Global competition forces companies to invest intensively in brands in order to hold their market positions. Hence, a company’s market competitiveness can be estimated based on an assessment of its brand equity. This study developed a preliminary metric that assesses a company's brand equity based on several different dimensions. Six hundred and forty in-depth interviews were conducted to assess brand equity of the leading brand in the drinkin’ box market. The assessment for the leading brand was then compared to that of other major competing brands within the New Brunswick market. Preliminary results suggest that the metric tested in this study is a valid tool for the determination of brand equity and that although the leading brand is a home brand and is able to hold its market position, competitive pressure from other brands is real and inescapable.

Introduction

The battle faced by marketers today is a battle of the brands. Companies are competing for brand dominance, realizing that brands are the company’s most valuable asset. The focus has changed from owning factories to owning markets, and the only way to own markets is to own market-dominate brands (Aaker 1991). Measures of competitiveness based on brand equity are lacking. With a view to filling this gap in the literature, the purpose of the following study was to develop a system to measure a company’s competitiveness by
assessing its customer-based brand equity. Since brand equity is a result of market competition, five competing brands are used to assess the brand equities in the drinkin’ box market.

**Literature Review**

Keller (2003) demonstrated the brand value creation (BVC) process. Customer-based brand equity assessment focuses on stage two of BVC, and this is the main stream of research in the literature. The basic idea of this approach is to establish a score system in order to evaluate customers’ choice along Aaker’s five dimensions (Aaker 1991). The methods in this approach are relatively mature. Different literature has used different score systems, but Agarwal and Rao (1996) have shown that they all converge.

Aaker (1991) defines brand equity as “a set of brand assets and liabilities linked to a brand, its name, and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm’s customers”. These assets and liabilities, according to Aaker (1991), have five dimensions – brand loyalty, brand awareness, perceived quality, brand associations, and other proprietary brand assets.

While products create choices, brands make choices easier (Bender, Farquahr, and Schulert 1996). A consumer can choose from many brands for a product, but most consumers do not examine all of the choices. Consumers first simplify the decision by reducing the choices to a small number (consideration set), and then they only evaluate those brands in order to make their decision. Therefore, it is crucial for a brand to be part of the consideration set (Bender, Farquahr, and Schulert 1996). Corporate brands are at the top of the brand hierarchy, and these well known corporate brands provide consumers with the reassurance of product quality and a promise of trusted service. Brand awareness is the most influential factor in determining which brands will be included in the consideration set (Bender, Farquahr, and Schulert 1996).

“Brand awareness is the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category” (Aaker 1991). It is a continuum that ranges from a consumer being totally unaware of a particular brand to the belief that it is the only brand that exists for a product.

Brand awareness can affect decisions about brands in the consideration set, even if a consumer does not have any other thoughts about a brand. Some consumers have adopted a decision rule to only buy familiar, well-established brands (Jacoby, Syzabillo, and Busato-Schach 1977; Roselius 1971). For low involvement decisions, a minimum level of brand awareness can be enough to choose a brand without any other brand information (Bettman and Park 1980; Hoyer and Brown 1990; Park and Lessig 1981). The elaboration likelihood model (Petty and Cacioppo 1986) suggests that consumers may base choices on brand awareness considerations when they have low involvement, which could
result from either a lack of consumer motivation (i.e. consumers do not care about the product or service) or a lack of consumer ability (i.e. consumers do not know anything else about the brands).

“Brand loyalty, long a central construct in marketing, is a measure of the attachment that a customer has to a brand. It reflects how likely a customer will be to switch to another brand, especially when that brand makes a change, either in price or in product features. As brand loyalty increases, the vulnerability of the customer base to competitive action is reduced. It is one indicator of brand equity that is demonstrably linked to future profits, since brand loyalty directly translates into future sales” (Aaker 1991).

Perceived quality is “the customer’s perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternatives” (Aaker 1991). Consumers have a perception of the overall quality of a brand that is not necessarily based on knowledge of its detailed specifications. Perceived quality directly influences purchase decisions and brand loyalty, especially when a buyer is not motivated or able to conduct a detailed analysis. It can also support a premium price, which, in turn, can create profits that can be reinvested in brand equity. Further, perceived quality can be the basis for a brand extension. If a brand is well regarded in one context, the assumption will be that it will have high quality in a related context (Aaker 1991).

“A brand association is anything linked in memory to a brand” (Aaker 1991). A brand image is a set of organized associations. Brand positioning is like an association or image, but it includes a reference, which is normally the competition, and does not reflect consumers’ perceptions of the brand. The brand position does reflect how a company is trying to be perceived. A strong brand has a competitively attractive and distinct position that is supported by strong associations (Aaker 1991).

