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**MEASURING BUSINESS PERFORMANCE USING KELLER'S BRAND EQUITY IN BUSINESS TO BUSINESS ENVIRONMENT**

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**ABSTRACT**

Brands have been developed by consumer companies but have been slow to develop in business-to-business marketing. This article explains the concept of brand equity in a specific industrial marketing setting. In addition, the sources of brand equity are investigated as well as the appropriate communications strategy and the relative importance of brand relative to other purchase criteria. With the growth of e-commerce and global competition, business-to-business (B2B) marketers are showing increased interest in the potential of branding, especially at the corporate level. This paper describes branding in the context of B2B markets, and examines its perceived importance to buyers. A review of relevant literature and the development of a conceptual model enables a cluster analysis of data from a survey of industrial buyers. The exploratory analysis examines to whom branding is important, and in what situations.

**Key Words:** Brand equity, Business performance, Business to Business

**1. Introduction**

With the growth of e-commerce and global competition, business-to-business (B2B) marketers are asking whether branding, especially corporate branding, can help improve their competitive position in the new economy. Although the power of branding is widely accepted in consumer markets, the nature and importance of branding in business markets is unclear and under researched.

The key question motivating the research is to whom is branding important in B2B markets. The assumption is that branding is important to some, but not all, business customers. As one manager interviewed in the study said, "Branding may not be important to everyone, but as long as it is important to some of our customers, we want to know about it." Price and

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tangible attributes of products in highly competitive markets often differ only slightly. To prevent their products from becoming commodities, companies seek to differentiate themselves with service, with the company brand, and with brands at the product level. Organizational buyers have long been known to consider service and other more intangible aspects of the offer, in addition to price and product quality. According to Aaker, “Many industrial purchase alternatives tend to be tossups. The decisive factor then can turn upon what a brand means to a buyer.” Some industrial buyers may be more receptive to branding than are others. This paper provides an exploratory study of to whom branding is important.

Many business-to-business (B2B) strategists have claimed brand-building belongs in the consumer realm. They argue that industrial products do not need branding as it is confusing and adds little value to functional products (Collins, 2007; Lorge, 2008; Saunders and Watt, 2009). Others argue that branding and the concept of brand equity however are increasingly important in industrial markets, because it has been shown that what a brand means to a buyer can be a determining factor in deciding between industrial purchase alternatives (Aaker, 2001). In this context, it is critical for suppliers to initiate and sustain relationships due to the small number of potential customers (Ambler, 2005; Webster and Keller, 2004). To date however, there is no model available to assist B2B marketers in identifying and measuring brand equity. In this paper, we take a step in that direction by operationalising and empirically testing a prominent brand equity model in a B2B context. This makes not only a theoretical contribution by advancing branding research, but also addresses a managerial need for information that will assist in the assessment of industrial branding efforts.

## **2. Literature Review**

Organizational buying behavior research indicates that intangible attributes are important in business purchase decisions. The consumer behavior literature documents the importance of branding in consumer decisions. Between these research streams lies a gap in terminology and knowledge concerning the role of branding in B2B markets. The small body of research on industrial branding provides insights, yet does not sufficiently close this research gap.

### **2.1. Organizational Buyer Behavior**

Organizational buyers differ in many ways, including what they perceive to be important, the decision processes they follow, and the purchases they make. Well-established models of organizational buyer behavior highlight the importance of buyer characteristics, purchase characteristics, and decision process characteristics to the purchase choice. The models begin with the recognition of a purchase need, then link buyer characteristics, purchase characteristics, the perception of attribute importance, and the decision process to the final choice. Differences in customer and purchase characteristics provide the basis for meaningful customer segmentation and analysis (Saunders, 2009). Buyers do not place equal emphasis on all attributes in the purchase decision. Studies of business markets have concluded that intangible attributes such as

reputation and image can be of equal or greater importance than tangible physical product attributes (Scheuing, 2009).

