# Measuring Consumer Based Brand Equity: An Empirical Study on Coca-Cola in Bangladesh 

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#### Abstract

: Building brand equity, or strong brands, is considered to be one of the key drivers of a business's success. In this article the author examines what constitutes brand equity in the beverage industry. The objective of the research was to analyze the sources and consequences of Coca Cola's Brand Equity in Bangladesh. The study has collected consumers' perception of brand equity from 138 respondents through a structured selfadministered questionnaire. The revealed that the brand awareness, brand perceived quality, the brand image and the brand Loyalty have a significant positive influence on Coca-Cola's Brand Equity, whereas consumers' purchase intention and their willingness to pay a premium price for Coca-Cola brand are clear consequences of the brand value. This paper concludes that the key to effective brand equity measurement for Cola-cola lies on its ability to identify the determinants. Finally, the paper suggests some recommendations that can be used by the management to maximize the value of their brands.


## Keywords: Brand Equity, Cola-Cola, Bangladesh

## Introduction:

Product plays an important role in creating growth opportunities and generating sales as well as profit for the companies. A product is intended to meet the needs of buyers in the product market, while a brand is the product offered by a specific company (Cravens and Piercy, 2009). Brand, representing the promise of consistency of product functions, benefits and services that are delivered from sellers to buyers, becomes one of the key factors for modern enterprises to exist and succeed. Strong brands have become an important part of the asset value of a company. It facilitates a more predictable income stream; it helps to increases cash flow by increasing market share, reducing promotional costs, and allowing premium pricing. The opportunity for using brand strength to build competitive advantage has encouraged the marketers to focus attention on the concept of brand equity.

Brand equity means the increment of marketing utility or output for a brand product. Brand with a strong positive brand equity, are generally brands with a highly loyal consumers and high market share. Brand equity is a key indicator of the state of the health of the brand. Brand-equity measurement is a single, critical measure of feedback from customers. This measurement will help in gauging the impact of the brand's own marketing-mix actions on customers and in providing feedback on whether the evolution

[^0]of the brand's equity is on course. Brand equity provides value to the firms by enhancing efficiency and effectiveness of marketing programs, prices and profits, brand extensions, trade leverage, and competitive advantage (Yoo and Donthu, 2001). These benefits by measuring Brand Equity initiate many companies to follow Branding Strategy.

In Bangladesh, single study was conducted on brand equity framework in telecommunication services (Matin, S 2016). No doubt, there was lack of empirical study has been conducted to verify the brand equity dimension (i.e. brand awareness, brand loyalty, perceived quality and brand association) in beverages industry especially carbonated drink category in Bangladesh. In this study beverage Industry in Bangladesh are focused. In order to promote the brand management, the paper will use Aaker's (1991) brand equity model and applied it to measure the brand equity of Coca Cola in Bangladesh.

## Overview of carbonated Soft Drinks in Beverage Industry in Bangladesh:

There are various product types in beverages industries. Among the beverages category which is classified in AC Nielsen are soft drinks, non- carbonated drinks, fruit juices, mineral water, energy drink, and isotonic drinks. A soft drink is a drink that typically contains carbonated water, a sweetener, and a natural or artificial flavoring. There are different types of soft drinks are available now a day, such as, juice, mineral water, and carbonated soft drinks in Bangladesh. In a broader sense, soft drinks include colas, sparkling water, iced tea, lemonade, squash and fruit punch. Carbonated soft drinks are also known as soda, pop or soda pop, fizzy drinks or sometimes just coke in some places of this world. Carbonated beverage entered into Bangladesh market in the later part of 1980s. At that time, there were only a few companies in Bangladesh. But with the change of time and by western cultural influences it has become very popular in Bangladesh. Today, soft drinks both carbonated and non-carbonated have spread over in a variety of forms and brands all over the world. The soft drinks market in Bangladesh is more than a Tk. 8000 million (US $\$ 114.28$ million) market, which is expected to reach Tk.10,000 million (US $\$ 142.86$ million) soon, and company insiders believe that there is a huge prospect of this product for the market to expand. The market structure of the beverage industry in Bangladesh is oligopolistic with few firms dominating the market.

