Brand equity and competitive advantage in alcoholic beverage products

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Abstract: In the face of growing competition in modern business environment as a result of globalisation and development in information and communication technology, firms are required to gain and sustain competitive advantage. This study therefore investigated the effect of brand awareness, brand association, brand loyalty, perceived quality, and other proprietary brand assets on competitive advantage in alcoholic beverage products and producers in Kabale District Uganda. The study employed descriptive and multiple regression analyses. The estimates from the multiple regression model indicated that brand equity has significant effect on competitive advantage among alcoholic beverages products and producers. This is evident in the statistical significance of the brand awareness, brand loyalty, and perceived quality variables at the 5% significant. We conclude therefore that brand equity has positive and significant predictive effect on competitive advantage. Hence, firms could enhance competitive advantage by paying attention to brand equity variables.

Keywords: brand equity; competitive advantage; alcoholic beverages; Uganda.


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1 Introduction

Branding has a remarkable capacity to impact the way people perceive products. Consumers rarely just see a product or service; they see the product together with the brand. As a result, how they perceive a product is shaped by the brand. Ancient history provides evidence on the importance of branding and in those days, names were put on such goods as bricks in order to identify their maker (Farquhar, 1989). It is also known that trade guilds in medieval Europe used trademarks to assure the customer and provide legal protection to the producer. Since the earliest times, producers of goods use branding to distinguish their products. Producers’ pride in their products has no doubt played a part in branding. More particularly, branding provides purchasers with a means of recognising and specifying products and increasing desire to repurchase or recommend the products to others. In recent times, almost everything has a brand: a company, a country, city, politician, an artist and so on. Marketing and advertising a brand is a form of sales. Brand is not what you say it is, it is what they say it is (Jones and Taylor, 2007). The main goal of any branding activities is to be able to create trust and loyalty which often leads to the possibility of charging a higher price for the product and branding is built to create action (Goward, 2015). The importance of branding has therefore been established as a success factor to modern business firms.

Aaker (1991) defined brand equity as a set of assets and liabilities linked to a brand and its attributes (name, logo, or symbol) that add to (or subtract from) the value provided by a product or service to an organisation and or that organisation’s customers. In a later study, this study adopts this classification of brand assets as a measure of brand equity. Brand awareness is the ability of a potential buyer to recognise or recall that a brand is a part of a specific product category (Keller, 1993). It is considered a major element of brand knowledge and can influence a consumer’s purchasing decision by eliminating competing brands from consideration. Brand association contains the meaning of a brand for consumers (Aaker, 1996). It is related to the memory of a brand. Brand loyalty is a measure of the relationship a customer has with a brand (Kamakura and Russell, 1993). Perceived quality is the customer perception to the overall quality or superiority of a product or service with the intent to expect respect (Aaker and Jacobson, 1994; Zeithaml, 1988). Other proprietary brand assets are a firm’s trademarks, patents and channel relationships that provide protection for the organisation’s competitive position in the market (Wong, 2013).

Although many schools of thought exist on the concept of brand equity, they can be integrated into two main approaches namely: customer-oriented brand equity and financial brand equity. The customer-oriented brand equity approaches brand value by taking the consumers’ point of view. This approach does not put a financial value on brands; instead it measures consumer behaviour and attitudes that have an impact on the economic performance of brands. Financial brand equity, on the other hand, refers to the financial value of the brand which, in fact, is an intangible, intellectual asset built over time as a positive result of business investment. The study concentrates on the customer-oriented brand equity. Customer-based perspective relies on the market’s perception, consumer’s attitude, and the likelihood that the consumer will purchase the product or service. Customer mind-set measures the awareness, attitudes, associations, attachments, perceived quality and loyalties that customers have toward a brand and that have been the focus of much academic research (Wong, 2013).
Competitive advantage refers to ability gained through attributes and resources to perform at a higher level than others in the same industry or market. According to Naatu (2016), it is the tool that enables a company to take a bigger market share and generate more sales. It is an advantage gained over competitors by offering customers greater value, either through lower prices or by providing additional benefits and services that justify similar or possibly higher prices. A firm has competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential player. Competitive advantage, in the opinion of Porter (2008) is a key determinant of superior performance that ensures survival and prominent placing in the market. Given that every firm desires to be a going concern, competitive advantage becomes a sustainability factor to modern business firms. Competitive advantage therefore is core for strategic management, as every organisation searches for a vantage point that could deliver competitive edge against its rivals. It makes an organisation different, by doing what others cannot, or doing it better than the others. Since competitiveness is a function of the exploitation and leveraging of the internal resources, strategies are designed to capitalise on core competencies. Distinctive assets, therefore, forms a basis for creating sustainable competitive advantage.