Benefit segmentation research assumes that buyers significantly differ in their evaluation of the importance of choice attributes. For example, analysis of the North American flat-rolled steel industry identified three customer segments: commitment, service, and price sensitive (Rosenbroijer, 2001). Customers in the commitment segments valued close relationships with stable suppliers with high levels of expertise. Customers in the service segment were primarily concerned with quality and delivery performance. The price-sensitive customers were concerned primarily with price and costs. These benefit segments have appeal, but illustrate the difficulty of identifying buyer segments that are distinguishable and truly meaningful to the vendor (Barclay, 2006). A critical managerial issue is whether the buyer segments can be described by discernible buyer characteristics.

Perceived risk is an important topic in the literature. Risk can be defined in terms of the perception of the uncertainty and adverse consequences of buying a product (Gordon, 2003). This can be from the perspective of the organization or of the individual buyer. For example, the classic model (Michell, 2001) considered new tasks to be the most risky, with straight rebuys the least risky. However, new tasks may involve more organizational risk, but less personal risk. Buying top brands from reputable companies is one way of handling and reducing risk.

## **2.2. Insights from Consumer Branding**

Consumer research has shown that powerful brands create meaningful images in the minds of customers. Marketers invest in branding because brand image and reputation enhance differentiation and can positively influence buying behavior, as consumers choose among competing offers (Hague, 2004).

A product offer consists of three levels (Quelch, 2006). The basic product consists of the tangible features, the augmented product adds other features and services, and the potential product emphasizes the intangible features and benefits to customers. The potential level captures the idea of the real and untapped potential of branding (Murphy, 2000). Branding is powerful because it is associated with benefits to consumers, not just to marketers. Consumers perceive brands to have functional, emotional, and self-expressive benefits (Aaker, 2006). Aaker (2006) also identified three key aspects of branding important to marketers: general name awareness, or how well known the brand is; the general reputation of the brand; and purchase loyalty, measured as the number of prior purchases of the brand. In contrast, Keller defines brand equity in terms of brand knowledge and unique brand associations.

At the corporate level, reputation and corporate branding are closely related concepts (Motram, 2008). Reputation addresses the image of the company to all its constituents, including investors. Branding focuses on the image of the company to its customers. Reputation has a firm tangible foundation, with strong links to many intangible elements. Together they improve a corporation's credibility.

At the individual product level, consumer branding research has been especially extensive and varied. This reflects the availability of data and the large sampling pool of consumers. Research has examined the effects of coupons, advertising expenditures, and

attribute importance on brand choice; explored brand image and personality; and measured brand equity (Sinclair, 2008). Many of these studies offer insights into individual branding, but are not directly applicable to B2B markets, due to differences in market conditions.

### **2.3. Brand equity in Consumer and Business Markets**

A brand is a bundle of functional, economic and psychological benefits for the end-user (Ambler, 2005). Every brand retains a certain amount of brand equity, defined as the assets or liabilities associated with the brand that add to, or subtract from, the value the product provides (Aaker, 2006). This is reflected in buyers' willingness to pay a premium for a favoured brand in preference to others, recommend it to peers, and give consideration to other company offerings (Hutton, 2007).

Brand equity is derived from the overall brand image created by the totality of brand associations, perceived by customers (Michell, King, & Reast, 2001). Therefore, the attainment of a positive image on core values and any other values that differentiate it should be of the highest priority to any company (Hague & Jackson, 2004). Aaker (2006) identified four major sources of brand equity as brand loyalty, brand awareness, perceived quality, and brand associations, while Keller (2008) combines the sources of brand equity into brand awareness and brand image.

The competitive advantage of firms that have brands with high equity include the following: a price premium can be attained; increased demand by customers; brands can be extended easily; communications will be more readily accepted; there will be better trade leverage; larger margins could be obtained; and the company will be less vulnerable to competitive marketing actions (Aaker, 2006; Hague & Jackson, 2004; Keller, 2008; Quelch & Harding, 2006; Wood, 2000).