Coca Cola was the first carbonated soft drink introduced in the then undivided Pakistan in 1962. After 1971, the Coca Cola production unit in Bangladesh was given to the Freedom Fighter Welfare Trust. Initially, the production capacity was 65 bottles per minutes (bpm) before the handover. The capacity was dropped to 45 bpm later on. However, with new machinery installed, the capacity was increased to 250 bpm in 1985. In 1990, another plant with 500 bpm production capacity was added to this unit. The marketing territory of CocaCola Export Corporation whose brands are Coca Cola, Sprite and Fanta was divided into 2 segments. Tabani Beverage got the marketing territory of Dhaka, Rajshahi and Khulna divisions and part of Barishal division while Abdul Monem Limited got the marketing territory of Chittagong and Sylhet divisions and a part of Barishal division.

Apart from Coca-cola, there are Transcom Beverage Limited, Partex Beverage Ltd, Akij Food \& Beverage Ltd, Agricultural Marketing Company Ltd (AMCL), Globe Soft Drinks Ltd. However, in terms of carbonated drinks, Coca Cola and Pepsi are the leading brands in most parts of the world including Bangladesh. According to the Nielson Report (2015) data, the beverage market is dominated by Transcom Beverage Limited with the 41.10\% market share, Coca Cola is holding $28.40 \%$ and $11.50 \%$ market share is being held by Akij Food \& Beverage Ltd. Pepsi, 7UP, Mirinda, Slice, Mountain dew, RC Cola, Virgin, Uro Cola, Coca Cola, Sprite, and Pran Cola are the major producers of soft drinks in Bangladesh. The other beverage producers are Akij Group (Speed, Wild Brew, Firm Fresh, SPA, Mojo, Clemon, Lemu, Fruitika), Agriculture Marketing Company Limited (Pran), Partex Beverage Limited (RC Cola, RC Lemon and Lychena) and Globe Soft Drinks Limited (Uro Cola, Uro Lemon).

At present Bangladesh has a very competitive market of beverage. Substitutes for soft drink beverage products are bottled water, sports drinks, coffee, and tea. Bottled water and sports drinks are increasingly popular with the trend to be a more health conscious consumer. There are progressively more varieties in the water and sports drinks that appeal to different consumers' tastes, but also appear healthier than soft drinks. In addition, coffee and tea are competitive substitutes because they provide caffeine. The consumers who purchase a lot of soft drinks may substitute coffee if they want to keep the caffeine and lose the sugar and carbonation. Specialty blend coffees are also becoming more popular with the increasing number of coffee shops that offer many different flavors to appeal to all consumer markets. It is also very cheap for consumers to switch to these substitutes making the threat of substitute products very strong. Competition is very fierce among existing firms. Firms can obtain a competitive advantage by the following any of the five ways: Changing prices, improving product differentiation, creating brand equity, creatively using channels of distribution and exploiting relationship with suppliers. Therefore healthy competition in food and beverage sector in Bangladesh leads to better product development and effective pricing for consumers to benefit.

## OBJECTIVE OF THE STUDY:

- To measure the brand equity of carbonated soft drink brand such as Coca-Cola in Bangladesh.


## THEORITICAL FRAMEWORK:

## Brand Equity conceptualization

Brands are intangible assets that are vital for the organization. A product's brand is the name and symbol that identifies it and positions it over similar products (Shah, 2011). American Marketing Associated (AMA) in 1960 stress the importance of the brand's logo and visual signifiers primarily as a basis for differentiation purpose, that is a name, term sign, symbol or design, or a combination of them, intended to identify the goods or
services of one seller and to differentiate them from those of competitors (Baker and Hart, 2008).

