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Determinants of brand relevance in a B2B service purchasing context

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Abstract

Purpose – Brands have traditionally been regarded as a key asset and a source of competitive advantage in purchasing decisions, as customers are expected to prefer stronger brands to minimize risks. However, the role of brands in business markets is unclear and underresearched. The purpose of this study is to analyze the relevance of brands in a business-to-business (B2B) purchase setting and their key determinants.

Design Methodology/approach – A research model was developed to explain brand relevance when compared with other decision factors in a B2B context. Based on the frameworks developed by Zablah *et al.* (2010) and Mudambi (2002), the model considers the purchase situation, decision-maker characteristics and firm size as determinants of brand relevance in the decision-making process. One of the most prominent Portuguese construction groups, which comprised three companies, was chosen for the sample of this study. Data were collected through a self-administered, online, cross-sectional survey, resulting in a convenience sample of 87 decision-makers.

Findings – Findings suggest that attributes related with brands matter even in B2B rational decision-making processes. However, brands are not important to all organizational buyers or in all situations. Different purchase situations and decision-maker characteristics proved to have an impact on brand relevance, namely, brand reputation, prior purchases and brand awareness. Only firm size was not confirmed as a determinant of brand relevance in the B2B purchasing process.

Originality/value – B2B brand research is scarce, especially for industrial services. By investigating the determinants of brand relevance in a B2B purchasing context, namely, in a construction services setting, this study contributes to bridging this literature gap. Moreover, the few studies on the subject have been largely descriptive in nature and managerially oriented, while this investigation emphasizes hypothesis testing through a proposed research framework. Also, in managerial terms, identifying determinants of the importance given to brands by organizational buyers is critical in deciding when investment in brand development is more likely to payoff.

Keywords Service, Determinants, Purchasing, Brands, Relevance, Business-to-business marketing

Paper type Research paper

1. Introduction

Brands have traditionally been regarded as a key asset and a source of competitive advantage in purchasing decisions, as customers are expected to prefer stronger brands to minimize risks (Webster and Keller, 2004; Roberts and Merrilees, 2007). Brands help to create meaningful associations that can increase feelings of confidence and loyalty in the minds of the customers (Romaniuk and Nenycz-Thiel, 2013).

But even though widely accepted in consumer markets, the importance of brands in business markets is still unclear and underresearched (Mudambi, 2002; Bengtsson and Servais, 2005; Ohnemus, 2009). In the 1990s, there were only a few articles on business-to-business (B2B) branding (Roberts and Merrilees, 2007) and research was neglected (Keränen *et al.*, 2012). Much of the early B2B branding research emphasized the role of brands as a product differentiator, considering whether a brand name conferred any competitive advantage to the selling organization. Past research has considered B2B brands irrelevant, because of their association with personal features and emotional values in a setting where decision-making is mostly based on functionality and rationality (Bengtsson and Servais, 2005; Ballantyne and Aitken, 2007).

But as business markets competition became more intense under the pressures of commoditization, globalization and price, together with a decreasing number of personal relationships and growing customer power (Keränen *et al.*, 2012; Leek and Christodoulides, 2011), B2B firms started to brand their products to gain a sustainable competitive advantage (Kotler and Pfoertsch, 2007; Walley *et al.*, 2007; Baumgarth, 2008). Previous order-winning criteria such as reliability and quality are now assumed as minimum requirements, and the increased use of outsourcing and partnerships has increased the pressure on firms to build trust through strong brands (Lynch and de Chernatony, 2007). As a response to increasing industry attention, particularly since 2000, recent years have seen the publication of a vast number

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of B2B branding articles and special issues of journals (Keränen *et al.*, 2012), with a substantial research stream appearing only very recently in the literature (Roberts and Merrilees, 2007; Leek and Christodoulides, 2011). However, the extant literature remains embryonic, fragmented, contradictory, largely subjective in nature, limited in its scope and essentially based on narrative literature reviews (Glynn *et al.*, 2007; Roberts and Merrilees, 2007; Keränen *et al.*, 2012). One such areas relates to the role of B2B brands in the decision-making process (Blombäck and Axelsson, 2007; Leek and Christodoulides, 2011).

Also, the role of brands in industrial services is gaining increasing importance in the B2B sector and merit research attention (Roberts and Merrilees, 2007; Davis *et al.*, 2008), especially considering the increase in "full service" or "total solution" providers (Keränen *et al.*, 2012). In their systematic literature review on B2B brands, Keränen *et al.* (2012, p. 410) found that only 9 out of 62 empirical studies were conducted in the context of B2B services and mainly included financial or logistics services. Research dedicated to more traditional industrial services, such as installation, construction, operation and maintenance, bought in connection with the purchase of physical goods, is "absent". Also, discrete, rather than continuous, B2B services have not yet been studied (Roberts and Merrilees, 2007).

To address these literature gaps, the purpose of this study is to analyze the relevance of brands in a B2B purchase setting and their key determinants. Specifically, this research will consider a construction services setting and a discrete traditional industrial service, and it will focus on industrial buyers of a Portuguese building contractor. This study begins by presenting the literature review of the most important concepts, namely, brand management and purchasing decisions in a B2B context. Drawing from the literature, a conceptual model of the determinants of brand relevance in B2B settings is developed. The investigation undertaken to test the conceptual framework is then described. Finally, we conclude the paper by presenting our final conclusions, which are relevant to both the academia and managerial world.