Brands tended to be associated with products but there has been a refocus on corporate brands (Mottram, 2008). A strong and favorable corporate brand is seen as an important discriminator in an increasingly competitive environment (Balmer, 2005). According to Ackerman (2008), the corporate brand offers managers a comprehensive discipline for clarifying, humanizing, organizing, and communicating how the company creates value. In industrial markets, the company itself is often the brand; but in consumers markets, the emphasis is usually on the products or a limited group of them (Hague & Jackson, 2004). It would be expensive for industrial companies to brand every item in their wide product range. For many industrial companies, there is scope for only one brand and that is the company name (Hague & Jackson, 2004). According to De Chernatony and McDonald (2008), industrial buyers are primarily concerned with the company's overall brand identity rather than with the specific product they want to buy. For a recent literature review of branding in B2B marketing, see Mudambi (2002).

Studies on industrial branding show mixed results. Saunders and Watt (2009) studied the attempts made by the man-made fibers industry to overcome the problem of loss of identity by branding at the ultimate consumer level. The study concluded that due to the large numbers of brands available, consumers were confused and really did not know what to expect from the different types of fiber. Sinclair and Seward (2008) reported on a survey of established producers

of wood and plywood panels who decided to brand their products. This study concluded that the emphasis on price and availability at the retail level tended to suggest that these products were still being produced on a commodity basis. The high dependence on price suggested a low effectiveness of manufacturers' branding strategies.

The differences and similarities between consumer and business markets have long been debated, especially given the dynamic nature of the business environment. Table 1 summarizes some of the relevant comparisons. In addition, the benefits of branding [Aaker, 2006) to customers in B2B markets have not been explored. Functional benefits may be most relevant, yet emotional and self-expressive benefits can also matter. Buyers are willing to seek out a brand for an expected functional benefit, such as a higher quality physical product or associated services. Limiting consideration to well-known products also has the functional benefit of reducing search and transaction costs.

Known brands have the emotional benefit of reducing perceived risk and uncertainty, both of which have identifiable costs to the individual buyer and to the firm. Branding can benefit the business customer by increasing purchase confidence. Purchasing a well-known brand can reinforce prior experience and relationships. Branding can increase customer satisfaction. Buying a familiar brand may involve additional comfort and a "feel good" factor. Professional buyers take pride in their work, and feel good about making the right choices.

Self-expressive benefits can be both personal to the buyer and generalizable to the buying organization. Business buyers enjoy associations with top companies, as "every purchasing department will be judged by the company it keeps". Companies recognize the value of using components manufactured by well-respected suppliers to gain legitimacy and acceptance for their own goods. Buyers can use the purchase to say something about themselves and their companies. These distinctions also influence brand management. To Murphy ([45], p. 60), industrial brands "serve precisely the same role" as consumer brands, although with a weaker branding bond, and with less potent intangible features than in the consumer sector. Table 2 highlights some of the key differences between consumer brand management and industrial brand management. These do not fit every situation, but describe general tendencies.

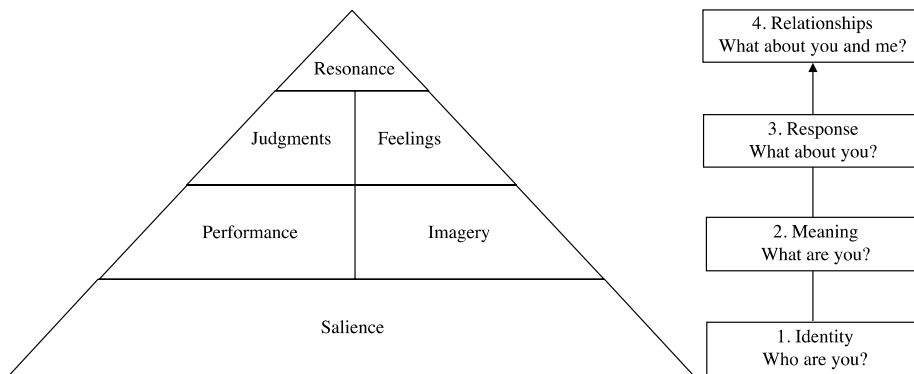
Different sources of brand equity have been proposed. Aaker (2006), for example, proposes brand awareness, associations, other proprietary assets, perceived quality and loyalty. Often though, there is no distinction made between consumer and industrial brands. The differences between consumer and business markets have been discussed elsewhere (Hutt and Speh, 2008; Kotler and Keller, 2005), and organizational buyers have been found to differ in their type of purchase and decision processes (Mudambi, 2002; Thompson et al., 2008; Wilson and Woodside, 2001). It would seem reasonable that what makes a brand valuable in a B2B context will differ from that in a consumer environment.