Brand associations are divided into three major categories of increasing scope: attributes, benefits, and attitudes (Keller 1993). “Attributes are those descriptive features that characterize a product or service – what a consumer thinks the product or service is or has and what is involved with its purchase or consumption. Benefits are the personal value consumers attach to the product or service attributes – what consumers think the product or service can do for them. Brand attitudes are consumers’ overall evaluations of a brand” (Keller 1993). They are important because they often form the basis for brand choice.

There are other assets that can prevent competitors from stealing a company’s customers and reducing their loyalty level. One asset is a trademark that protects brand equity from competitors who want to try to confuse customers by using a similar name, symbol, or package. Another is a patent, which if strong and relevant to customer choice, can prevent direct competition. A third is the distribution channel, which can be controlled by a brand because of its
history of performance. These assets must be tied to the brand, not a company; otherwise they will not have an impact (Aaker 1991).

**Research Questions and Methodology**

A long standing challenge of brand equity assessment is to establish a systematic scoring system that enables the use of survey data such that respondents are able to reveal their brand preference via a quantitative measure. The result is a metric that is able to produce results which can be aggregated at the market level.

The purpose of this research was to (i) identify the determinants of a strong brand equity position in the drinkin’ box market, (ii) develop a multi-dimensional metric to quantitatively assess brand equity, and (iii) identify the strength of equity of individual brands in the drinkin’ box market. In this study, a pilot metric was developed which included the identification and quantification of the dimensions of brand equity. The measurements were then aggregated using equally distributed weight. The results of this study are of benefit to practitioners and academicians alike. First, for the practitioner, the results provide marketing managers with a metric to assess their brand equity within specific markets. Based on this assessment, managers are better able to understand and predict buying behavior within the market and have a better base from which to improve their brand’s position. As well, marketing professionals will gain further insight into how consumers drive brand equity. From the academicians’ perspective, the results provide a preliminary assessment tool for the measurement of brand equity and thus provide a starting point for future brand equity measurement research.

Because this study was a pilot project with the goal of developing and testing a brand equity measurement scale, convenience and judgment sampling techniques were employed. Data was collected by professors and students as part of a fourth year marketing research class project. Depth interviews, focus groups, and blind taste tests were used to collect the data based on the need for complex and detailed information. In total, 640 consumers from across different communities in New Brunswick participated in the study. Five brands of fruit punch flavored drinkin’ boxes were examined. These included two Canadian brands (B_{C1} and B_{C2}) and three American brands (B_{A1}, B_{A2}, and B_{A3}).

**Results and Discussion**

Each dimension of brand equity was measured with a combined scoring system, which is similar to Agarwal and Rao (1996), and the aggregated results are reported as the following.

Of the five brands studied, BC1 was most commonly named as a company that makes drinkin’ boxes in an unaided recall test (Figure 1). It was also the company most recognized as making drinkin’ boxes when the respondents
were asked if they had heard about drinkin’ boxes from the companies. In fact, 100% of respondents recognized BC1.

According to Aaker (1991), there are five levels of brand awareness. This research clearly demonstrated the existence and separation of consumers into these levels. The lowest level is unaware of brand. Over half of the respondents were unaware of BA3. The next level, brand recognition, is based upon an aided recall test. More respondents were able to recall BC1, BA1, and BC2 than BA2 or BA3. At this level, there must be a link between the brand and the product, but it does not have to be strong (Aaker 1991). The third level is brand recall, which is an unaided recall test. This is a harder task than recognition; therefore, it is associated with a stronger brand position (Aaker 1991). BC1 was the brand most often recalled, with no close competitors. The first named brand in an unaided recall task has achieved top of mind awareness, which is a very important position because it is ahead of the other brands in a person’s mind. It is the fourth level of brand awareness (Aaker 1991). BC1 has achieved this position, but none of the other brands have. The top level, which is even a stronger recall position, is a dominant brand. This is a brand that is the only brand recalled for a high percentage of the respondents, which provides a very strong competitive advantage. During the purchase decision, no other brand will even be considered (Aaker 1991). BC1 is close to achieving this level.

The first step in the buying process is to select a group of brands to consider. The buyer will not be exposed to many brands during this process. Therefore, brand recall is critical to becoming a member of this group. According to Aaker (1991), the first companies that come to mind will have the
advantage, which, in this case, is B_\text{C1}. \text{ B}_\text{A1} and \text{ B}_\text{C2} may also be part of this group. The others, \text{ B}_\text{A2} and \text{ B}_\text{A3}, may not be considered at all.