2. The relevance of brands in the B2B purchasing process

The American Marketing Association (1960, p. 91) defines brand as:

> A name, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors.

Brands add value by giving clues about their offer to reduce perceived risk and uncertainty in buying situations (Bengtsson and Servais, 2005). Brands are also associated with higher tangible quality and reduced search and transaction costs (Mudambi, 2002; Kotler and Pfoertsch, 2007). Above all, the positive images that strong brands establish in the consumer's mind are difficult to imitate, resulting in competitive advantages (Davis *et al.*, 2008; Campbell *et al.*, 2010). Thus, brand image and brand reputation evoke confidence and positive feelings that motivate purchase (Mudambi *et al.*, 1997; Bendixen *et al.*, 2004; Leek and Christodoulides, 2012).

Brand awareness, or how well a brand is known and how strong is a brand presence is in the consumer's mind (Aaker, 1996), is an important concept in the marketing management literature (Homburg *et al.*, 2010; Huang and Sarigöllü, 2012). Moreover, brand awareness influences the purchase decision process (Keller, 1993). Also, brand reputation, which relates to the image of a company perceived by all its stakeholders (Mudambi, 2002), can determine behavioral intentions and outcomes under different situations (Sengupta *et al.*, 2015). Moreover, one of the most desired behavioral effects of branding activities is brand loyalty or a strongly motivated and long-standing decision to purchase a product or service of the same brand (Romaniuk and Nenycz-Thiel, 2013).

During the greater part of the twentieth century, brands were regarded as something mainly applicable to and useful for companies selling consumer goods (Blombäck and Axelsson, 2007; Roberts and Merrilees, 2007). This reflects a more relationship-oriented approach of B2B contexts (Brown *et al.*, 2012) and the emphasis on functionality and rationality during the decision process (Bengtsson and Servais, 2005; Ballantyne and Aitken, 2007; Leek and Christodoulides, 2012). Also, branding was considered impractical in B2B due to the thousands of products involved, which makes it difficult for both organizational markets and organizational purchasers to clearly acknowledge brand relevance (Bendixen *et al.*, 2004; Leek and Christodoulides, 2011).

Only recently has attention been given to business markets (Baumgarth, 2008; Ohnemus, 2009; Marquardt *et al.*, 2011). Some authors (Blombäck and Axelsson, 2007; Brown *et al.*, 2007; Roberts and Merrilees, 2007; Aspara and Tikkanen, 2008b; Juntunen *et al.*, 2011) especially emphasize the importance of corporate brands, as opposed to product brands, in B2B markets. A corporate brand is more powerful, stronger and has more sustainable values and foundations that allow the organization to have a stronger positioning. One of the key differences between product brands and corporate brands is that the corporate brand values tend to be grounded in the values and affinities of company founders, owners, management and personnel (Balmer and Gray, 2003). According to Aspara and Tikkanen (2008b), a corporate brand in B2B markets refers to company-specific brand perceptions/images which business customers often assess, value and base their purchase decisions on. Brand managers in industrial markets tend to place more emphasis on corporate rather than individual brands, and the company name is often the brand, unlike what happens in consumer markets (Walley *et al.* 2007; Davis *et al.*, 2008). This is especially true in B2B services, where there is no product brand (Roberts and Merrilees, 2007) and the object of purchase is intangible (Juntunen *et al.*, 2011). Services involve interaction between the customer and the provider company; customization, relationships and experiential components play a major role; and the quality is evaluated through the activities, capabilities and performances of the provider company, namely, its employees, technologies and facilities (Aspara and Tikkanen, 2008b). Services' intangibility creates uncertainty, and strong brands can help decision-makers deal with this uncertainty (Brown *et al.*, 2012). Furthermore, corporate brands refer not only to corporate identity but also to brand relationships (Bengtsson *et al.*, 2005; Blombäck and Axelsson, 2007;

Juntunen *et al.*, 2011), such as, for example, size and prestige of previous clients, history of past deliveries and overall actions of the organization. Thus, the significance of corporate brands for a B2B company will also be emphasized by the relative network position of the supplier company and its willingness to partner (Aspara and Tikkanen, 2008b).

To understand the relevance of brands in B2B markets, it is necessary to investigate buyers' behavior and decision-making processes. Industrial products are defined as "products used in manufacturing that are not marketed to the general consuming public", including goods, services, capital goods and consumable items (Mudambi *et al.*, 1997, p. 435). B2B markets can also be characterized by "large transactions between a firm and its suppliers related to goods used by the firm in the production of its own products and services" (Campbell *et al.*, 2010, p. 712). In industrial markets, any decision made should add value to the buying organization and be financially feasible (Blombäck and Axelsson, 2007). Industrial markets consist of profit-seeking firms and budget-constrained organizations and are characterized by their buyers more than their products (Webster and Keller, 2004). The fact that B2B purchase decisions involve more people also adds to the complexity of the process (Brown *et al.*, 2007). Exchange in B2B markets has been described as driven by precise and technical specifications and by business buyers who are professional, active customers that carefully evaluate accordingly, indicating that emotional impact and impulse purchases are rare in industrial markets (Blombäck and Axelsson, 2007; Brown *et al.*, 2007). However, B2B purchasing is a decision made by a group of individuals, who may be influenced by both affective and cognitive factors (Mudambi, 2002; Lynch and de Chernatony, 2004). Buyers are concerned not only about their organization's economic performance but also about their desire to achieve recognition and rewards (Davis *et al.*, 2008). Thus, besides functional benefits, the psychological security of purchasing a strong brand may also play an important role. In this sense, industrial buying decisions may be both rational and emotional, as they serve both the organization and the individual's needs, even if the former takes precedence over the later. According to Lynch and de Chernatony (2007), adopting a one-dimensional approach that relies solely on functional values overlooks the importance of emotional values in organizational decision-making.