The study of competitive advantage has attracted profound research interest due to contemporary issues regarding superior performance levels of firms in today’s competitive market. But most of the studies were conducted in developed and emerging Asian countries (see for example, Madden et al., 2006; Nurittamont and Ussahawanitchakit, 2008; Amegbe, 2016; Cheng, 2017). These studies majorly examined the effect of product branding and competitive advantage in sectors such as sports and tourism, financial, spa business, etc. None of these studies were conducted in Uganda nor concentrated on alcoholic products. Hence, there is need to address this gap in the literature by investigating the effect of brand equity on competitive advantage in alcoholic beverages in Uganda.

More so, the beer industry in Uganda in recent time is flooded with a vast variety and a number of brands which are struggling with each other to make their own mark in the industry and fighting the fierce competitors to win over consumers. Walekwa (2009) notes that despite the efforts Uganda Breweries Limited (UBL) had put on communicating the Senator Extra Lager through various channels, including cultural galas, advertising and sales promotion, the brand communication effectiveness had remained low signified through low sales of less than 10% on average countrywide since its inception in 2004. In 2012, UBL was a market leader in Uganda with a respectable market share of about 69% compared to Nile Breweries at about 31%. Not anymore. Nile Breweries, whose key brands include Club, Eagle (Dark, Eagle and Lager), Nile Gold and Nile Special have gained strong market momentum and are top sellers. On the other hand, Uganda Breweries brands including Guinness, Tusker, Bell, Senator, Smirnoff, are slowly losing demand. Once the underdog, Nile Breweries now boasts of over 70% of the market against UBL’s share estimated at 30%. Due to brand proliferation witnessed especially in beer industry in Uganda, there is a growing importance of branding, brand equity and brand extension in beer industry. Hence the need to study customer based brand equity with its associated dimensions, product brand equity as a new dimension for competitive advantage.

The purpose of this study therefore was to evaluate the effect of brand equity variables on competitive advantage among alcoholic beverage products and producers in Kabale District South Western Uganda. The findings of this study are important to
existing and prospective alcoholic beverage producers in Uganda, regulators of alcoholic beverages, and to future researchers. The producers of alcoholic beverages, for example, will understand how branding affect competitive advantage. The regulators will gain evidence-based insight into regulation of branding so as to sustain alcoholic beverages industry. The findings will further enrich existing knowledge on interaction between branding and competitive advantage as well as provide literature for future researchers of related subject. The remainder of this paper organised as follows: Section 2 contains brief review of literature. Section 3 describes the data and method for analysis. Section 4 presents results and discussions, and Section 5 provides conclusions and recommendations.

2 Brief review of empirical literature

Numerous empirical studies have evaluated the linkage between competitive advantage and brand equity. Baldauf et al. (2003) examined the relationship between brand equity and financial performance in Australian organisations. They investigated the effect of perceived brand equity on brand profitability, brand sales volume, and perceived customer value and the results indicate that all three measures are significant indicators and predictors of competitive advantage. A similar empirical research by Madden et al. (2006) demonstrate a significant and positive relationship between brand equity and desired organisational outcomes such as increased profitability, enhanced brand extension opportunities, more powerful organisational communication, and increased levels of consumer preferences and purchase intentions.

Nurittamont and Ussahawanitchakit (2008) examined the influence of brand equity on competitive advantage and performance of spa business in Thailand. In this study, four dimensions of brand equity including brand awareness, brand loyalty, brand association, and appreciation of quality, were chosen as independent variables. The results indicate that brand equity has a significant positive relationship with competitive advantage and performance. Market turbulence as a moderating variable between competitive advantage and performance did not moderate the relationships. Najafizadeh et al. (2013) noted that brands are important to customers as well as to firms in different ways. For instance, customers view a brand as a company’s value promise and differentiation to be received consistently in terms of features, benefits and services, and that customers buy brands and not products. In addition, benefits of brands to consumers may be real, illusory, rational or emotional, tangible or intangible. However, they suggested that emotional or symbolic benefits, which are more intangible and difficult to imitate, should be developed in customers’ mind. Thus a brand serves as a guide to customers’ expectations of the company, point of differentiation and the benchmark for evaluating performance. A later study by Junior (2018) established that brand portfolio strategy is how firms manage their brands and sub-brands within a targeted market, considering the consumer’s price and quality perceptions and the competition within the targeted market, and brand architecture posits the same challenge in terms of a plain definition about what it is. He concludes that the key concept behind brand architecture is customers’ mental organisation, that is how a brand, including its sub-brands, is depicted across consumers’ minds, showing them where each brand is located in the entire portfolio of brands, its unique characteristics and which brand will satisfy their current needs.
Nabatanza (2014) evaluated the critical role played by branding on the competitiveness of international new ventures in Uganda. It examined the firm level factors that contribute to competitiveness of international new ventures (INV). Specifically, the study investigated whether entrepreneurial and branding resources and capabilities greatly contribute to competitiveness of INV. The study followed a positivist and quantitative methodological approach to establish the causalities and social order of competitiveness of INV in Uganda. The purpose of the study was actualised through adopting a cross-sectional survey design. The study results reveal that brand orientation greatly contributes to international competitiveness whereas the interaction between entrepreneurial and branding resources and capabilities significantly enhances brand advantage of INV. In addition, the study indicates that in the short run, brand advantage constrains the contribution of entrepreneurial and branding capabilities to competitiveness of INV.