The importance of factors in the grocery purchasing decision varied between consumers (Table 1). Of the respondents, 18% said that brand name was a very important factor to them in the purchase decision. Other factors were also very important to these consumers. Brand loyalty is a central construct of a brand’s equity. When consumers buy products based on features other than brand name, there is likely little equity. On the contrary, if consumers purchase a brand regardless of a competitor’s product features, that brand has achieved a level of significant value in its name, symbol, and slogans (Aaker 1991). In this study, several other factors were more important than brand name. Based on this information and Aaker’s conclusion about the importance of brand loyalty to brand equity, it appears that the level of equity that exists for all of the brands in this study is low.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very Important (%)</th>
<th>Somewhat Important (%)</th>
<th>Not Very Important (%)</th>
<th>Not At All Important (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>36</td>
<td>62</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Quality</td>
<td>78</td>
<td>21</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Appearance</td>
<td>36</td>
<td>41</td>
<td>14</td>
<td>9</td>
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<tr>
<td>Taste</td>
<td>87</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nutritional Value</td>
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<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Convenience</td>
<td>13</td>
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<td>21</td>
<td>17</td>
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<tr>
<td>Advertising</td>
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<td>24</td>
<td>23</td>
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<tr>
<td>Brand Name</td>
<td>18</td>
<td>43</td>
<td>23</td>
<td>16</td>
</tr>
</tbody>
</table>

Respondents were questioned in order to determine if they were loyal to the different brands. Over half of the respondents were loyal to B_\text{C1} (Table 2). Therefore, even though brand loyalty is not one of the top decision factors in grocery purchases, consumers are loyal to B_\text{C1}. Based on Aaker’s book, this should not be the case. The results of this study disagree with his findings. Perhaps brand loyalty is a factor that influences the purchase decision subconsciously.
According to Aaker (1991), there are several levels of loyalty. This study demonstrated this theory. “The bottom layer is the unloyal buyer who is completely indifferent to the brand – each brand is perceived to be adequate and the brand name plays little role in the purchase decision. Whatever is on sale or convenient is preferred. This buyer might be termed a switcher or price buyer” (Aaker 1991). BC1 is the brand with the lowest level of unloyal respondents. In the entirety of the study, 45% of respondents were unloyal to any of the brands.

“The second level includes buyers who are satisfied with the product or at least not dissatisfied. Basically, there is no dimension of dissatisfaction that is sufficient to stimulate a change especially if that change involves effort. These buyers might be termed habitual buyers. Such segments can be vulnerable to competitors that can create a visible benefit to switching. However, they can be difficult to reach since there is no reason for them to be on the lookout for alternatives” (Aaker 1991). Of the respondents interviewed, 5% fit into this level.

“The third level consists of those who are also satisfied, and, in addition, have switching costs – costs in time, money, or performance risk associated with switching. To attract these buyers, competitors need to overcome the switching costs by offering an inducement to switch or by offering a benefit large enough to compensate. This group might be called switching-cost loyal” (Aaker 1991). Only a small portion of respondents, 8%, have switching costs.

“On the fourth level we find those that truly like the brand. Their preference may be based upon an association such as a symbol, a set of use experiences, or a high perceived quality. However, liking a brand is often a general feeling that cannot be closely traced to anything specific; it has a life of its own. People are not always able to identify why they like something, especially if the relationship has been a long one. Sometimes, just the fact that there has been a long-term relationship can create a powerful effect even in the absence of a friendly symbol or other identifiable contributor to liking. Segments at this

<table>
<thead>
<tr>
<th>Brand</th>
<th>Loyal Respondents (%)</th>
<th>Unloyal Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC1</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>BC2</td>
<td>15</td>
<td>85</td>
</tr>
<tr>
<td>BA1</td>
<td>22</td>
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<tr>
<td>BA2</td>
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</tr>
<tr>
<td>BA3</td>
<td>2</td>
<td>98</td>
</tr>
</tbody>
</table>
fourth level might be termed friends of the brand because there is an emotion-al/feeling attachment” (Aaker 1991). Almost a quarter of respondents, 24%, liked the brand.

“The top level is committed customers. They have a pride of discovering and/or being users of a brand. The brand is very important to them either functionally or as an expression of who they are. Their confidence is such that they will recommend the brand to others. The value of the committed customer is not so much the business he or she generates but, rather, the impact upon others and upon the market itself” (Aaker 1991). Of the respondents interviewed, 18% considered themselves to be committed customers.

Respondents were asked to define quality. The majority of respondents defined quality as nutritional value (29.7%) and taste (29.2%). Other characteristics mentioned were packaging (11.4%), price (9.7%), size (3.8%), satisfaction (2.2%), consistency (2.2%), and texture (2.2%). A number of other characteristics were mentioned such as variety, convenience, colour, clarity, and value.