B2B markets are also characterized by complex and long-lasting buying processes involving group decision-making processes and multiple buying influences (Lynch and de Chernatony, 2004). Industrial buying decisions typically involve many actors, take place over a long period and go through a series of decision stages (Webster and Keller, 2004). According to Blombäck and Axelsson (2007), buying in B2B markets implies several steps, namely, selection, evaluation and choice. However, during the initial screening of the available suppliers, buyers often face many alternatives and, hence, cannot actively pursue and assess all of them. Buyers may lack the knowledge and experience of the supplier, and the brands can be seen as providing reduced risk and increasing confidence in the purchase decision (Leek and Christodoulides, 2011; Mudambi, 2002). For example, Blombäck and Axelsson (2007, p. 423) concluded that corporate image and reputation may function as a "catalyst for choice", especially in the early stages when the selection set is formed. Corporate image is, thus, assumed to have an impact on customers' choice of a company when services attributes are difficult to evaluate (Srivastava and Sharma, 2013), by helping decision-makers to reduce the perceived risk of the purchase and information search costs (Backhaus *et al.*, 2011). Also, B2B buyers are often looking for a partner for future cooperation, and the ability to display a trustworthy corporate brand image plays a critical role in the B2B decision-making process. Consequently, the identification of factors that influence relative brand importance in the decision-making process is critical to the development of effective B2B brand strategies (Zablah *et al.*, 2010) and is a question the research agenda needs to address (Leek and Christodoulides, 2012).

3. Determinants of brand relevance in B2B purchasing

Among other determinants, brands can influence B2B purchasing decisions (Backhaus *et al.*, 2011). From the producer's point of view, a strong brand generates demand, allows companies to practice premium prices, increases power in distribution networks and positively impacts perceived quality, satisfaction and loyalty, among other benefits (Low and Blois, 2002; McQuiston, 2004; Ohnemus, 2009; Glynn, 2012).

In a buying situation, brands can benefit the business customer by increasing purchase confidence in a process where emphasis is given to risk reduction (Mudambi, 2002), especially in high-risk buying situations involving significant expenditures and possible technical problems like B2B decisions (Lynch and de Chernatony, 2004; Glynn, 2012; Leek and Christodoulides, 2012). Also, business buyers gain acceptance for their own goods by associating themselves with prestigious top suppliers (Mudambi, 2002; Leek and Christodoulides, 2012). Brands can also serve as a mechanism for dealing with information overload and simplifying product selection (Zablah *et al.*, 2010; Brown *et al.*, 2012). Moreover, according to Low and Blois (2002), brands increase the confidence in decision-making and make business customers feel more satisfied with their purchase, as buying a familiar brand can contribute with a "feel good" factor (Mudambi, 2002). Corporate reputation also positively influences buying behavior (Roberts and Merrilees, 2007).

However, the importance of brands in B2B settings tends to be lower when compared with other more functional benefits (Bendixen *et al.*, 2004). And although organizational buyers consider service and other more intangible aspects in their buying decisions, brands tend to be secondary when compared with price, technology, logistics and product features (Kuhn *et al.*, 2008; Zablah *et al.*, 2010). Also, Bendixen *et al.* (2004) concluded that brand comes in fourth place as the most valued attribute, preceded by delivery time, price and technology. Kalafatis *et al.* (2012) argue that though tangible and intangible aspects are both essential criteria, its relative significance differs with the market structure and settings.

As brands are not equally important to all companies, all customers or in all purchase situations (Mudambi, 2002), it is thus important to determine to whom, when and in what situations are brands more likely to be influential in B2B purchasing decisions (Zablah *et al.*, 2010; Brown *et al.*, 2012). According to Lynch and de Chernatony (2004), in addition to understanding the decision-making process, to understand the relevance of brands, it is important to know:

- the characteristics of the purchase situation;
- the structure of the decision-making unit (DMU) and evaluative criteria used; and
- the nature of the organizational buyers.

Accordingly, Mudambi (2002) concluded that brand relevance is influenced by both buyer and purchase characteristics. Organization and decision-maker characteristics as well as purchase situations are important determinants of the purchase choice (Zablah *et al.*, 2010). Also, according to Leek and Christodoulides (2011), the nature of the buyer, the characteristics of the customer company and the nature of the purchase situation all individually influence the importance of brand management.