Kalembe (2015) conducted a study on contribution of branding in enhancing performance of tourism sector in Rwanda. She documented evidence on the importance of these dimensions (brand awareness, Tourism brand loyalty, tourism brand image and perceived quality) in enhancing the performance of the tourism sector in Rwanda. The results established that there is a relationship between branding and tourism performance in Rwanda. She concluded therefore that branding has a significant positive effect on tourism performance in Rwanda.

Sharma et al. (2010) in their empirical study on attaining competitive advantage through brand equity, provided evidence showing that brand equity enhances the brand’s value and thus, certainly gives the company the power to bargain with its suppliers, intermediaries, and even the government bodies. Greater brand equity means a stronger brand and stronger brands means a higher market share, return on investment, and a higher shareholder value, which enables attainment of a greater competitive advantage over competitors. Also, it attracts the best talent and respect among industry players by creating a positive motivational climate in the organisation, since the internal customers would take pride in staying associated with it.

Amegbe (2016) showed that branding has positive and predictive power on competitive performance of Private Universities in Ghana. The study further indicate that brand association and brand loyalty positively impact private universities performance. The sample comprises 213 male and 234 female students studying at various private universities in the Greater Accra Region of Ghana. In order to have fair representation of students from all levels of classification from all the private universities in Accra, convenience sampling was purposefully used to collect data from undergraduate students in the private universities sampled. The result of the study indicated that the dimensions of brand equity and private universities’ performance are positively related. The regression analyses indicate that there is a positive predictive power of brand association and brand loyalty on private universities performance. However, the study did not find brand awareness and perceived quality to be positively related. The conclusion of the study is that the performance of private universities’ and brand equity depends on the high loyalty among students.

Njuguna (2017) examined the effect of strategic management options on competitive advantage of youth enterprises in Kenya. The study focused on areas of building collaborative networks, engaging in innovation processes through product value addition, focusing on product diversification and employing sustainable business development services in order to achieve sustainable competitive advantages over competitors. The
findings of the study revealed that collaborative networks, innovation, product diversification and business development services have positive significant relationship with competitive advantage of youth enterprises in Kenya. The findings indicate that innovation positively and significantly influences competitive advantage of youth enterprises in Kenya. The Pearson product moment correlation coefficient revealed a moderate positive and significant correlation between innovation and competitive advantage of youth enterprises.

Cheng (2017) provided evidence to show that brand equity has significant effect on competitive advantage from his study on the effects of brand image, perceived price, perceived quality, and perceived value on the purchase intention towards sports and tourism products of the 2016 Taichung International Travel Fair. The study aimed at discussing the effects of brand image, perceived price, perceived quality, and perceived value on purchase intentions toward sports, sightseeing, and tourism products of the 2016 Taichung International Travel Fair. Participants of the Taichung International Travel Fair were used as subjects and questionnaires were handed out via purposive sampling. A total of 400 valid questionnaires were acquired, and after excluding 20 invalid questionnaires that were incomplete or with obvious mistakes, the valid response rate was 95.2%. Data collected were analysed using descriptive statistics and structural equation modelling. Specifically, the results of this study show that:

1. Brand image does not have significant effect on purchase intention.
2. Perceived price has significant effect on purchase intention.
3. Perceived quality has significant effect on purchase intention.
4. Perceived value has significant effect on purchase intention.

Ökten et al. (2019), in a very recent paper, observed that growth of a country’s economy is mostly influenced by physical or non-physical assets but that non-physical assets are the most important driving forces in the country’s economy to accelerate growth. Hence, they measured the effect of the brand values on the growth of a country’s economy. They used autoregressive distributed lag (ARDL) co-integration analysis to evaluate the correlation between the growth rates of 38 countries between 2008 and 2017 and the Top 500 brand values in both short and long-term. Their results show that the effect of investing in national brands and increasing brand values of the country was negative in the short-term, but positive on the long-term with regards to the country’s economic growth.

