Corporate brand expressions in industrial brand: Evidence from Malaysia

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Abstract

Purpose – Nowadays, suppliers in order to maintain and improve their positions against other national and international suppliers take advantage of their brand equity. The aim of this study was to identify the factors influencing industrial brand equity from the perspective of buying center members.

Design/methodology/approach – Statistical population includes members of buying center of companies producing fridges, washing machines, and cookers in Pahang. 110 questionnaires were distributed among members of the buying center industry (managing director, production manager, finance manager, purchasing agent and senior engineer) and 98 questionnaires were completed for analysis. SPSS software was used to analyze data and PLS software was used to test hypotheses.

Findings – Research findings indicate a significant positive effect of perceived quality, brand loyalty, social responsibility of supplier, reputation of supplier and quality of relationship between the buyer-supplier on industrial brand equity. The effect of brand awareness on industrial brand equity was insignificant.

Originality/value – This comprehensive model includes major factors affecting industrial brand equity that is appropriate for Malaysian suppliers to maintain and improve industrial brand equity in B2B markets. And this study is the first research in this area in Malaysia. Keywords: perceived quality, brand awareness, brand loyalty, corporate social responsibility, corporate reputation, buyer–supplier relationship quality, industrial brand equity.

Introduction

Most prior researches and discussions about brands, brand equity and brand management have solely focused on consumer markets. A recent overview of the world’s 100 strongest brands not only lists Coca Cola, Amazon, Pepsi and Red Bull, but also includes many industrial brands such as Apple, IBM, Microsoft, SAP, Intel and Siemens (Interbrand, 2013). One of the reasons for the increasingly important role of industrial branding is the growing importance of B2B commerce through internet. Hunter et al. (2004) explained that online customers will use cues like the brand name to diminish the risks of purchasing decisions. Empirical evidence increasingly demonstrates that when buyers make their purchasing decisions, they are not only influenced by tangible attributes like price and quality, but with intangible attributes such as trust, brand association, supplier reputation and image (Mudambi, 2002; Cretu and Boride, 2007). Thus the intangible, emotional aspects of brand equity may be one of important sources of sustainable competitive advantage. However, they are underemphasized in past researches (Lai, Chiu, Yang & Pai, 2010). Nowadays, industrial marketers increasingly recognize the value of branding in business-to-business markets. By comparing B2B studies with B2C studies, B2B branding or industrial branding research is relatively scarce. Although only a few researchers have recently focused on industrial brand equity or B2B brand equity (e.g., Michell, King, and Reast, 2001; Mudambi, 2002; van Riel et al., 2005; Lai et al., 2010; chen et al., 2011; Marquardt, 2013). As a result, there is a need for conceptual and empirical studies addressing branding within industrial contexts (Marquardt et al., 2011).
In addition, Kotler and Pfoertsch (2007) suggest the need for branding of international B2B companies to increase perceived value to customers, and decrease the complexity involved in the buying decisions. Therefore, a conceptual model is designed based on the theory of Aaker (1991), Chen et al. (2011), Lai et al. (2010) and Marquardt (2013). The power of the industrial brand usually is evaluated by equity brand, in fact the brand is the most important asset of the firm and building a strong brand is an investment. Brands presents the performance of the corporation. As in B2C markets, brands have the same general goals as in B2B markets, by facilitating the identification of businesses, products and services and as well as differentiating from the competition (Anderson and Narus, 2004). Thus, it is important to identify the origin of the industrial brand equity. This study argues that buyers’ perceptions about suppliers’ corporate social responsibility (CSR) activities, corporate reputation and buyer–seller relationship quality may be antecedents to industrial brand equity.

Branding in an industrial market must be perceived to convey benefits to various stakeholders for companies to financially invest in it. With regard to the company investing in branding a number of benefits have been identified. Cretu and Brodie (2007) found branding had a positive impact on the perceived quality of the product or service. It was also perceived as providing a product with an identity, a consistent image and as conferring uniqueness (Michell, King, & Reast, 2001). Brands are useful for reducing the level of perceived risk and uncertainty in buying situations (Mudambi, 2002; Ohnemus, 2009). The buying company’s product may gain legitimacy through the incorporation of a branded product and being associated with a reputable company. The benefits of branding for B2B suppliers (quality, differentiation, higher demand, premium price, distribution power, barrier to entry, loyal customers, customer satisfaction, brand extensions,...) and buyers (higher confidence, increased satisfaction, risk/uncertainty reduction, greater comfort, identification with a strong brand,...)(Leek & Christodoulides, 2011).

In this research, an integrated model is designed based on the literature, one of the originality of this research is that. It is presented in Malaysia for the first time and is consisted of variables different from other models and it could be applied in Malaysian industry.