3.1 Purchase situation

The notion of the purchase situation is a key consideration in organizational buying literature (Brown *et al.*, 2007). Buying behavior varies as a function of the type of purchase being considered and so does the role played by the industrial brand (Webster and Keller, 2004; Blombäck and Axelsson, 2007; Backhaus *et al.*, 2011). Purchase situations in B2B markets may be pure repurchases, modified re-buy situations and new purchases, a distinction that reflects the different level of involvement in the problem-solving behavior (Mudambi *et al.*, 1997). Pure repurchase refers to routine decisions concerning the same product from the same supplier, resulting in reduced risk actions. When the goal is to meet an existing need in another way, the company is in a modified re-buy position (Zablah *et al.*, 2010). Finally, the new purchase situation is related with a new need, resulting in a riskier process and in higher costs for information search (Mudambi, 2002). According to Webster and Keller (2004), purchase situations vary in terms of the complexity of the problem being solved; the newness of the buying requirement; and the number of people and the amount of time involved.

Brands play different roles in these various situations across the continuum. In routine re-buys, brands are drivers of loyalty, while in new purchases, brand recognition and promises are the determinant in encouraging a change in purchasing preferences. Blombäck and Axelsson (2007) studied the role of industrial brands in a new purchase situation and concluded that at least at early stages of purchasing, B2B buyers can be affected by factors peripheral to the actual product or service offered. Once quantifiable "hygiene" factors have been applied, other intangible attributes related to the selling party may become more important than product performance. For instance, corporate brand image and supplier reputation may affect a buyer's evaluation. Also, the more complex the purchase situation (problem, people, information and time involved), the more valuable a strong brand becomes (Bendixen *et al.*, 2004; Webster and Keller, 2004). Similarly, as the degree of uncertainty and risk increases, the relevance of brands may increase (Bengtsson and Servais, 2005; Backhaus *et al.*, 2011) as a decision heuristic. For instance, Brown *et al.* (2012) and Zablah *et al.* (2010) investigated when brands are more likely to influence organizational buying decisions by focusing on a modified re-buy situation. According to the authors, these purchase situations tend to balance buyer risk and buyer autonomy and, thus, maximize brand relevance in the purchase decision. Also, the criticality of the product involved in the purchase may affect the importance of brands (Brown *et al.*, 2007; Leek and Christodoulides, 2011).

The heightened level of involvement and importance surrounding a purchase is a factor directly related to organizational and buyer brand sensitivity (Brown *et al.*, 2007; Backhaus *et al.*, 2011). Mudambi (2002) related different purchase situations to branding "receptiveness" of industrial buyers, finding three clusters. Brand receptive buyers were found more in risky purchase situations (typically new purchases), involving larger volumes and several suppliers, while non-receptive buyers were found in straight re-buys based on convenience. Highly tangible buyers were characterized by product-oriented modified re-buys. On the other hand, according to Leek and Christodoulides (2011), for more transactional buyers, who may repeatedly buy the same brand to minimize search costs, brand attributes may be more important in determining who to do business with. In another study on the branding of B2B services, Roberts and Merrilees (2007) also conclude that brands are the most important criteria in the case of repurchase/renewal decisions, contributing to customer retention. In an effort to bridge these two perspectives, Brown *et al.* (2011) argue that buying centers are more sensitive to brands when risk is relatively low (e.g. repurchases) and/or relatively high (e.g. new purchases). In low-risk situations, brands may act as cues for choice simplification, whereas in high-risk situations, organizational buyers may resort to brand cues due to the overwhelming amount of information. This apparent lack of consensus in the literature supports our call for additional studies. The purchase situation (new situation, pure repurchases or modified re-buy) may, thus, influence the importance given to the brand in the decision-making process (Mudambi *et al.*, 1997). Accordingly, this research predicts that:

H1. Different purchase situations will result in significant differences regarding the importance given to at least one of the factors associated with brands.

3.2 Decision-maker characteristics

The importance of brand-related factors may also depend on organizational roles in the buying process (Lynch and de Chernatony, 2004; Webster and Keller, 2004; Leek and Christodoulides, 2012). In the B2B markets, there is often more than one person involved in the purchase decision. Several individuals can occupy a given role, and each individual may occupy several roles (Webster and Keller, 2004). The typical buying center or DMU has many members, from a number of disparate functional areas, with a wide variety of backgrounds and experience, and there is a need to achieve consensus to arrive to a group decision (Brown *et al.*, 2007). However, each member is likely to give importance to very different decision criteria, to evaluate risks in a different way and to have varying modes of information processing (Lynch and de Chernatony, 2007; Leek and

Christodoulides, 2011) and thus assign differing values and relevance to the brand (Backhaus *et al.*, 2011). For instance, attributes and values that appeal to a purchasing manager may be rather different from the values deemed important by a manufacture manager, a designer or an engineer (Lynch and de Chernatony, 2004, 2007).

In terms of the decision-maker characteristics, participants can be described in terms of their roles. These roles were defined as (Webster and Keller, 2004):

- *Beginners*: Those who define the purchase situation and initiate the process.
- *Users*: Those who are able to use the product.
- *Buyers*: Those who can commit the organization to spend money.
- *Deciders*: Those with the authority to choose between offers from potential products and sellers.
- *Influencers*: Those who add information or restrictions in the buying process.
- *Gatekeepers*: Those who can control the flow of information in the buying process.