Building strong brands has become a marketing priority for many companies nowadays because it provides multiple advantages to establish and create an identity in the market place for a company, while being a key source of competitive advantage (Aaker, 1996). In order to measure the overall value of a determinate brand or product, marketing researchers and managers have begun to examine the concept of Brand Equity (Aaker, 1991; Keller, 1993), which refers to the tremendous value a brand brings to consumers and manufacturers. There is general agreement at the conceptual level as to the meaning of brand equity that can be summarized as:
"The financial value endowed by the brand to the product' (Farquhar 1989). This definition of brand equity was based on the financial value, while the consumer perspective offers definitions (Aaker, 1991) based on consumer perceptions. Consumer based brand equity is defined as:
'The differential effect of brand knowledge on consumer response to the marketing of a brand' (Keller 1993).
"Brand equity is a set of 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 and/or to that firm's customer." (Aaker 1991).

The present research follows the customer based brand equity model proposed by Aaker (1991). Hence, we will define Brand Equity as the set of assets and liabilities linked to the brand, which either increase or decrease the value provided by a product or service to the consumer.

## The dimensions of Customer based Brand Equity:

Aaker (1991) presented the brand equity as assets can be grouped into four dimensions: brand awareness, perceived quality, brand associations, and brand loyalty. In the purchasing process, consumers are not only concerned about the price or quality of a product or brand, but also other variables such as the brand awareness or brand image (Aaker, 1991, 1996). Additionally, this study aims to analyze two consequences of Brand Equity on consumer behavior. For that purpose, we have proposed the analysis of two other dimensions, such as the consumers' purchase intention and their willingness to pay a premium price for the one specific soft drink brand.

First dimension of Brand Equity is brand awareness. It is related to consumer's memory. It is the ability of the consumer to appeal to his memory when a brand name is evoked. Stored information form a set of interconnected nodes (trace in memory) about the brand (Rossiter \& Percy, 1987; Keller, 1993). The more the presence of these nodes is strong, the more the brand has a high awareness. So the higher the level of awareness, the more dominant is the brand in the consumers' mind, and that will increase the likelihood of a
brand to being considered in many purchase decisions (Aaker, 1996, Yoo et al., 2000). Brand awareness is argued as being a first and necessary, but not sufficient, step leading to trial and repeat purchases because the effect of awareness results at best in product curiosity (Konecnik and Gartner, 2007).Therefore, when increasing the level of awareness of a specific beer brand, it increases the probability that the brand will be in the consideration set in a purchase decision. Therefore, we propose the following hypothesis:

## H 1: Brand awareness is positively related to Brand Equity.

Second dimension of Brand Equity is brand quality. A brand name may be used as a substitute for judgment of quality. Customers associate a brand with certain level of quality. Perceived high brand quality helps support a premium price, allowing a marketer to avoid severe price competition (Pride and Ferrell, 2012). Perceived quality provides value to customers by providing them with a reason to buy and by differentiating the brand from competing brands (Kayaman and Arasli, 2007). Favorable perceived brand quality help the brand extension and market penetration since the high regard for the brand will translate into high regard for the selected products. A high perceived quality occurs when potential consumers recognize the differentiation and superiority of a brand in relation with other competitor brands. Therefore, a high level of perceived quality in a specific beer brand would influence consumers' purchasing decision. Therefore, we propose the following hypothesis:

## H2. Perceived quality is positively related to brand equity

Brand Equity is largely supported by brand associations -or brand image. Brand associations can be anything that connects the customer to the brand. It can include user imagery, product attributes, use situations, organizational associations, brand personality and symbols. The brand associations consist in multiple images, ideas, instances or facts that establish a solid network of brand knowledge (Yoo et al., 2000); and are formed as a result of the consumer's brand belief (Aaker, 1991). Therefore, consumers' favorable brand images and beliefs will influence and affect their purchasing behavior and the choice of a brand or even a product. So, consumers' positive and favorable images related to a specific beer brand would increase their beer Brand Equity. So, the following research hypothesis is proposed:

## H 3: Brand image is positively related to Brand Equity

Finally, the equity of a brand is largely created by brand loyalty. Aaker (1996) and Keller (1993) suggest that the value or equity of a brand or product depends on the number of people who are purchasing it regularly. Moreover, brand loyalty has been found to have a direct and positive role in affecting Brand Equity (Atilgan et al., 2005). Therefore, we propose that beer brand loyalty enhances the Brand Equity. Therefore, we will propose the following hypothesis:

## H 4: Brand loyalty is positively related to Brand Equity.

Consumer-based Brand Equity has been considered as a condition or prerequisite for the election or preference of a brand, which subsequently affects the purchase intention. Several studies point out the positive relationship between the dimensions of Brand Equity, brand preference and the purchase intention (Vakratsas and Ambler, 1999; Myers, 2003). Thus, we propose the following research hypothesis:

## H 5: Brand equity is positively related to brand purchase intention

Additionally, Brand Equity is likely to influence the willingness that consumers have to pay a premium price for a product or brand (Arvidsson, 2006). Brand equity in commercial brand names influences consumer response to the increase in the price of the product, so that their response to a price increase is more inelastic (Keller, 2003; Hoeffler and Keller, 2003). Moreover, several authors have demonstrated that consumers are willing to pay a higher price for those brands that have positive brand associations, or otherwise provide with higher value (Erdem et al., 2002; Netemeyer et al., 2004). Therefore, we propose the following hypothesis:

## H 6: Brand equity has a positive effect on consumer willingness to pay a premium price.

Figure 1: Conceptual Proposed Model


## Variables and measurement scales:

The measurement of variables was carried out using a Likert-type scale of 5 points, with 1 being strongly disagree and 5 strongly agree. When measuring the dimensions of Brand Equity we considered a fully detailed review of the literature on this topic. First, in order
to measure brand awareness, we used five items proposed by Yoo et al. (2000) and by Netemeyer et al. (2004), which refer to the general knowledge the consumer has about a brand and to their ability to distinguish and recognize a brand compared to other competitive brands. In second place, in order to evaluate perceived quality, we used four items previously used by Pappu and et al. (2006), which assess the perceived quality without regarding the attributes specific to a particular product category. To assess brand associations, we used different items that were previously used by different researchers (Aaker, 1996; Pappu et al., 2005). For measuring brand loyalty, we use the scale proposed by Yoo et al., (2000), which analyzes whether the consumer is considered loyal to a particular brand and if the brand is its first option, even if he would not buy other brands when this brand is not available at the point of sale. In order to assess the overall Brand Equity we used the items proposed by Yoo et al. (2000), since they will incorporate the additional value of a product or a brand, because of their brand names. Finally, in order to evaluate consumers' willingness to pay a premium price for a brand and consumers' purchase intention, we used items proposed by Netemeyer et al. (2004). Table 1 shows measurement scales and indicators used, as well as latent variables to be analyzed.

Table-1: Measurement scales, variables and reflective indicators used for measuring Brand Equity

| Variables | Indicators |
| :---: | :--- |
| Awareness <br> Yoo et al. (2000), <br> Netemeyer et al. (2004) | Aw1: I have heard about and I know Coca-Cola <br> Aw2: I am able to recognize Coca-Cola easily from among <br> other competitive brands |
| Perceived Quality <br> Yoo et al. (2000); Pappu, <br> Quester and Cooksey (2005) | PQal1: Coca-Cola offers excellent quality products <br> PQal2: Coka-Cola offers reliable and trustworthy products |
| Associations/ Image <br> Lassar et al. (1995), Aaker <br> (1996), Netemeyer et al. <br> (1994) | Aso1: Within the beer market, I believe that Coca-Cola is a <br> good purchase <br> Aso2: Coca-Cola provides a high value in relation with the <br> price you pay for it <br> Aso3: Coca-Cola is interesting <br> Aso4: The company that makes Coca-Cola has credibility |
| Loyalty | Loy1: If I buy soft drink, Coca-Cola would be my first <br> purchase option |
| Yoo et al. (2000) | Loy2: I would not buy other brands of soft drink if Coca- <br> Cola was available at the point of sale |
| Overall Brand Equity | Be1:.It makes sense to buy Coca-Cola instead of others <br> available in the market <br> Yoo et al. (2000) |
| Be2: Although there were other brands of soft drink as good |  |


|  | as Coca-Cola, I would rather buy the Coca-Cola |
| :---: | :--- |
| Purchase Intention | Int1: I would buy Coca-Cola |
| Netemeyer et al. (2004) | Int2 Definitively, I would consider buying Coca-Cola |
|  | Int3: I am likely to buy Coca-Cola |