The most comprehensive brand equity model available in the literature is Keller's (2003, 2001, 2003). Keller claims the customer-based brand equity (CBBE) model can be applied in a B2B context, but detailed analysis, a full formal adaptation (such as a redesigned questionnaire), and empirical evidence are not yet available. Keller recognises likely general differences between consumer and B2B markets and addresses general issues of B2B application, but his primary focus is on consumer markets. In an earlier issue of *Qualitative Market Research*, Grace

and O’Cass (2002) recognised similar limitations of the Keller framework, but in relation to its coverage of services. We turn now to an overview of the specific steps in the Keller model and present a discussion drawing from B2B branding research.

## 2.4. Elements of the Keller model

Brand equity, as defined by Keller (2003), occurs when a brand is known and has some strong, favourable and unique associations in a consumer’s memory. As shown in Figure 1, the CBBE model identifies four steps for building a strong brand. In this branding ladder, each step is dependent on successfully achieving the previous – from brand identity to brand meaning, brand responses and finally brand relationships. These steps in turn consist of six brand building blocks – salience, performance, imagery, judgments, feelings and resonance. The ultimate aim is to reach the pinnacle



Keller’s (2003) argument is as follows. The first step in building a strong brand is to ensure the correct brand identity. The purpose is to create an identification of the brand with customers, and an association in their minds with a specific product class or need. To do this, brand salience must exist, which represents aspects of brand awareness and the range of purchase and consumption situations in which the brand comes to mind. The salience building block is therefore made up of two sub-dimensions – need satisfaction and category identification.

B2B products also possess images, associations and perceptions of value, but initial awareness and associations are often achieved by direct contact with company salespeople (Gordon et al., 2003). In industrial markets, branding is dependent on the surrounding distribution network (Gordon et al., 2003; Rosenbroijer, 2001), making the role of distributors particularly important in building equity. Large organisations often have a buying centre consisting of a number of parties from various departments, as well as specialists and other interest groups, all of whom impact the purchase decision (Gordon et al., 2003; Morris et al., 2009; Rozin, 2004). This makes the process more complex, as each member will possess different needs and will view the purchase situation, buying criteria and alternative suppliers in

various ways (Ghingold and Wilson, 2008). The Keller model is focused primarily on an individual's perceptions of brands in the assessment of brand equity, but in a B2B context these other influencers can have an impact on brand equity as well.

The second step establishes brand meaning by linking tangible and intangible brand associations. Brand meaning is therefore characterized in either functional (brand performance) or abstract (image-related) associations. Functional attributes are:

1. primary ingredients and supplementary features;
2. product reliability, durability and serviceability;
3. service effectiveness, efficiency and empathy;
4. style and design; and
5. price.

By contrast, industrial research suggests that brand value has other components including the product, distribution services, support services and the company, each possessing both tangible and intangible elements (Low and Blois, 2002; Mudambi et al., 2007). Keller's model tends to ignore elements relating to support services (specifically the rapport between the service provider and customer) and the company (such as profitability, market share and reputation), which may have greater importance in a B2B context.