The purpose of this study is to investigate the effects of CSR, corporate reputation, buyer-seller relationship quality, brand Loyalty, perceived quality and brand awareness on industrial brand equity. Thus, the question study of this is: what are the factors influencing industrial equity brand in business-to-business (B2B) markets?

2. Literature review and research hypotheses

In the consumer marketing literature, despite the availability of numerous definitions of brand equity, there is little consensus on what brand equity means (Park and Srinivasa, 1994). Brand equity is defined as the marketing effects or outcomes that accrue to a product with its brand name compared with those that would accrue if the same product did not have the brand name (Keller, 2003; Aaker, 1991). One of the most widely used definitions of brand equity is Aaker’s (1991) who defines it as “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 that firm’s customers”. For marketers it is more important to understand the drivers of brand equity in different markets. Industrial brand equity as brand value brought to industrial buyers. To create brand equity, buyers must perceive meaningful differences among brands in the product or service category.

Aaker (1991) identified five sources of brand equity which are perceived quality, brand loyalty, brand awareness, brand associations and other proprietary assets such as patents, trademarks and channel relationships. However, because most measures in the past studies did not include the component of other proprietary brand assets, this study also defines and measures industrial brand equity as composed of four components such as that of Aaker, brand awareness, brand loyalty, brand associations, and perceived quality (Lai et al., 2010).

While several of the antecedents of customer-based brand equity, such as brand awareness, brand loyalty and perceived quality, appear directly transferable to industrial branding, others such as brand associations appear irrelevant in most B2B markets (van Riel et al., 2005). For brand associations in the appliance industry, industrial brands are rarely if ever used to evoke non-product-related associations. Therefore brand associations are not regarded as an antecedent of industrial brand equity in this study.
Therefore, this study hypothesizes positive relationships between perceived quality, brand awareness, brand loyalty and industrial brand equity. Thus:

H₁: Perceived quality associates positively with industrial brand equity.
H₂: Brand awareness associates positively with industrial brand equity.
H₃: Brand loyalty associates positively with industrial brand equity.

**Corporate reputation and industrial brand equity**

A good corporate reputation differentiates a company from its competitors. Jones (2005) suggested that brand value is created by fully satisfying all stakeholder expectations, not just those of customers. What most stakeholders expect is a company with a good reputation. Thus a good corporate reputation can enhance the brand equity of its products and services.

Researchers in consumer markets indicated that corporate reputation induce positive brand perceptions of a corporation’s products (Jones, 2005; Brickley et al. 2002; Varadarajan and Menon, 1988; Smith and Higgins, 2000) and this issue indicated that few studies in industrial markets has been done (Lai et al., 2010). Thus, we present the forth hypothesis as following:

H₄: Corporate reputation is positively related to industrial brand equity.

**Corporate social responsibility and industrial brand equity**

Corporate social responsibility (CSR) in business today is a new discussion. Corporate Social Responsibility focuses on accountability social issues. Businesses are responsible in regard of all stakeholders, customers, employees, environment, community and etc. Attention to social responsibility is to increase brand equity. Corporate social responsibility (CSR) is defined as a company’s “status and activities with respect to its perceived societal or, at least, stakeholder obligations” (Brown and Dacin, 1997). Due to the positive effects of CSR participation and the negative effects of CSR violation, today most companies not only pay attention to CSR issues, but also actively participate in CSR activities (Lai et al., 2010).

A company’s reputation for socially responsible behavior constitutes an important part of its brand capital (Brickley et al. 2002).

In fact, relationship marketing goals is to increase company revenues and sales through product differentiation by creating socially responsible attributes associated with brands. As indicated by Smith and Higgins (2000, p. 309), “the brand manager uses consumer concern for business responsibility as a means for securing competitive advantage.”

Many studies have also indicated that Corporate social responsibility induce positive brand perceptions of a corporation’s products and services (Jones, 2005; Torres et al., 2012; Brickley et al. 2002, Ker-Tah Hsu, 2011; Chen et al., 2010)

Following this logic, this study concludes that the perceptions of CSR practices about an industrial company by buyers can positively increase its brand equity. Thus, we derive the following hypothesis:

H₅: The buyer perceptions of CSR activities about suppliers are positively related to the supplier’s industrial brand equity.

**Buyer-supplier relationship quality and industrial brand equity**

A subset of relationship marketing focuses on the quality of the relationship between exchange partners (Ulaga and Eggert, 2006; Huntley, 2006). Researchers have examined the quality of relationships in industrial markets (Marquardt, 2013; Haghighinasab, 2010; Babaei and Rakei, 2011).