## Research Methodology:

The primary data was obtained by administering survey method, guided by questionnaire to the customers. The respondents had been selected conveniently regardless their age, gender, occupation or income level. The questionnaires had been distributed to the target sample from 1st January 2018 to $31^{\text {st }}$ March 2018. Respondents have to fill up the selfadministrated questionnaire form. The respondent was asked about their basic demographic (age, gender, educational level). Prior to that, a pilot study by 50 respondents was conducted to assess the validity and reliability of the questionnaire. The two types of questions were asked in the questionnaire such as categorical and Multiplechoice questions. The Secondary data was collected through articles, journals, magazines, newspapers and internet etc. The study is restricted to two products such as Coco Cola. The summary table is as follows:

| Research design | Both Descriptive \& Causal Research |
| :--- | :--- |
| Research Method: | Survey Method |
| Research Instrument: | Survey Questionnaire |
| Sample size: | 138 ( 8 times of the main variables used in questionnaire) |
| Sample Are: | DhakaCity |
| Sampling Method: | Non-probability/ convenience sampling |
| Statistical Package: | SPSS, Version 22 |
| Analytical too: | Frequency table, Descriptive statistics \& Multiple regression |

## Sample Description:

The author incorporated some questions concerning socio-demographical variables. A sample description is summarized in Table 2.

| Variables |  | Frequency | Percentage |
| :--- | :--- | :--- | :--- |
| Frequency of <br> Consumption | Daily Consumption | 35 | 25.4 |
|  | Several times per week | 67 | 48.6 |
|  | Once per week | 14 | 10.1 |
|  | Occasionally | 22 | 15.9 |


|  | Total | 138 | $100 \%$ |
| :--- | :--- | :--- | :--- |
| Age | Less than 20 | 10 | 7.2 |
|  | 20yrs - 22yrs | 57 | 41.3 |
|  | 23yrs - 25yrs | 41 | 29.7 |
|  | $26 y r s ~-28 y r s+$ | 30 | 21.8 |
|  | Total | 138 | $100 \%$ |
| Eender | Male | 96 | 69.6 |
|  | Female | 42 | 30.4 |
|  | Total | 138 | $100 \%$ |
|  | Graduate Level | 92 | 66.7 |
|  | Post Graduate Level | 46 | 33.3 |
|  | Total | 138 | $100 \%$ |

## LIMITATIONS OF THE STUDY:

- The area of study is limited to Dhaka city only. Hence the results may not be true for other geographical areas.
- Quality of information highly dependent on the knowledge of the respondents.


## Data Collection \& Reliability Of The Study:

Data were collected from 138 samples using self-administered questionnaire (17-item instrument). We made a reliability analysis of the data collected from the respondents. The main purpose for the reliability analysis of the data is to determine the trustworthiness' of the data. The reliability analysis is measured by the consistency of the survey data where the indicators are the inter-item correlation and reliability coefficient Cronbach's Alpha. The reliability co-efficient Cronbach's Alpha for the 17-item (See Appendix A) scale is 0.843 which is over the acceptable limit 0.70 . As we can see the reliability statistics table, all items seem to be contributing reasonably well to the scale's reliability.

Table:3 Reliability of the Scale:

| Attributes | Cronbach Alfa | Items |
| :--- | :--- | :--- |
| All factors | 0.843 | 17 |
| F1: Awareness | 0.404 | 02 |
| F2: Perceived Quality | 0.628 | 02 |
| F3: Associations/ Image | 0.522 | 04 |
| F4:Loyalty | 0.753 | 02 |
| F5: Overall Brand Equity | 0.555 | 02 |
| F6: Purchase Intention | 0.687 | 03 |
| F7: Willingness to pay a premium price | 0.741 | 02 |

## Analysis And Findings

Table 4 presents the mean \& standard deviations of 17 items of the five-point scale. Thefollowing table describes the perceptions of the respondents regarding the items of the brand equity, purchase intension and willing to pay premium price.