Bendixen *et al.* (2004) found that technical specialists and users were the only ones to rank brand as the most important attribute (24 and 28 per cent relative importance), while buyers and gatekeepers only gave the brand a relative importance of 16 and 7 per cent. The authors describe technical brands as largely outside the area of interest of gatekeepers, indicating a low personal involvement and a more affective focus, while technical specialists and users would be more engaged in the sourcing decision, holding superior brand knowledge and experience. Alexander *et al.* (2009) concluded that deciders and users were the ones who gave brand the highest importance. According to Leek and Christodoulides (2011), technical specialists, users and deciders are more able to differentiate between good and poor brands, given their considerable experience. Also, the sensitivity to the brand tends to increase when the buyer has a top position in the organizational hierarchy (Brown *et al.*, 2012). As such, this research predicts that:

H2. Different decision-maker characteristics (the department which he/she belongs to and their role in the buying process) will result in significant differences regarding the importance given to at least one of the factors associated with brands.

3.3 Organization characteristics

Characteristics of the firm, such as size, may also have an impact on the importance given to brands. The buyer firm size can be assessed in terms of annual sales (Zablah *et al.*, 2010) or by the number of employees in an organization (Brown *et al.*, 2012). Small firms are more likely to use a less rational procedure in their decision-making due to lack of resources. By relying on brands, the process requires less information processing effort for small firms (Zablah *et al.*, 2010). As larger firms have more means to evaluate multiple alternatives, they can avoid developing strong brand preferences. Mudambi (2002) characterized organizations in terms of brand receptivity. Firms considered to be more receptive to brands use more suppliers, are large volume buyers and are sophisticated and open-minded, while low-involvement, tradition and convenience characterized the less receptive clusters. Conversely, Brown *et al.* (2012), in their study on factors influencing buying centers' brand sensitivity, conclude that when dealing with highly complex purchases, brand information tends to be heavily weighted by smaller firms, while larger firms appear to rely on other informational factors. Also, according to Leek and Christodoulides (2011), smaller B2B firms may rely more on face-to-face interaction, whereas larger firms adopt a brand perspective approach. With respect to these past findings, this research predicts that:

H3. Different firm characteristics will result in significant differences regarding the importance given to at least one of the factors associated with brands.

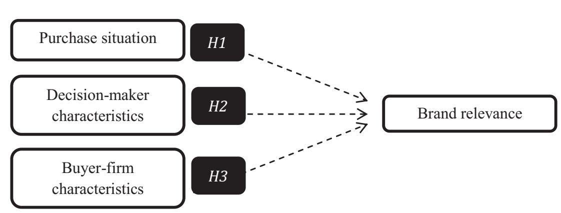
4. Research framework and methodology

This research focuses brand relevance on the buying decision process in a B2B setting. It assumed purchase situation, decision-maker and firm characteristics (namely, firm size) as key determinants of brand relevance in the decision-making process. According to the literature review, this study proposes the following research framework (Figure 1).

To develop this research, a survey-based field study was conducted. The selected population refers to industrial buyers of a Portuguese building company, the construction and engineering group DST. The DST group comprises three companies: DST, Bysteel and DTE. DST is a construction and public works company engaged in Portugal and other countries in the construction of major engineering projects, including bridges, highways, railways, canals and tunnels and various kinds of infrastructures. Bysteel's expertise is directed to the construction, design, development, production and assembly of medium- and large-sized metal structures that are used in the construction of several types of buildings, such as industrial buildings, housing and works of art. DTE is a national reference in the field of special installations and electrical contract work. As the importance given to the brand can be very contingent on the purchaser and the need itself, it is intended that this research will be enriched by the variety of DST group activities.

Also, building/construction companies can be seen as firms that offer a bundle of services but, in the end, deliver goods. According to Blombäck and Axelsson (2007), in terms of branding, these firms can be seen as having a special position, as they have no well-defined, pre-developed or ready-made products to brand, but mainly offer services. Thus, in building companies, the significance of a corporate brand may be emphasized (Roberts and Merrilees, 2007; Aspara and Tikkanen, 2008b). Finally, with this choice of context, this research also aims to bridge a literature gap, namely, the lack

Figure 1 Research framework



of research on traditional industrial services, such as installation, construction, operation and maintenance (Keränen *et al.*, 2012), and on discrete, rather than continuous, B2B services (Roberts and Merrilees, 2007).

Data were collected through a self-administered online cross-sectional questionnaire, wherein respondents (business managers, clients of the DST group) were asked to recall an actual, specific organizational purchase in which they were involved as members of the DMU. Respondents were then asked to keep in mind the last purchase situation involving the DST group and to respond to the survey questions. The questionnaire was divided into three sections. The first section related to data on the buying situation and the need that led the company to look for DST. Questions then followed about the product or service type; the company with whom the transaction was made; the purchase situation; the risks involved; and whether the DST group was chosen or not in this process. When questioning the respondent about the purchase situation, a typology found in the literature (Mudambi *et al.*, 1997) was used, and each of the possible options was explained. This allowed respondents to consider purchase situations in which newness and complexity varies, allowing *H1* testing. The second section required the adoption of an existing scale, as it concerns the assessment of the importance given to a brand in relation to other factors. The scale used was the one used by Mudambi (2002), although it has been combined with some of Zablah *et al.*'s (2010) criteria for explaining some items. A seven-point Likert scale (1 = not important; 7 = very important) was used. Factors associated with brands match those highlighted by Aaker (1996): awareness, reputation and loyalty. The attributes of the product or service included price, physical characteristics of the product, ordering and delivery services, quality of the working relationship, support services, technology used and geographical coverage (Mudambi, 2002; Zablah *et al.*, 2010). The last section refers to data about the company and the respondent. Respondents were asked about the department they worked in, and when asked to classify their role in the decision-making process, a typology found in the literature (Webster and Keller, 2004) was used, and each of the possible options was explained, thereby allowing *H2* testing. Respondents could choose more than one option, as each individual may occupy several roles. In terms of company data, buyer firm size was assessed through the number of workers and the business volume, thus allowing *H3* testing.