It is therefore argued that consumers’ perceptions of their relationships with a brand have a direct positive impact on brand-equity (Dwivedi, Merrilees, Miler and Herington, 2012). Marquardt (2013) point out that, relational resources are fortified as the quality of buyer-supplier relationships improves, moving from highly transactional activities in low quality relationships to highly collaborative activities in high quality relationships, with each differing in terms of its distinctiveness. Within this study, relationship quality is discussed from the buyer’s perspective, and is defined as the degree to which buyers value the overall relationship at a particular point of time, as manifest through the buyer’s satisfaction, trust and
commitment toward the seller (Skarmea et al., 2008). The quality of buyer–supplier relationship acts as a source building industrial brand equity when products are uncertain and future-based (marquardt, 2013). In industrial markets the quality of relationship between buyer and seller is more important than consumption markets, consequently this quality can enhance the industrial equity brand. Thus, we present the sixth hypothesis as below:

H₆: Buyer–supplier relationship quality in industrial markets has a significant positive effect on industrial brand equity.

3. Methodology
This study is descriptive of survey type. The population under study includes 22 manufacturer of refrigerators, washing machines, cookers in Pahang. Questionnaires were distributed among members of purchase centers of these firms (managing Director, Production Manager, Finance manager, senior engineer and purchasing agent). Due to the small size of populations census method was used. A total of 110 questionnaires were distributed and 98 questionnaires were completed. Validity determination resulted from factor loading analysis was used to analyze questionnaire internal structure and determine the validity, and two kinds of convergent and discriminate validity were tested. Convergent validity is appointed when AVE index related to each structure is more than 0.5 (Fornell and Larker, 1981). As it is seen in table (2), AVE index amount, for structure of this study is more than 0.5. Discriminate validity is appointed when AVE index amount, for each structure is more than correlation coefficient square of that structure in accordance to other structures (Fornell and Larker, 1981). As it is seen, AVE index amount related to each structure is more than the correlation coefficient square of that structure. Cronbach’s Alpha coefficient is used for reliability measurement that should be more than 0.07. Cronbach’s Alpha coefficient for all structure is shown in table (2) that all of them are greater than 0.07 in order to be acceptable.

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of item</th>
<th>AVE</th>
<th>Cronbach’s alpha</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived quality</td>
<td>6</td>
<td>0.81</td>
<td>0.7479</td>
<td>Chen et al.(2011)</td>
</tr>
<tr>
<td>Brand awareness</td>
<td>3</td>
<td>0.62</td>
<td>0.8370</td>
<td>Chen et al.(2011)</td>
</tr>
<tr>
<td>Brand loyalty</td>
<td>3</td>
<td>0.71</td>
<td>0.7151</td>
<td>Chen et al.(2011)</td>
</tr>
<tr>
<td>Corporate reputation</td>
<td>3</td>
<td>0.67</td>
<td>0.8733</td>
<td>Lai et al.(2010)</td>
</tr>
<tr>
<td>Corporate social responsibility</td>
<td>5</td>
<td>0.54</td>
<td>0.7711</td>
<td>Lai et al.(2010)</td>
</tr>
<tr>
<td>Buyer–supplier relationship</td>
<td>9</td>
<td>0.96</td>
<td>0.8168</td>
<td>Marquardt(2013)</td>
</tr>
<tr>
<td>Industrial brand equity</td>
<td>5</td>
<td>0.78</td>
<td>0.8224</td>
<td>Chen et al.(2011)</td>
</tr>
</tbody>
</table>

4. Results
Descriptive Data
In this study, SPSS software was used to describe the demographic variables. Descriptive results of the demographic data of respondents (98 people) in this study are shown in Table 3.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>% Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>78</td>
</tr>
<tr>
<td>Age</td>
<td>Female</td>
<td>20</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----</td>
</tr>
<tr>
<td>30&lt;</td>
<td>18</td>
<td>18.4</td>
</tr>
<tr>
<td>30-40</td>
<td>32</td>
<td>32.7</td>
</tr>
<tr>
<td>40-50</td>
<td>25</td>
<td>25.6</td>
</tr>
<tr>
<td>50+</td>
<td>23</td>
<td>23.3</td>
</tr>
<tr>
<td>Relationship with Supplier</td>
<td>Less than a year</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1 year</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2 year</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>3 year</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>4 or more years</td>
<td>39</td>
</tr>
<tr>
<td>Job position</td>
<td>managing director</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>production manager</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>finance manager</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>senior Engineer</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>purchasing agent</td>
<td>21</td>
</tr>
</tbody>
</table>

As is evident from the above table, 79.6% of the respondents were male and 20.4% percent are women and most of the respondents are in the age groups 30-40 years and 40-50 years. 39.7% respondents had a relationship of four or more years with the supplier. The greatest percentage of respondents (22.5%) was senior Engineer.