Respondents ranked each brand for quality. BC1 was the brand that was given the highest scores for quality (Figure 2). Like brand loyalty, perceived quality also provides value. The perceived quality of a brand influences which brands will be included in the consideration set and the brand that will be purchased (Aaker 1991). BC1 has the highest perceived quality and will be included in the consideration set and most likely purchased.

![Figure 2](image)

The quality scores, on a sale of zero to ten with ten meaning high quality, given to each brand by the respondent
A variety of responses were given when the consumers were asked what comes to mind when they hear the name of the brand, why they are attracted to the brands, and what they feel when they think about the brands. Each brand had different associations, which gives each one different advantages. $B_{C1}$’s advantage is the company is local, which was important to several respondents and helps to elevate its equity position above $B_{A1}$. $B_{A1}$ is believed to be a quality product, which is an advantage over the other brands, excluding $B_{C1}$. $B_{C2}$ is inexpensive, but not as high quality. $B_{A2}$ is fun, but not nutritious. $B_{A3}$ was unknown by the majority of respondents.

**Summary and Conclusions**

Our findings suggest that each brand has a distinct set of perceived strengths and weaknesses with respect to brand awareness, loyalty, perceived quality, and associations. These four areas appear to be the determinants of brand equity in the market, and strengths in these areas tend to indicate a strong brand equity position in the drinkin’ box market. Data on the drinkin’ box market suggests that, based on these four determinants, $B_{C1}$ has the highest level of equity in the drinkin’ box market. This brand consistently had the highest levels of awareness, loyalty, perceived quality, and associations. To support the use of this metric, market data shows $B_{C1}$ as clearly the leader in the market.

Preliminary data suggests that the pilot metric developed in this study is indeed a useful tool for assessing brand equity. Results of this study clearly support Aaker’s definition and components of brand equity, with the exception of brand loyalty. There was a discrepancy about the importance of brand loyalty in the purchase decision to brand equity. Brand loyalty is key in consumer decision-making, product positioning, and setting market strategy, yet it remains one of the more abstract of constructs in the marketing discipline. More investigation into the impact of brand loyalty is clearly needed.

Today, brands are under fire from competitors, retailers, and aggressive consumers, which is also a power struggle. Consumers seek deals more aggressively once they feel that a number of brands are acceptable choices. This is contrary to the intuitive notion of brand equity (Rubinson 1993), but was supported in this study. While a number of respondents stated that they were brand loyal, a significant number also stated that they would switch brands based on price and that brand name was not a very important factor in the purchase decision.

Brand equity is very important to marketers today. If a company is to be one of the top brands in the market, it has to build its brand through brand awareness, brand loyalty, perceived quality, and brand associations. As a result, brand equity will improve, and the company will succeed, profit, and grow. Marketers must also think of brand extension options strategically, as a brand equity issue. Brands have been extended so much that now marketers need to ask if they have overextended their brands. This means that the question of line extendibility will
be a two way street, where the line retrenchment side of the issue will always present itself as a brand equity question such as “Should I be in all the businesses I’m in?” (Rubinson 1993).

When considering the results of this study one must take into consideration the limitations that arise from methodological issues. First, the study was conducted using convenience and referral sampling. A more objective sampling method must be used. Second, since B_{C1} is a local company, the brand equity results may be stronger than in other markets; thus respondents must be solicited from areas outside of the Province of New Brunswick to guard against any geographical bias. Finally, a much more rigorous approach to metric development and testing must be used on a larger sample. Factor analysis and other such techniques may be used to validate the dimensions of brand equity and the metric in general. More rigorous testing of the relationship between the dimensions and overall brand equity scores must also be further investigated.

In this study, the brand equity of five brands was examined in the drinkin’ box market. B_{C1} was the leader in all components of brand equity. However, brand name was not considered to be highly important to the respondents, which, according to Aaker (1991), erodes the existence of brand equity in this market. If this is true, B_{C1}, and all of the other brands, must work harder to make brand equity more important to drinkin’ box consumers. This will improve the chances for increased company success. In the future, the authors intend to further refine the brand equity measurement scale so that it can be used practically by companies to measure consumer-based brand equity. This will entail nationwide probability sampling, refinement of the scoring system, and proper statistical analyses.

Brand equity is a complex issue to manage, but vital to business success. Therefore, marketers should take a broad view of marketing activity for a brand and recognize the various effects it has on brand knowledge, as well as how changes in brand knowledge affect more traditional outcome measures such as sales. Marketers must realize that the long-term success of all future marketing programs for a brand is greatly affected by the knowledge about the brand in memory that has been established by the firm’s short-term marketing efforts. In short, because the content and structure of memory for the brand will influence the effectiveness of future brand strategies, it is critical that managers understand how their marketing programs affect consumer learning (Keller 1993). Of course, more research is needed to deepen our understanding of this important phenomenon.
Endnote
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