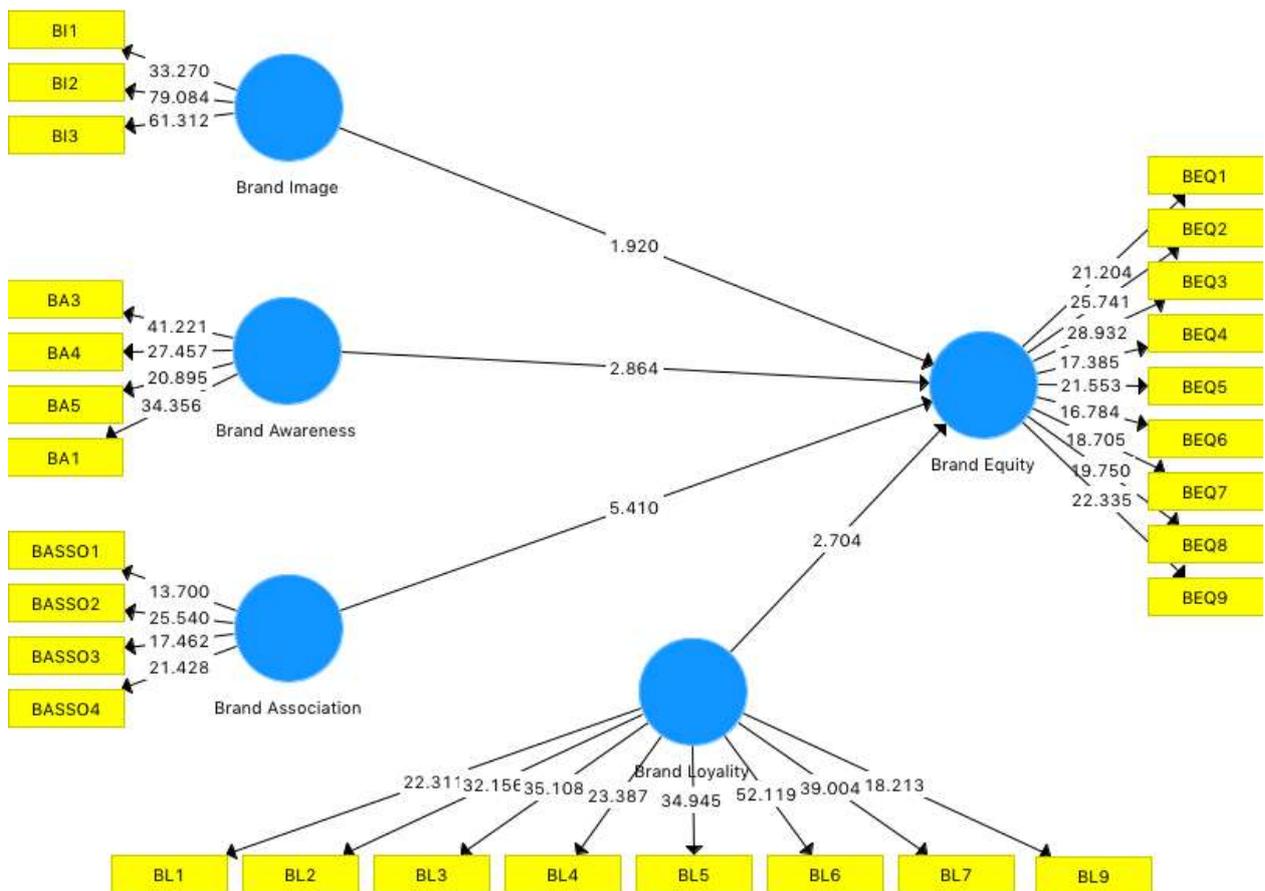


Figure 2: PLS Bootstrap

## **5. DISCUSSION OF THE FINDINGS AND CONCLUSION**

The main objective of this research was to examine how brand loyalty, brand awareness, brand association and perceived quality determine the brand equity in telecommunication industry in Somalia.

The purpose of this study was to examine determinants of brand equity i.e. brand loyalty, perceived quality, brand awareness and brand association in the telecommunications industry in Somalia. The validity of the data was checked using convergent and discriminant validity analysis, then the reliability of data was also tested using cronabch's alpha and composite reliability. We found that our model is convergent and discriminant valid. Moreover; the all dimensions of the model are internally consistency and reliable then the researcher investigated the relationship between the variables using Structural model for find Path coefficients & hypothesis testing. All the variables reported to have a positive relationship except brand image.

This research has seen the three influential factors of brand equity being studied. The relationship between the three independent variables of perceived quality, brand loyalty and brand image cannot be denied on having a combined influence on brand equity.

The research revealed vital information which pertains to the selection reasons for the telecommunication industry and types of services from the the main three companies in the country. The information collected would serve well for telecom industry management to continuously monitor the customer experience in order for them to return. A customer service team should conduct frequent audits to ensure customer relationship management procedures and processes are followed.

The determinants of brand equity; brand awareness, brand association, brand loyalty and brand image, will require constant examining and revising to keep up with customer needs. Since the coefficient result of this study identified brand association as the highest contributor to brand equity, telecommunication companies need to consistently ensure the quality of services provided are at optimum level.

Since Somalia is among the developing countries and the possibility of markets going to be matured like developed nations, the focus on key factors of brand loyalty like the trust of the customers to the brand. Therefore, it will be very demanding for the enterprises to draw the new customers and retain the old ones due to serious competitions for making above the average profits. So, this is recommending the main focus has to be paced in developing a satisfied customer, who then will be loyal to the brand.

The study revealed that the respondents consider themselves loyal to the brand and trust the mobile service provider, therefore, these elements has to be maintained so that the customers continue being loyal in the long run.

With the increased publicity for information and added access to it, customers are also savvy in realizing the availability of other providers of the same services in the market, and would not pause for a single minute to switch to another service provider if their requirements and wants are met by substitute providers. Without the clear expectations for behaviour, responsiveness and communication, the telecommunication companies are of losing the customers to the substitute or same service providers if the quality and excellent features or consistence is not maintained.

Finally, to build a successful brand, companies must be consistent in delivering quality services, foster customer relationships management and deliver significant, meaningful messages. Valuable brand equity is achieved when the brand is consistent in brand management practice.

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