3 Methodology and ethical consideration

3.1 Methodology

This study was conducted using primary data. The primary data were collected through self-administered questionnaires distributed to producers, wholesalers, retailers and consumers of alcoholic beverages in Kabale District, Uganda. The questionnaire was selected as an instrument to collect the data because it is straightforward and less time consuming for respondents. The structured questionnaires were administered through drop and pick later method.
The target population of the study was the locally 1783 including wholesalers, retailers, customers and brand and marketing managers of Nile Special Lager, Eagle Lager, Senator Extra Lager, club and Consumers of unbranded beer products in the Kabale District. The sample size was determined using the Slovene’s formula thus:

\[
 n = \frac{N}{1 + N(\alpha)^2}
\]

where \( n \) = sample size, \( N \) = target population and \( \alpha = 0.05 \) level of significance.

\[
 n = \frac{1783}{1 + 1783(0.05)^2}
\]

\[
 n = \frac{1783}{1 + 1783(0.0025)}
\]

\[
 n = \frac{1783}{1 + 4.5}
\]

\[
 n = \frac{1783}{5.5}
\]

\[
 n \approx 324
\]

Therefore the minimum sample size chosen in this study was 324 respondents. Multistage sampling techniques were used in this study. Simple random sampling technique was used to select alcoholic beer products and producers. Purposive sampling technique was adopted to sample shopping centre to collect consumer information. Shopping centres were selected based on a marketing investigation. The selection criterion was for clubs/bars that receive more than 20 customers per day. A total of 104 hotels, restaurants and bars were chosen for the study and in each of the hotels, restaurants, clubs and bars, two customers and one manager were chosen for the survey. Therefore 201 customers were selected, 104 retailers/managers, 17 wholesalers and two distributors who represented beer producers were selected for the study. This is in line with Nworgu (1991) who stated that no fixed number is ideal, rather it is the circumstances of the study situation that determine what number or what percentage of the population that should be studied. Purposive sampling was used to select respondents from the different strata.

The general concept of validity was traditionally defined by Brown (1996) as the degree to which a test measures what it claims to measure. To ensure the validity of the instrument, face validity and content validity were evaluated. To ensure the validity of the questionnaire, experts’ opinion and content validity index (CVI) were used. The instrument was validated by four experts: Two experts in measurement and evaluation and two academics. The experts in measurement and evaluation as well as my academics measured the face validity of the instrument, ensuring that the item/statements addressed the research purposes and questions, as well as the adequacy of the constructs used in the questionnaire. All their criticisms, corrections and suggestions resulted in the final copy of the instrument used for data collection. The CVI was computed to determine the content validity of the instrument in this study. Amin (2005) noted that the acceptable CVI for an instrument should be 0.70 or above. The CVI was calculated as follows:
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\[ CVI = \frac{\text{Number of questions declared valid}}{\text{Total number of questions}} \]  

(2)

\[ CVI = \frac{79}{84} \]

\[ CVI = 0.94 \]

A CVI value of 0.94 is greater than 0.7 minimum CVI required for a valid instrument. Hence, the instrument is valid.

In order to ensure that the research instrument was reliable and can consistently produce reliable data when administered, the researchers adopted test-retest, split half and Cronbach’s alpha. The test-retest reliability method measures the stability of the research instrument. It intends to determine the extent to which a measure, procedure or instrument yields the same result on repeated trials (Ebuoh, 2017). This was done by administering the research instrument twice on the same set of respondents at different times. The questionnaire was given to 30 respondents. Same instrument was re-administered to the respondents after two weeks. Data collected from the two intervals were evaluated with correlation coefficients (Pearson \(r\)). Hence, a reliability coefficient of 0.76 was obtained. This indicates that the instrument was reliable for the study. An instrument is considered reliable when it has a coefficient ranging from 0.60–0.99.

Split-half method measures the internal consistency of the instrument. In this method, research instrument was split into two equivalent halves and the test score correlated together (Oyerinde, 2011). This was estimated with correlation coefficients (Pearson \(r\)). Correlation coefficients range from 0.00 to 1.00. Correlation coefficient of 0.00 means no correlation, while correlation coefficient of 1.00 means perfect correlation. The results of the split-half (0.886 and 0.884) presented in Table 1 indicate that the instrument was reliable for the study. Similar to the test re-test and split-half methods, Cronbach’s coefficient alpha is the measure of scale’s internal consistency. A Cronbach’s alpha coefficient greater than 0.7, is commonly acceptable, as a rule of thumb, as internal consistency of research instrument (Nworgu, 1991). As can be seen in the results of the reliability tests presented in Table 1, the Cronbach’s alpha coefficient is 0.934, and indicates that the instrument is very reliable. The other tests meant to corroborate Cronbach’s alpha show that the instrument was very reliable.