The Keller pyramid is also focused on the individual brand but B2B products are often marketed under the manufacturer label, or a hybrid brand, where the company's name is used with a specific product name (Gordon et al., 2003; Michell et al., 2001). This makes the company name an important decision variable. Factors relating to the company behind the brand form only a minor part of the Keller model, but they are important in a B2B context (Selnes, 2003; Thompson et al., 2008). Brand response is the third step in the Keller model and represents opinions and evaluations of the brand based on a combination of associations identified in brand meaning.

Brand relationships constitute the final step in the pyramid where brand response is converted to create an intense, active loyalty relationship between customers and the brand. Customer loyalty generating factors have also been found to be important to the success of industrial brands (Michell et al., 2001).

Hutton (2007) found willingness to communicate about the brand and make brand referrals. He also found that some organisational buyers had developed such a strong relationship with the brand they were willing to extend to other products with the same brand name.

### **3. First Examination**

Face-to-face interviews were performed with senior management from cities user owned purified water company which is PDAM Surabaya and PDAM Sidoarjo to obtain information about the technologies, market environment, and purchase processes. From this, a survey instrument was developed for use with a sample of users. The company provided contact details and allowed the use of its brand. Cities owned companies were chosen based on their stage in the purchase decision process and their perceived level of knowledge about the two main water

purifier system brands (the brand using the GPS, from here on termed Brand A, and the bar code docket system, Brand B). One was known to be using Brand A, two were known to be using Brand B, another user was close to releasing a tender for a system, and the fifth was engaged in initial discussions with the suppliers.

Respondents within the two city users were trade water purifier system officers, who are responsible for the pick-up and collection of trade water purifier system in their respective shires. They often initiate and influence the purchase decision, and ultimately use the technology. Interviews were conducted by telephone and followed a semi-structured format. They lasted up to 35 minutes. The survey consisted of a series of closed-and open-ended questions, addressing each aspect of Keller's pyramid. Questions asked respondents about the two water purifier system brands and were ordered based on the sequence of four steps and six brand building blocks in the CBBE pyramid. The second part asked respondents how they felt about the questionnaire to test their view of the content and comprehensiveness of the model. The aim was to obtain direct feedback from respondents as to their opinion of the suitability of the approach, and to identify limitations inherent in the Keller structure.

### **3.1. Findings**

First examination resulted the following:

1. Respondents placed a greater emphasis on the manufacturers' corporate brand names rather than the individual product brands, and demonstrated greater awareness of these, suggesting a B2B brand equity framework needs to give major attention to the corporate brand names.
2. Respondents identified primarily with company brands and spoke about their relationships with company representatives rather than product brands.
3. Brand elements such as slogans and brand names lacked relevance to respondents, who explicitly stated they were more interested in the product offering.
4. When asked about brand associations most respondents identified product performance features, which would be categorised in Keller's performance building block. Style and design, which feature in the Keller model, were not mentioned.
5. When asked what factors would be important to their users in purchasing an electronic system for water purifier system management, respondents mentioned many factors that represent sub-dimensions of Keller's performance building block. Some new factors however, not part of the Keller model were identified. Overall, respondents were seeking a system that could be easily implemented and used, that satisfied all the various necessary applications, and that was flexible enough to be upgraded, expanded and improved over time. Evidence of proven technologies also emerged as another important B2B performance attribute.



6. All respondents seemed to know about the activities of other users, suggesting Keller's sub-dimensions of user profiles and purchase and usage situations have relevance in an industrial marketing context.
7. Two of Keller's sub-dimensions under the imagery brand building block were not mentioned by respondents. The two water purifier system brands did not possess any personality traits or values, nor did they possess any associations related to history, heritage or experiences.
8. Aspects of the Keller brand judgments building block appeared relevant in this organisational purchasing environment, however credibility emerged as an even more important element. Respondents considered Brand B a proven product and therefore its manufacturer had more credibility. The technology of Brand A was regarded as innovative and possibly superior.
9. Keller's feelings building block lacked relevance in this market, with responses suggesting the purchase process is more rational than emotive.
10. Respondents failed to demonstrate any behavioural loyalty, attitudinal attachment, sense of community, or active engagement as per Keller's brand resonance building block.
11. When asked about the suitability of the Keller model approach, one respondent mentioned he was unsure whether he should have responded based on his own personal perspective or that of his user. This indicates a B2B brand equity model should take into account the role of the organization buying centre and the brand perceptions of all members. Discussion  
Study 1 revealed difficulties in applying a pure Keller model in a B2B context, and identified further elements potentially in need of inclusion. With the small sample size however, there was the risk the results were not representative, providing justification for an extended study with a larger sample to validate the findings. Study 1 also failed to capture key insights due to the structure of the questionnaire. It was designed based on the Keller model in its pure form, therefore the purpose of that question set was to assess the equity of brands of electronic systems for water purifier system management, not their manufacturers. Respondents who were unaware of the product brand names were not asked subsequent questions relating to associations, feelings and so on, even if they were aware of the manufacturer's brand.