Companies were included in the investigation through the use of their commercial databases, whose e-mails were used to send out the questionnaire. As the B2B buying process is complex, from many to many (Webster and Keller, 2004), it was considered appropriate to include multiple contacts from the same company (when possible), as the questionnaire itself included a question that distinguished different roles in the decision-making process, in addition to the question regarding the department to which they belong. Overall, the questionnaire was sent to 523 addresses, of which 219 were in the DST database, 112 in DTE and 192 related to Bysteel. At the end, data collection resulted in 115 responses from executives actively involved in procurement activities, representing a response rate of 21.9 per cent. Of those questionnaires, 28 were excluded because of excessive missing data or obvious answer patterns, resulting in a total of 87 usable questionnaires. The resulting sample corresponded to a majority of large buyer firms. In total, 48.2 per cent of the respondents were DST clients, followed by Bysteel (37.3 per cent) and DTE clients (14.5 per cent). Purchase situations were mainly straight re-buys (42.9 per cent). The majority of respondents (58.3 per cent) considered price the most important decision criteria. Decision-makers were mainly beginners (49.4 per cent), deciders (46 per cent) or influencers (43.7 per cent). The operational department was the most represented (32.5 per cent). In total, 21.3 per cent of the answers were from the board of directors (including 7.5 per cent first-line directors). Thus, statistical test results for some variables measured should be handled with care, as small sample sizes in a validation study have less power than larger samples, which may lead to lower significance.

Data do not necessarily follow the conventions of normality as assumed in many analysis techniques (e.g. ANOVA). Under Kolmogorov–Smirnov and Shapiro–Wilk normality tests all measures were significant at the <0.05 level indicating high incidents of non-normality. Thus, we used non-parametric tests in reporting our results. Although Levene tests gave non-significant results (indicating that equality of variance is present), due to the relatively low sample size, the use of ordinal scales and non-normality of data distribution, Kruskal–Wallis tests were performed to investigate the effects of different purchase situations, decision-makers and firm characteristics on the relative brand importance. The Kruskal–Wallis test is a non-parametric equivalent of the one-way ANOVA for independent groups using ordinal data (Burns, 2000; Tabachnik and Fidell, 2001). Non-parametric tests have the advantage of making the minimal assumption about the underlying distribution of data and, thus, are often called distribution-free methods (Aczel, 1996).

5. Findings

Unsurprisingly, "price", "ordering and delivering services" and "technology" were the attributes with higher importance scores (respectively, 6.36, 5.54 and 5.08), reflecting the general belief that decision-making in B2B settings is mostly based on functionality and rationality (Bendixen *et al.*, 2004; Walley *et al.* 2007) and that brand attributes are secondary in relation to factors such as logistics and price (Zablah *et al.*, 2010). In fact, "brand awareness" and "frequency of prior purchases to the same supplier" are the attributes with the lowest score importance (3.64 and 3.78, respectively). Notwithstanding, "brand reputation", an indicator of corporate credibility, is ranked as the sixth (out of ten) most important factors for respondents (4.81).

H1 is confirmed (Table I/Figure 2), as there are significant statistical differences between purchase situations in terms of the importance given to one attribute associated with brands: the frequency of prior purchases from the same supplier ($p < 0.05$), which is the most important for pure repurchases (MR = 48.16). Conversely, though exhibiting higher mean ranks for new purchases and modified re-buys, brand awareness and brand reputation (respectively) did not exhibit significant score differences among purchase situations.

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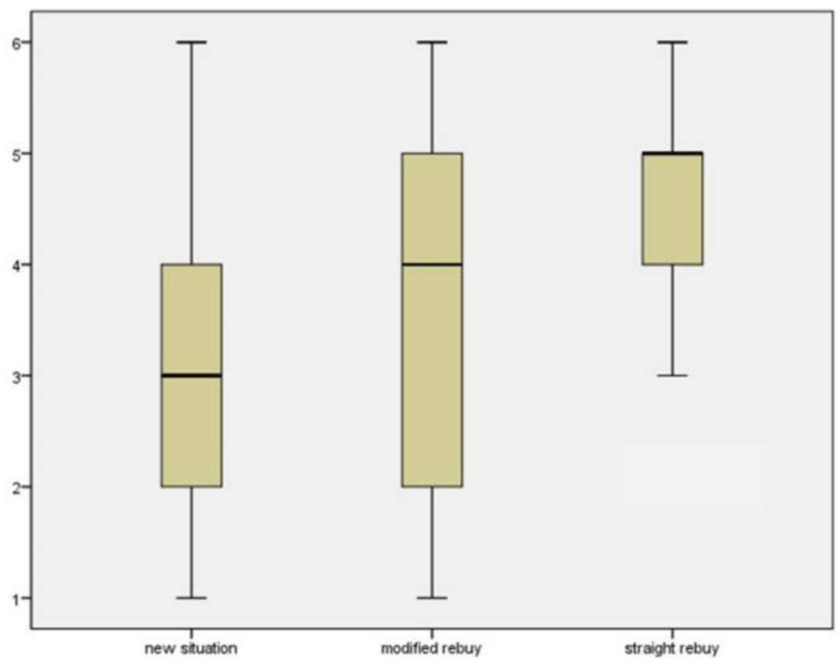
Table I *H1* testing results: impact of purchase situation on the importance of factors associated with brands