<table>
<thead>
<tr>
<th>Number</th>
<th>Type of reliability test</th>
<th>Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cronbach’s alpha</td>
<td>0.929</td>
<td>Very reliable</td>
</tr>
<tr>
<td>2</td>
<td>Split-half</td>
<td>Part 1 = 0.886</td>
<td>Very reliable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Part 2 = 0.884</td>
<td>Very reliable</td>
</tr>
<tr>
<td>3</td>
<td>Correlation between forms</td>
<td>0.870</td>
<td>Very reliable</td>
</tr>
<tr>
<td>4</td>
<td>Spearman-Brown coefficient</td>
<td>Equal length = 0.824</td>
<td>Very reliable</td>
</tr>
<tr>
<td>5</td>
<td>Guttman Split-half</td>
<td>0.823</td>
<td>Very reliable</td>
</tr>
</tbody>
</table>

Source: Field Study (2017)
3.2 Regression analysis

To establish the effect of brand equity on competitive advantage among alcoholic beverage products in Kabale District Uganda, the researchers conducted multiple regression analysis. The multiple-regression model was specified as follows:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n + \mu \]  

where

- \( Y \): independent variable
- \( \beta_0 \): intercept of \( Y \)
- \( \beta_i \): parameter of the dependent variables
- \( \mu \): error term.

In accordance with the purpose of this study, equation (3) was specified thus:

\[ CA = f(BA, BAS, BL, PQ, OPBA) \]  

To estimate the multiple regression models, equation (4) was converted as follows:

\[ CA = \beta_0 + \beta_1 BA + \beta_2 BAS + \beta_3 BL + \beta_4 PQ + \beta_5 OPBA + \mu \]  

where

- \( CA \): competitive advantage
- \( \beta_0 \): constant or intercept
- \( \beta_i = \beta_5 \): parameters of the brand asset variables
- \( \mu \): error term
- \( BA \): brand awareness
- \( BAS \): brand association
- \( BL \): brand loyalty
- \( PQ \): perceived quality
- \( OPBA \): other proprietary brand assets.

The sign of the slope coefficients (\( \beta_1 \) to \( \beta_5 \)) was used to establish the effect of brand equity on competitive advantage among alcoholic beverages products. Positive and significant slope coefficients indicate that brand equity has positive effect on competitive advantage among alcoholic beverages products. Negative and significant slope coefficients, on the other hand, would indicate that brand equity variables have negative effect on among alcoholic beverages products. The a priori expectation of the slope coefficients are as follows:

\[ \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 > 0 \]

The implication of the a priori expectation on the basis of the extant literature is that the brand awareness, brand association, brand loyalty, perceived quality, and other
proprietary brand assets, would have positive effects on competitive advantage among alcoholic beverages products.

The assumptions of the error term (μ) are absence of serial correlation and heteroscedasticity. These assumptions were evaluated using Durbin-Watson statistic and ARCH-LM test. The Durbin-Watson test statistic tests the null hypothesis that the residuals from an ordinary least-squares regression are not autocorrelated against the alternative that the residuals are autocorrelated process. The Durbin-Watson statistic ranges in value from 0 to 4. A value near 2 indicates non-autocorrelation; a value toward 0 indicates positive autocorrelation; a value toward 4 indicates negative autocorrelation. The estimated regression model would therefore be adequate if the Durbin-Watson coefficient is significantly close to 2. This would indicate evidence of the absence of autocorrelation in the error term of the regression of brand equity on competitive advantage among alcoholic beverages products. The study was conducted at the five percent (5%) significance level.

3.3 Ethical consideration

To ensure confidentiality of the information provided by the respondents and to ascertain the practice of ethics in this study, the following activities were implemented by the researchers:

- Observing the privacy of participants. This was achieved by giving each participant up to one week to answer the questionnaires at their own timing and pace.
- Ensuring that participation in the study was voluntary. The researchers advised any participant who feels he or she was busy or unable to participate, to partially or completely withdraw from the study on their own freewill.
- Informing the respondents of the researchers’ intention to make them part of his study. This was achieved by giving the respondents consent form to fill.
- Ensuring anonymity of the participants by not mentioning or publishing their names in any part of the research report.
- Ensuring citation and acknowledgment of the authors whose works were consulted in this study, in order to eliminate chances of plagiarism.

4 Empirical results and discussion

4.1 Response rate and demographic characteristics of respondents

Response rate is usually conducted to ascertain the percentage of the target respondents that actually responded to the questionnaire. From the results presented in Table 2, notice that out 324 targeted respondents who were given questionnaires, 312 of them filled and returned the questionnaires. This represents a response rate of 96%. This percentage was considered high and good enough to represent the target population, given the busy schedule of the targeted population. This high response rate was achieved due to marking-up of the minimum sample size by 20% (64), which resulted in distributing 388 questionnaires. The essence of the mark-up is to minimise the problem associated with
non-return of questionnaire by some respondents. The questionnaires returned from the field were assessed and found to be duly completed for use in this study.