Table 4: Item Statistics (Sorted by Mean)

| Rank | Item | Mean | Standard Deviation |
| :---: | :---: | :---: | :---: |
| 1 | I have heard about and I know Cola-Cola. | 4.5145 | . 51596 |
| 2 | I am able to recognize Cola-Cola easily from among other competitive brands. | 4.3768 | . 56932 |
| 3 | Within the beverage market, I believe that Cola-Cola is a good purchase. | 4.1594 | . 78533 |
| 4 | Cola-Cola offers excellent quality. | 4.0362 | . 83193 |
| 5 | Cola-Cola is interesting. | 4.0290 | . 78249 |
| 6 | Cola-Cola is reliable and trustworthy. | 3.9275 | . 86824 |
| 7 | I would buy Cola-Cola soft drink. | 3.9275 | . 84264 |
| 8 | If I buy soft drink, Cola-Cola would be my first purchase option. | 3.8841 | 1.14032 |
| 9 | I am likely to buy Cola-Cola soft drink. | 3.7681 | . 96122 |
| 10 | Cola-Cola provides a high value in relation with the price you pay for it. | 3.7464 | . 92066 |
| 11 | It makes sense to buy Cola-Cola instead of others available in the market. | 3.7246 | . 89417 |
| 12 | The company that makes Cola-Cola has credibility. | 3.6957 | . 94837 |
| 13 | Definitively, I would consider buying Brand ColaCola. | 3.6739 | 1.14728 |
| 14 | Although there were other brands of soft drink as good as Cola-Cola, I would rather buy the Cola-Cola. | 3.6377 | 1.05292 |
| 15 | I would not buy other brands of soft drink if Cola-Cola was available at the point of sale. | 3.5580 | 1.22634 |
| 16 | I am willing to pay a higher price for Cola-Cola than other brands of soft drink. | 3.2029 | 1.12152 |
| 17 | I am willing to pay much more for Cola-Cola soft drink than brands of soft drink. | 2.3913 | . 86653 |

## Regression Analysis:

The following hypotheses cited in the conceptual framework will be tested by applying regression analysis.

H 1: Brand awareness is positively related to Brand Equity.
H2. Perceived quality is positively related to brand equity
H 3 : Brand image is positively related to Brand Equity
H 4 : Brand loyalty is positively related to Brand Equity.
H 5: Brand equity is positively related to brand purchase intention
H 6 : Brand equity has a positive effect on consumer willingness to pay a premium price.
When Table 5 is examined, it shows that all models are statistically significant since for model $1 p<.10 \&$ for model $2,3,4,5,6 p<.05$. So, Substantial correlation between predictor variables and dependent variable exists in the models. Therefore, we need to accept all hypotheses. However, when the significance of predictors (explanatory variables) is examined in Table 4, only one predictor from each model is found to be statistically significant.

Table: 5- Summary of Model Findings Testing Hypothesis

|  | R <br> Square | Durbin- <br> Watson | F | Sig. (p) |
| :--- | :--- | :--- | :--- | :--- |
| Model 1 (H1) <br> Brand Awareness $\rightarrow$ Brand Equity <br> a. Predictors: (Constant) Aw1, Aw2 <br> b. Dependent Variable: Brand Equity | .034 | 1.996 | 2.407 | $.094^{*}$ |
| Model 2 (H2) <br> Perceived Quality $\rightarrow$ Brand Equity <br> a. Predictors: (Constant)PQal1, PQa12 <br> b. Dependent Variable: Brand Equity | .199 | 2.051 | 16.737 | $.000^{* *}$ |
| Model 3 (H3) <br> Associations / Image $\rightarrow$ Brand Equity <br> a. Predictors: (Constant) Asso1, <br> Asso2,Asso3,Asso4 <br> b. Dependent Variable: Brand Equity | .155 | 1.879 | 6.080 | $.000^{* *}$ |
| Model 4 (H4) <br> Loyalty $\rightarrow$ Brand Equity <br> a. Predictors: (Constant) Loy1, Loy2 <br> b. Dependent Variable: Brand Equity | .397 | 2.195 | 44.354 | $.000^{* *}$ |