### **3.2. Discussion**

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#### **4. Second Examination**

The purpose of second examination was to take the pure Keller questionnaire from second examination, adapt it for B2B based on the feedback and results, and then test the revised survey on a larger sample.

A sample of 130 purchasing staff was selected for second examination. Selection was based on the population of the region represented (an indicator of whether a user has a need for an electronic system for water purifier system management is the number of constituents in the district).

Telephone interviews followed a semi-structured interview format and lasted between 10 and 40 minutes. Notes taken were later transcribed into word processing files so conclusions could be drawn. The survey instrument was similar to Study 1 in that it consisted of a series of closed-and open-ended questions. The survey was again structured in two parts, with the first consisting of questions following Keller's guidelines, and the second asking respondents about the suitability of the Keller model approach. A key limitation of the first study was that by using the Keller model in its pure form, the questions were designed to assess the equity of the individual product brands. The second questionnaire therefore assessed respondents' recognition of the corporate and product brand names for both Brands A and B, with respondents then asked about associations for each individually.

Additional questions were incorporated into the questionnaire that represented key findings of Study 1. In order to understand the role of company representatives in building brand equity and the importance of the company behind the product, respondents were asked what aspects of the company and of their relationship with company representatives would be important in considering to purchase an electronic system for water purifier system. A question was also incorporated about credibility. Two questions were introduced to determine the existence and structure of the organisation buying centre, as well as the role of respondents in this group. It includes detailed instructions for the interviewer. Italicised comments explain the conceptual purpose for each question, although these could be deleted for fieldwork.

#### **4.1. Findings**

Brand awareness and brand elements. Brand awareness was found to be higher overall for Brand B, with brand recognition much stronger than brand recall. When asked to recall brands of electronic systems for water purifier system management, 65 per cent of respondents could not think of any, and in only two instances respondents recalled both the manufacturer and product brands together. A total of 54 and 96 per cent of respondents recognised the product brand and manufacturer brand, respectively, for Brand B. For Brand A, 27 per cent of respondents recognised the product brand, while 42 per cent recognised the manufacturer's brand. Breadth of awareness was relatively low for Brand A, with 23 per cent of respondents correctly recalling the

manufacturer when asked about companies. When asked with which manufacturer respondents associated Brand A, only 28 per cent correctly recalled the manufacturer. When prompted, all respondents who indicated they did not know, correctly recognised Brand A's manufacturer. Awareness of the manufacturer brand names was therefore shown to be stronger than awareness of the product brands themselves.

Overall, the majority of respondents listed more associations when asked about the manufacturers than when asked about the individual product brands. Most of the associations provided for the manufacturers related to the systems themselves. In many instances, the same associations were listed for the manufacturer and product brands. To respondents the product brand and manufacturer brand name were synonymous. Respondents placed more emphasis on the companies behind the brands than the brands themselves. Two respondents specifically stated they did not use the product brand when referring to the systems, but rather used the company names to distinguish between products. When asked about awareness and associations for the manufacturers and the product brands, other trade water purifier system officers expressed confusion and asked if these were the same. The results highlight the importance of measuring the equity of manufacturers' brand names.