Table 2  
Response rate

<table>
<thead>
<tr>
<th>Targeted respondents</th>
<th>Actual respondents</th>
<th>Responses as percentage of targeted respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>324</td>
<td>312</td>
<td>96%</td>
</tr>
</tbody>
</table>

Source:  
Response rate analysis (2017)

Table 3  
Respondent demographic characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>250</td>
<td>89.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>62</td>
<td>19.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>312</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td>18–24</td>
<td>14</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>25–35</td>
<td>73</td>
<td>23.4</td>
</tr>
<tr>
<td></td>
<td>36–45</td>
<td>118</td>
<td>37.8</td>
</tr>
<tr>
<td></td>
<td>46–55</td>
<td>82</td>
<td>26.3</td>
</tr>
<tr>
<td></td>
<td>55 and above</td>
<td>25</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>312</td>
<td>100</td>
</tr>
<tr>
<td>Education level</td>
<td>High school</td>
<td>33</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
<td>54</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>113</td>
<td>36.2</td>
</tr>
<tr>
<td></td>
<td>Bachelors</td>
<td>96</td>
<td>30.8</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>16</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>312</td>
<td>100</td>
</tr>
<tr>
<td>Beer brand</td>
<td>Eagle</td>
<td>78</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Nile</td>
<td>98</td>
<td>31.4</td>
</tr>
<tr>
<td></td>
<td>Club</td>
<td>95</td>
<td>30.4</td>
</tr>
<tr>
<td></td>
<td>Senator</td>
<td>38</td>
<td>12.2</td>
</tr>
<tr>
<td></td>
<td>LocalBeer</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>312</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Authors’ computation

The study presents the demographic profiles of the respondents in Table 3. From Table 3, notice that majority of the respondents were males with 80.1%, and 19.93% of the respondents were females. The gender of respondents shows that more males consume alcoholic beverages in Kabale Uganda. It also shows that the finding of the study does not suffer from gender bias.

Notice also, from Table 3, that majority of the respondents were aged between 36–45 years of age (37.8%), followed by those aged between 46–55 (26.3%). The least of the respondent were those aged between 18–24 years (4.5%). These indicate that the respondents were adults.

The study requested the respondents to indicate their level of education. Notice from Table 3 that diploma education is the level of education with the highest response rate.
From Table 3, 36.2% of the respondents indicated their highest education level as diploma. This is followed by bachelors and certificate education, with 30.8% and 17.3% respectively. The respondents with masters’ degree are the least sampled with 5.1% response rate. Table 3 indicates that all of the respondents sampled in this study have formal education.

Data was collected from the respondent on their beer brand. From Table 3, see that majority of the respondents take Nile beer (31.4%), closely followed by Club beer with respondents rate of 30.4%. The least brand of alcohol consumption according to the respondents was local beer with a 1% response rate. These imply that Nile beer is the favourite for respondents sampled.

4.2 Descriptive statistics for brand equity and competitive advantage

Table 4 shows the descriptive statistics of the brand equity variables (brand awareness, brand association, brand loyalty, perceived quality, and other proprietary brand assets), and competitive advantage variable of alcoholic beverage products in Kabale Uganda. As shown in Table 4, the average and standard deviation of brand awareness (3.7), brand association (3.5), brand loyalty (3.4), perceived quality (3.8), and other proprietary brand assets (3.8), respectively. These imply that majority of the respondents agree with brand equity variables. The corresponding standard deviations are 0.4, 0.4, 0.3, 0.5, and 0.6, respectively. These indicate minimal variability from the mean responses. Skewness and kurtosis represent the nature of departure from normal distribution. In a normally distributed variable, skewness is zero and kurtosis is three. Positive or negative skewness indicate asymmetry in the variables and kurtosis coefficient greater than or less than three suggest peakedness or flatness of the data (DeCarlo, 1997). The skewness values for the brand awareness (0.08), brand association (0.04), brand loyalty (0.04), perceived quality (0.07), other proprietary brand assets (0.06), and competitive advantage (0.05), are close to zero. These imply that variables of this study are approximation of normal distribution. The implication is that there are normal changes in the variable as predicted by normal distribution. Similar to skewness, the kurtosis coefficients for all the variables are approximately three, thus provide support for normal distribution in the variables (Wilcox and Keselman, 2003).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. dev.</th>
<th>Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Awareness</td>
<td>3.7123</td>
<td>.44780</td>
<td>2.472</td>
<td>.084</td>
</tr>
<tr>
<td>Brand Association</td>
<td>3.5302</td>
<td>.42265</td>
<td>3.035</td>
<td>.048</td>
</tr>
<tr>
<td>Perceived Quality</td>
<td>3.4894</td>
<td>.37680</td>
<td>2.665</td>
<td>.073</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>3.8051</td>
<td>.51479</td>
<td>3.366</td>
<td>.046</td>
</tr>
<tr>
<td>Other Proprietary Brand Assets</td>
<td>3.8574</td>
<td>.60585</td>
<td>3.200</td>
<td>.062</td>
</tr>
<tr>
<td>Competitive Advantage</td>
<td>3.6355</td>
<td>.36519</td>
<td>3.856</td>
<td>.057</td>
</tr>
</tbody>
</table>