| Model 5 (H5) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Brand Equity $\rightarrow$ Purchase Intension <br> a. Predictors: (Constant) OBE (overall Brand <br> Equity)1 <br> b. Dependent Variable: Purchase Intension |  | 1.944 | 71.137 | $.000^{* *}$ |
| Model 6 (H5) <br> Brand Equity $\rightarrow$ Willing to pay premium <br> price <br> a. Predictors: (Constant) OBE (overall Brand <br> Equity)1 <br> b. Dependent Variable: Willing to pay <br> premium price | .143 | 2.041 | 22.644 | $.000^{* *}$ |

* Significant at $p<.10$, ** significant at $p<.05$


## Testing Problems with Regression Analysis:

Autocorrelation' is the basic problem of regression analysis. When tables for six models are considered together, the same generalized evaluation can be made as follows:
The Durbin-Watson test is a widely used method of testing for autocorrelation. The Durbin-Watson Statistic is used to test for the presence of serial correlation among the residuals. Unfortunately, SPSS does not print the probability for accepting or rejecting the presence of serial correlation, though probability tables for the statistic are available in other texts. The value of the Durbin-Watson statistic ranges from 0 to 4 . As a general rule of thumb, the residuals are uncorrelated if the Durbin-Watson statistic is approximately 2 . A value close to 0 indicates strong positive correlation, while a value of 4 indicates strong negative correlation (Durbin and Watson, 1971). Durbin-Watson should be between 1.5 and 2.5 indicating the values are independent (Statistica). As shown in Table 4 Durbin-Watson values belonging to six models are between 1.5 and 2.5 showing the absence of auto correlation.

## Discussion \& Conclusions

The author's objective was to analyze the sources and consequences of Coca Cola's Brand Equity in Bangladesh market. The major finding is that as previously hypothesized all relationships of Brand Equity and its sources and consequences are significantly positive. It is concluded that brand awareness, perceived quality, brand association and brand loyalty have a significant impact on brand equity in Coca-Cola in Bangladesh. In addition, brand loyalty and brand association/ image had the most significant impact on brand equity. So, as far as the present empirical research is concerned, focused in the Coca Cola in Bangladesh, the brand awareness, brand perceived quality, the brand image and brand Loyalty have a significant positive influence on Coca-Cola's Brand Equity,
whereas consumers' purchase intention and their willingness to pay a premium price for Coca-Cola brand are clear consequences of the brand value.

Building strong brands has become a marketing priority for many companies. Brand equity is crucial for a heavily branded product category, like soft drinks, within a highly competitive and brand conscious market, such as Bangladesh. Though brand equity has received continuous attention from researchers and marketing managers, there are few studies based on empirical data on the soft drink industry in Bangladesh.

This study was conducted to measure the brand equity of carbonated soft drink brand such as Coca-Cola in Bangladesh. The study intended to explore the much unexplained area of brand equity and its relationship to purchase intension \& willing to pay premiums price. The findings support that the sources of Coca-Cola's brand equity are brand awareness, perceived quality, brand associations and loyalty that show a significant and positive influence on Coca-Cola's Brand Equity. Among these dimensions, the CocaCola's brand loyalty means the higher contribution. So, the mentioned variables should be considered in the management of Coca-Cola, in order to maintain or improve consumer-based Brand Equity. The finding also shows that the consequence of brand equity has huge impact on consumer behavior. It was revealed that the better the brand equity the more the consumer will show the purchase intension and willing to pay premium price.

It is imperative for Coca-Cola to emphasize on creating, enhancing and managing Brand Equity. Coca-Cola must formulate marketing strategies in order to strengthen brand loyalty and brand Image, as the most important sources of Brand Equity. Coca-Cola needs to put special effort on the creation and development of beer brand loyalty through Communications and relationship marketing. So, if Coca-Cola is able to build brand equity, this will lead to a sustainable competitive advantage.

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