Brand B did not have a slogan, but Brand A did. Only two respondents correctly identified the brand associated with the slogan. The implication for branding appears to be that B2B buyers care little about product slogans and more about the product offering.

Brand associations. Key criteria for assessing brand associations in Keller's model are their perceived favourability and uniqueness. Trade water purifier system officers were therefore asked open-ended questions about which factors were most favourable, least favourable and most unique about Brands A and B. Responses mostly referred to features of the products, which would fall under the Keller building block performance. Respondents focused on aspects of the brands that would satisfy their functional needs. It should be noted that style and design, which feature in the Keller model, were again not mentioned.

Subjects were asked what factors would be important to their users in purchasing an electronic system for water purifier system management. The most important factors were system usability and simplicity, and cost/price. Other important factors included system reliability and dependability, compatibility with existing systems, flexibility, and reporting functionality. Many of these represent sub-dimensions of Keller's performance and imagery building blocks, however some new elements emerged.

When asked what aspects of the company behind the product were important in considering the purchase of a water purifier system, the fact that the technology/system is proven emerged as the most important factor. Around 64 per cent of respondents mentioned such factors as the manufacturers' proven track record, experience in the industry and involvement with other local government authorities. Respondents indicated they wanted to see the system set up in other users and wished to speak with these users to gauge their satisfaction. Other important factors included after sales service and support, as well as company stability. Respondents generally wanted to see some indicator of longevity and proof the supplier would be there to assist them in the future.

When asked about associations for the manufacturers and their brands, amongst the strongest associations for both Brands A and B were the names of users using these systems. Overall, respondents demonstrated detailed knowledge of system users. This tended to favour Brand B, which is better established in the market and more extensively used.

Similar to First Examination, it was found the two water purifier system brands do not possess any personality traits or values, nor do they possess any associations related to history, heritage or experiences.

Brand judgments. When asked about their overall opinion of the water purifier system brands and their quality, 50 per cent of respondents who were eligible to answer the question stated they did not have an opinion, or that they did not know. Respondents generally wanted some form of demonstration or exposure to the product before forming a judgment. Other respondents stated the systems seemed “good” based on their investigations or initial research.

Several respondents took into consideration the experiences of other users in forming their brand judgments. Two respondents mentioned that although they had no personal involvement with the products, they presumed the quality was “decent” as a result of their discussions with other users who were “comfortable” with the products.

It was evident that both brands were under consideration by all respondents. Both were considered personally relevant by respondents although cost was an issue. Responses indicated Brand B was perceived to be superior to Brand A. This seemed to be due to Brand B being a proven product. The technology of Brand A was again regarded as superior.

Credibility was one element identified as being of key importance, even more important than recognised by Keller. In this market, respondents identified primarily with the manufacturer and spoke about their relationships with company representatives.

Brand feelings. The responses suggest that feelings do not play an important role in this B2B market, suggesting the purchase process is more rational than emotive.

Brand resonance. Brand resonance was not evident. In discussing their experiences, respondents again referred to product functionality and tangible product performance as reasons for purchasing. Some respondents already using a water purifier system brand spoke about the terms of their contracts, and the possibility of switching to the competitive product following the contract completion. Behavioural loyalty appeared to be a consequence of the contract period, with respondents stating after this time they would review all products to determine which would best meet their needs at the right price. Also, although the experience of other users plays a critical role during the decision making process, the respondents did not feel any type of kinship or affiliation with other users of the same brand post-purchase.

Active engagement was not evident. No respondents who had purchased an electronic system were willing to invest time, energy, money or other resources to get to know the brands better beyond those expended during purchase and consumption (Keller, 2003). Some trade water purifier system officers indicated they speak with other local government authorities about the brands they are using, but they did not actively engage in word-of-mouth communication.

The findings reveal that the application of Keller’s resonance building block in this organisational context poses difficulties. The buyers generally appeared to keep an objective,

detached perspective (rather than displaying enthusiasm or advocacy). This is a major difference from consumer brands.