**Data Analysis**

In this study we tested the hypothesis at 95 percent of confidence level. If t-value are bigger than the range of +1.96 and -1.96 the $H_0$ will be rejected and $H_1$ accepted. The results of hypotheses are shown in the following table.

Table 3. The results of testing of hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Description</th>
<th>(β)</th>
<th>t-value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$</td>
<td>Perceived quality industrial brand equity</td>
<td>0.315</td>
<td>4.507</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_2$</td>
<td>Brand awareness industrial brand equity</td>
<td>0.049</td>
<td>.528</td>
<td>Insignificant</td>
</tr>
<tr>
<td>$H_3$</td>
<td>Brand loyalty industrial brand equity</td>
<td>0.741</td>
<td>11.925</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_4$</td>
<td>Corporate reputation industrial brand equity</td>
<td>0.356</td>
<td>5.891</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_5$</td>
<td>CSR industrial brand equity</td>
<td>0.201</td>
<td>3.768</td>
<td>Significant</td>
</tr>
<tr>
<td>$H_6$</td>
<td>B-S relationship quality industrial brand equity</td>
<td>0.782</td>
<td>12.438</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Note:** $R^2 = 0.752$

As shown in the above table, all hypotheses were confirmed, except second hypothesis.
5. Discussion and Conclusion
The main objective of this study was to identify factors affecting brand equity in the industrial market. The results indicated that perceived quality and brand loyalty has a significant positive impact on industrial brand equity. These results is parallel to the results of Chen et al (2011) and also the consumer market, many other researchers have experimentally confirmed this (Aaker, 1996; Yoo et al. 2000; Pappu and Quester, 2006; Tong and Hawley, 2009). Social responsibility and reputation variables provide a significant positive effect on industrial brand equity according to the findings of Lai et.al (2010). Many studies in consumer markets have also indicated that CSR and corporate reputation induce positive brand perceptions of a corporation’s products (Brickley et al., 2002; Jones, 2005; Smith and Higgins, 2000; Vararadjan and Menon, 1988). Also, the results showed that the quality of the relationship between buyer and supplier has an effect on industrial brand equity that is consistent with Marquardt (2013) findings. Variable of brand awareness had an insignificant effect on industrial brand equity. Since few of industrial brands exist in the Malaysian market, members of the purchasing centers are aware of all brands and also other important factors in choosing a supplier are considered. And this could be an explanation for rejection of second hypothesis. Thus, it can be concluded that there is no significant effect of brand awareness on industrial brand equity. Based on path analysis, variables of relationship quality, brand loyalty, reputation, perceived quality and social responsibility accordingly, have the highest impact on industrial brand equity. And based on Coefficient $R^2=75\%$, We can conclude that the variables of perceived quality, brand loyalty, brand awareness, corporate reputation, corporate social responsibility and B-S relationship quality together explain 75 percent of the changes in industrial brand equity.

According to the above results, we propose the following managerial and theoretical implications. First, a pronounced theoretical benefit of this research is that it extends our knowledge of the industrial brand equity utilized within the industrial marketing contexts. Second, since buyers’ perceptions about suppliers’ social responsibility activities constitute an antecedent of industrial brand equity, we urge managers and suppliers in the B2B market to engage in social responsibility activities to enhance their buyer’s perception toward them. Third, buyers’ perceptions about supplier’s social responsibility activities positively improve the supplier’s reputation that in turn improves the industrial brand equity of suppliers. Forth, managers and suppliers can implement measures such as total quality management, improve product quality and pricing based on the quality of products. Industrial buyers will increase the perceived quality of the goods and thus increase their brand equity. Fifth, suppliers and managers can come up with measures such as loyalty programs, after-sales service, good discounts, design an appropriate marketing mix, strengthen long-term relationships with an emphasis on relationship marketing, create customer club and create a customer culture, customers loyalty industrial buyers and thus increase their brand equity. Sixth, industrial manufacturers can a commitment to social and human ethics, equal employment opportunities, quality products, public works such as school building, hospital building, supporting the development of sports activities in the community and sponsoring sports teams, good relations with the media.... therefore promoting industrial buyers’ perceptions regarding their competence and increase their brand equity. Finally, based on the sixth hypothesis, we proposed to managers: to segment their customers into major, medium and minor industrial services segments and act based on their promises and compensate their service failures.

6. Suggestions for future research
To develop research activities in the field of industrial brand equity, the following recommendations are proposed for future researches:
- Many other factors exist as suggested by the literature, such as Country-of-origin (Chen et al. 2011), Country-of-manufacture, Country-of-design(Chen and Su, 2012) and Brand image (Yasin et al., 2007) that contributes to industrial brand equity. Therefore, studying of these other factors are recommended.
- Studying and assessing industrial brand equity from a financial perspective is suggested.