Note: Std. dev. is standard deviation.

Source: Authors’ computation
4.3 Analysis of multicollinearity in brand equity variables

Multicollinearity exists whenever two or more of the predictors in a regression model are moderately or highly correlated. It is a state of very high intercorrelations or inter-associations among the independent variables. It is therefore a type of disturbance in the data, and if present in the data the statistical inferences made about the data may not be reliable. In the presence of high multicollinearity, the confidence intervals of the coefficients tend to become very wide and the statistics tend to be very small. It becomes difficult to reject the null hypothesis of any study when multicollinearity is present in the data under study. The presence of multicollinearity in study was evaluated using tolerance levels and the variance inflation factor (VIF). The decision rule for the tolerance level is to accept absence of multicollinearity if the tolerance level is greater than 0.5. Similarly, there is absence of multicollinearity if the VIF if less than three. Notice from Table 5 that the tolerance level is greater than 0.5 in all the variables of brand equity. These indicate evidence of absence of multicollinearity in the predictor variables. Similarly, coefficients of the VIF are less than three for all brand equity variables. Hence, provide support for the absence of multicollinearity shown by the Tolerance level. Consequently, there is no existence of multicollinearity in the predictor variable. They are therefore good for empirical analysis.

Table 5 Collinearity statistics

<table>
<thead>
<tr>
<th>Construct</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>BrandAwareness</td>
<td>0.545</td>
<td>1.836</td>
</tr>
<tr>
<td>BrandAssociation</td>
<td>0.704</td>
<td>1.419</td>
</tr>
<tr>
<td>PerceivedQuality</td>
<td>0.678</td>
<td>1.476</td>
</tr>
<tr>
<td>BrandLoyalty</td>
<td>0.627</td>
<td>1.594</td>
</tr>
<tr>
<td>OtherProprietaryBrandAssets</td>
<td>0.761</td>
<td>1.314</td>
</tr>
</tbody>
</table>

Source: Author’s computation (2017)

4.4 Effect of brand equity on competitive advantage among alcoholic beverage products

This section presents the results of the regression model estimated to brand equity on competitive advantage among alcoholic beverage products in Kabale Uganda. Notice from the regression model estimates presented in Table 6, that brand equity has significant effect on competitive advantage among alcoholic beverage products and producers. This is evident in the statistical significance of the brand equity variables at the 5% significant level, except for brand association and other proprietary brand assets. These results indicate that brand equity variables have positive effect on competitive advantage among alcoholic beverages products in Kabale Uganda.

The estimates of the regression model further suggest that brand equity is positively related to competitive advantage among alcoholic beverages products. This is evident in the coefficient of determination (R) of 0.75. Since correlation varies between –1 to +1, R value of 0.75 hence suggests that a strong positive relationship exists between brand equity and competitive advantage among alcoholic beverage products. The value of R² is 0.67. This indicates that 67% of the total variation in competitive advantage is accounted for by brand equity variables. The F-statistics indicate that all coefficients excluding
constant, are not zero. This is evident in the sig-value (0.00) of t-statistics is less than the critical value (0.00). Standard error of estimate represents the imprecision of the regression equation in fitting the data. The closer the coefficient of standard error of estimates to zero, the better and more reliable the analysis. From Table 6, coefficient of standard error of estimates is close to zero (0.01). This suggests that the regression equation is properly fitted the data. More so, the Durbin-Watson coefficient (1.97) indicates that there is absence of serial correlation in the residual of the regression estimate. This is because the Durbin-Watson value is near to two as stated in Section 3.2.