Brand/purchase situation	Mean ranks (MR)	Chi-square	df	Asymp. significance
Brand awareness		2.137	2	0.343
New purchases	44.52			
Modified re-buy situations	38.32			
Pure repurchases	35.77			
Frequency of prior purchases		9.249	2	0.010*
New purchases	26.76			
Modified re-buy situations	32.98			
Pure repurchases	48.16			
Brand reputation		3.285	2	0.194
New purchases	33.61			
Modified re-buy situations	44.93			
Pure repurchases	37.44			

Notes: Kruskal–Wallis test; grouping variable: purchase situation; *significant at $p < 0.05$

Figure 2 *H1* testing results: impact of purchase situation on the importance of factors associated with brands (frequency of prior purchases)



In terms of *H2*, we have studied two decision-maker characteristics: the department to which he/she belongs and their role in the decision-making process. In terms of the department, we considered two categories: members and non-members of the board of directors. In terms of the role in the buying process, the typology suggested by Webster and Keller (2004) was used, which considers six categories: beginners, users, buyers, deciders, influencers and gatekeepers. Answers relating to the role in decision-making do not correspond to a single variable, as they are not mutually exclusive, so 6×2 tests were conducted.

There are significant statistical differences between members and non-members of the board of directors in terms of the importance given to the two attributes associated with brands:

1 the frequency of prior purchases from the same supplier; and
2 the reputation of the supplier.

As reported in Table II and in Figure 3, members of the board of directors give more importance to reputation (MR = 54.38) and less importance to prior purchases (MR = 28.34) than members of other departments (MR = 40.82, MR = 43.54, respectively).

In terms of the role in the decision-making process (Table III/Figure 4), gatekeepers significantly differ in terms of the importance given to brand awareness (MR = 56.18; $p < 0.05$), an attribute related to brands. Thus, *H2* was supported.

Finally, there were no significant statistical differences between buyer dimensions in terms of importance scores of decision criteria ($p > 0.05$). Thus, *H3* was not confirmed. Differences between groups were found when firm dimension was measured by the number of workers, but not when it was measured in terms of business volume. However, identified

Table II *H2* testing results: impact of decision-maker characteristics (department) on the importance of factors associated with brands

Brand/department	Mean ranks (MR)	Chi-square	df	Asymp. significance
Brand awareness		0.097	1	0.755
Board of directors	41.62			
Other departments	44.58			
Frequency of prior purchases		5.684	1	0.017*
Board of directors	28.34			
Other departments	43.54			
Brand reputation		4.327	1	0.038*
Board of directors	54.38			
Other departments	40.82			

Notes: Kruskal – Wallis test; grouping variable: department; *significant at $p < 0.05$

Figure 3 *H2* testing results: impact of decision-maker characteristics (department) on the importance of factors associated with brands

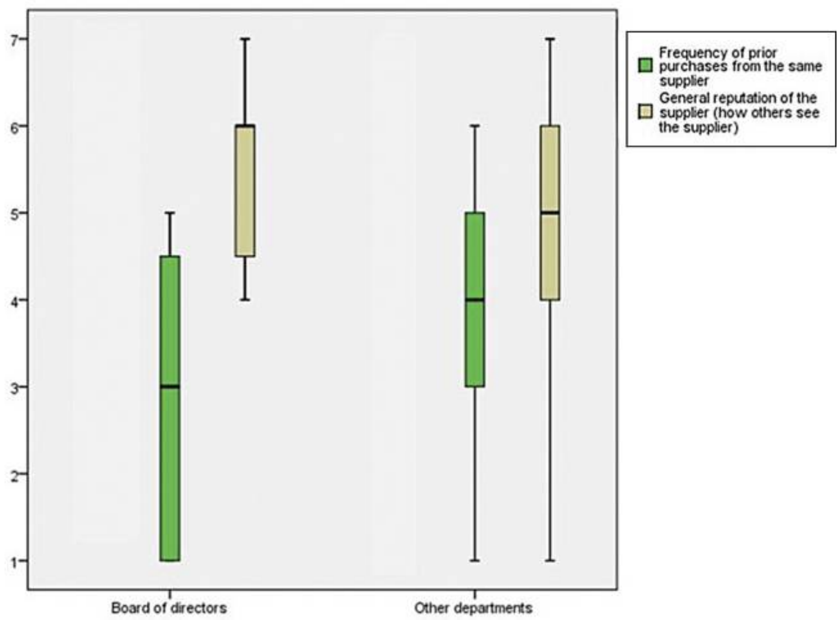


Table III *H2* testing results: impact of decision-maker characteristics (role: gatekeeper vs non-gatekeeper) on the importance of factors associated with brands

Brand/department	Mean ranks (MR)	Chi-square	df	Asymp. significance
Brand awareness		4.049	1	0.044*
Gatekeeper	56.18			
Non-gatekeeper	41.66			
Frequency of prior purchases		0.240	1	0.624
Gatekeeper	43.21			
Non-gatekeeper	39.92			
Brand reputation		0.175	1	0.676
Gatekeeper	45.96			
Non-gatekeeper	43.02			

Notes: Kruskal – Wallis test; grouping variable: gatekeeper [decision role]; *significant at $p < 0.05$

differences do not correspond to any of the factors associated with brands.