Company representatives and brand equity. The company and its representatives play a major role in building brand equity. When asked about their relationship with the brand, respondents spoke about their relationships with company salespeople. This further reinforces that in an industrial context, it is buyers and sales staff that interact, not customers and brands as in the consumer environment. When asked what aspects of their relationship with the sales team and other company representatives would be important in purchasing an electronic system, respondents offered a number of insights. The most important factor was the ability to contact company representatives, followed by after-sales service/support, and staff honesty. Respondents expressed their desire to have sales staff understand their individual needs and work in partnership with them to satisfy requirements.

#### **4.2. Discussion**

Respondents in the current study most closely identify with her “highly tangible cluster” as they indicated physical product improvements were important, and their focus was on tangible, quantifiable and objective benefits of the products and their manufacturers. The emotional and self-expressive benefits were unimportant, but respondents highlighted the need for support from well-established, reputable and flexible manufacturers. They acknowledged the importance of a high-quality physical product as well as augmented services. Mudambi claims a combination of a strong company brand and an effort to differentiate individual brands is likely to be most effective with firms in this cluster, as they are less receptive to branding. This appears to be the case in the current study. The generalisability of our findings may be stronger for industries fitting into

Mudambi’s highly tangible cluster. Our questionnaire however is general enough to pick up relevant associations from other Mudambi industry clusters (such as where feelings are important), and therefore could be used as a first step in considering how to measure brand equity.

#### **5. Conclusion**

Overall, assessing the brand equity of the corporate or manufacturer brand names would seem more appropriate in a B2B context than measuring the equity of the individual product brands. Second, the salience, performance, imagery and judgments building blocks are applicable in an organisational context, although differences in the sub-dimensions for these blocks have been identified. Some brand elements such as product slogans appear to lack relevance to organisational buyers, while user profiles, purchase and usage situations and credibility are even more important than suggested by Keller. Feelings did not play a role in the industrial marketing context and the pinnacle of Keller’s CBBE pyramid, resonance, may need modifications to be more relevant. Company representatives play a role in building brand equity,

thus indicating need for this human element to be recognised in a B2B brand equity model. An issue for a single industry case study such as this is of course, that of generalisability, but the findings are consistent with those of Mudambi (2002). Mudambi's research identified three clusters of B2B customers, each of which differs in terms of the importance of branding in the purchase decision. Respondents in the current study most closely identify with her "highly tangible cluster" as they indicated physical product improvements were important, and their focus was on tangible, quantifiable and objective benefits of the products and their manufacturers. The emotional and self-expressive benefits were unimportant, but respondents highlighted the need for support from well-established, reputable and flexible manufacturers. They acknowledged the importance of a high-quality physical product as well as augmented services. Mudambi claims a combination of a strong company brand and an effort to differentiate individual brands is likely to be most effective with firms in this cluster, as they are less receptive to branding. This appears to be the case in the current study. The generalisability of our findings may be stronger for industries fitting into

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## **6. Limitations and Future Research**

This research begins the assessment and adaptation of a major brand equity model for the B2B context, but it is by no means the end. Although, insights and challenges have been identified in applying Keller's CBBE model, there is a risk the results may represent industry-specific factors that are not representative of all B2B markets. One potential limitation of the study is that no distinction was made between the B2B and business-to-government environments. This represents a future research opportunity (though we suspect the basic B2B brand equity framework would apply to both). Further, research is therefore required to validate the findings in different industrial marketing contexts.

The advantage of the current study is that it captures detailed insights and key lessons from the field with regards to how B2B brand equity should be conceptualized and measured, by investigating real brands with real potential B2B buyers. More attention is needed to the link between the marketing mix and the creation of brand equity in B2B markets, drawing on work in customer markets. Online B2B hubs and exchanges, and changes in industrial distribution pose challenges to marketers trying to differentiate their companies and products. Given the complexity of managing in the dynamic B2B marketplace, the role and importance of branding will continue to be explored and examined.

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