Table 6 Results of the effect of brand equity on competitive advantage among beverages

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Std. error</th>
<th>t-stat.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.759</td>
<td>0.312</td>
<td>8.831</td>
<td>0.000</td>
</tr>
<tr>
<td>BrandAwareness</td>
<td>0.182</td>
<td>0.067</td>
<td>2.709</td>
<td>0.007</td>
</tr>
<tr>
<td>BrandAssociation</td>
<td>0.114</td>
<td>0.063</td>
<td>1.809</td>
<td>0.071</td>
</tr>
<tr>
<td>PerceivedQuality</td>
<td>0.179</td>
<td>0.072</td>
<td>2.496</td>
<td>0.013</td>
</tr>
<tr>
<td>BrandLoyalty</td>
<td>0.165</td>
<td>0.055</td>
<td>3.020</td>
<td>0.003</td>
</tr>
<tr>
<td>OtherProprietaryBrandAssets</td>
<td>0.013</td>
<td>0.042</td>
<td>0.314</td>
<td>0.753</td>
</tr>
</tbody>
</table>

Note: R = 0.75, R² = 0.67, std. error = 0.01, Durbin-Watson = 1.97 and F(5, 306) = 16.24 [0.00].

Source: Author’s computation (2017)

The results of this study are in accord with extant knowledge. Baldauf, Cravens and Binder (2003) report that the effect of perceived brand equity on brand profitability, brand sales volume, and perceived customer value are all significant indicators and predictors of performance measures hence competitive advantage. A similar empirical research by Madden et al. (2006) demonstrate a significant and positive relationship between brand equity and desired organisational outcomes such as increased profitability, enhanced brand extension opportunities, more powerful organisational communication, and increased levels of consumer preferences and purchase intentions. The results are also in tandem with Nurittamont and Ussahawanitchakit (2008), who document evidence showing that the brand equity has a significant positive relationship with competitive advantage and performance. Similarly, Cheng (2017) provides evidence to show that brand equity has significant effect on competitive advantage.

Table 7 Diagnostic test results for effect of brand equity and competitive advantage

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Statistic</th>
<th>Significance level (χ²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-B Q-statistic</td>
<td>7.2993</td>
<td>0.1540</td>
</tr>
<tr>
<td>ARCH-LM</td>
<td>3.4907</td>
<td>0.4792</td>
</tr>
</tbody>
</table>

Source: Author’s computation (2017)

Further diagnostic tests were conducted to ascertain adequacy of regression model estimated to examine the effect of brand equity variables on competitive advantage among alcoholic beverage products, for policy-making and the results are displayed in Table 7. From Table 7, notice that the Ljung-Box Q-statistic for the regression model residuals are not significant. This indicates that there is no autocorrelation in the residuals. Similarly, the ARCH-LM diagnostic test result shows absence of
heteroscedasticity in the residuals at 5% significance level. Therefore, the outcomes reported are serially uncorrelated and homoscedastic. Hence, the results reported are valid and reliable.

5 Conclusions and recommendations

This study investigated the effect of brand equity on competitive advantage in alcoholic beverage products in Kabale District Uganda. Specifically, the study sought to determine the effect of brand awareness, brand association, brand loyalty, perceived quality, and other proprietary brand assets on competitive advantage in alcoholic beverage products and producers in Kabale District Uganda, by evaluating responses obtained through questionnaires using descriptive analysis and multiple regression analysis. From analysis of respondents, the percentage of targeted respondents that actually responded to the questionnaire was 96%. From the preliminary analysis conducted in the study, majority of respondents in this study have the following attributes:

1. diploma level education
2. are males
3. aged between 36–45 years
4. prefer Nile lager beer.

The data approximates normal distribution, with absence of multicollinearity. The results of the multiple regression model estimated to determine the effect of brand equity on competitive advantage in alcoholic beverage products suggest that that brand equity has significant effect on competitive advantage among alcoholic beverage products. This is evident in the statistical significance of the brand awareness, brand loyalty, and perceived quality variables at the 5% significant. We therefore conclude that brand equity has positive and significant predictive effect on competitive advantage. Hence, firms could enhance competitive advantage by paying attention to brand equity variables.

We therefore recommend that that brand managers should prioritise brand equity as a strategy to attract potential customers because it is significant effect on competitive advantage. Marketing and brand managers of alcoholic products should appreciate the important roles of brand awareness, brand loyalty, and perceived quality as major determinant of competitive advantage. Alcoholic beverage producers should invest resource in enhancing the area of brand awareness, brand loyalty, and perceived quality in order to strengthen their brand equity in the market. Beer producers should also engage in activities that emphasis the reason to re-buy their products in the minds of consumer, thereby sustain brand loyalty. In addition, we recommend that it is important to construct a distinct brand name, colour combination, and logo due in order to enhance brand association and to establish the brand in the mind of the consumers.
References


Amin, E.M. (2005) Social Science Research: Conception, Methodology and Analysis, Makerere University of Printry, Kampala.