6. Conclusion and discussion

The aim of this study was to analyze the relevance of brands (namely, awareness, reputation and loyalty) on the buying decision process in a B2B setting. As key determinants of brand relevance, purchase situation, decision-maker and buyer-firm characteristics were considered.

Findings suggest that attributes related with brands matter even in rational B2B decision-making processes. However, purchasing managers are likely to consider more functional

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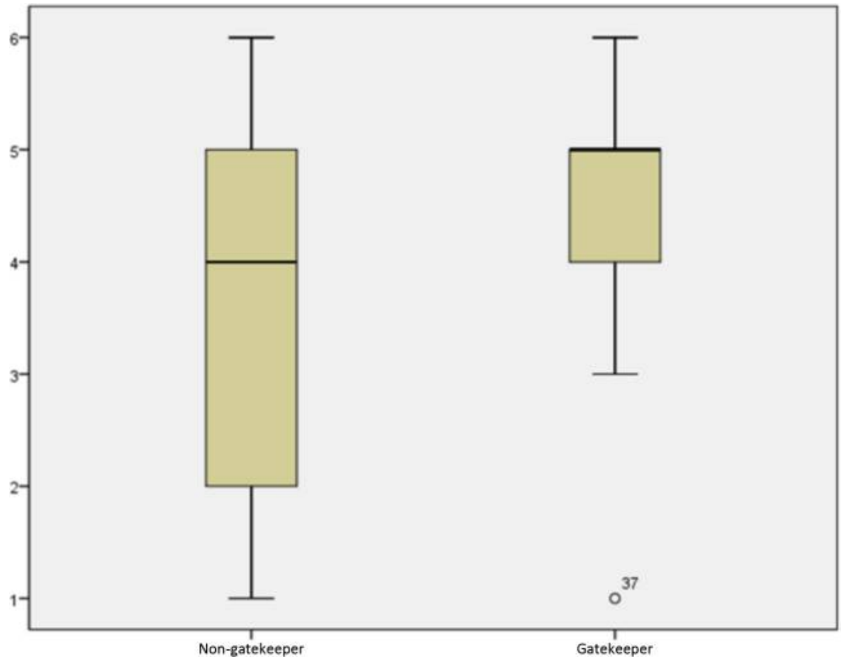
Figure 4 *H2* testing results: impact of decision-maker characteristics (role: gatekeeper vs non-gatekeeper) on the importance of factors associated with brands (brand awareness)



aspects than emotional and intangible features. In fact, in this study, brand awareness and frequency of previous purchases to the same supplier register the lowest importance scores. Interestingly, reputation, "a firm tangible foundation with strong links to many intangible elements" (Mudambi, 2002, p. 526) was considered as an important attribute overall, ranking as the sixth (out of ten) most relevant factor to respondents. Some B2B studies have garnered the attention about reputation and its importance (Cretu and Brodie, 2007; Hansen *et al.*, 2008). Brand reputation has always been a factor in B2B purchasing decisions, usually appearing as a top four selection criteria in selecting suppliers (Roberts and Merrilees, 2007). Customers perceive companies with a good reputation as more credible and trustworthy and as providing greater value (Roberts and Merrilees, 2007). Customers will also have more confidence in suppliers with a good reputation (Leek and Christodoulides, 2011). Furthermore, B2B buyers are more concerned with overall company reputation than with the product reputation (Brown *et al.*, 2007), and a company with a solid reputation reduces perceived risk associated with generally technically complex offerings (McQuiston, 2004).

In line with Mudambi (2002), this investigation showed that brands may not be important to all organizational buyers or purchases. Results provide an insight as to when high levels of brand importance are most likely to occur. Different purchase situations influence the importance given to the frequency of prior purchases from the same supplier, more relevant in straight repurchases, as seen in Table I and Figure 2. This may be related with routine decisions. Buyers are familiar with the brand, satisfied with its performance and repeat purchase of that brand is perceived as a safe option (Walley *et al.*, 2007). These results seem to confirm the conclusions of Leek and Christodoulides (2011) and Roberts and Merrilees (2007), which consider that brands are important in the case of repurchase/low-risk decisions, contributing to customer retention while minimizing search costs. Unexpectedly, other brand attributes (namely, awareness and reputation) were not considered significantly more important in other, more complex situations. According to Brown *et al.* (2012), this pattern occurs when dealing with tangible-dominant products. So the results may suggest that DST promotion policies are not focusing enough on intangible benefits to leverage brand assets. However, though the differences were not significant, brand awareness exhibited a higher importance in the case of new purchases, while reputation exhibited a higher relevance for modified re-buys (Table I/Figure 2). As stated in the literature (Blombäck and Axelsson, 2007), corporate brand image and supplier's reputation within the purchasing company may affect buyer's evaluation, especially when the buyer has limited experience of that particular purchase, which may occur in new purchases and modified re-buys. Also, Brown *et al.* (2012) and Zablah *et al.* (2010) concluded that modified re-buys are situations which tend to maximize the relevance of brands in the purchase decision, encouraging a change in purchasing preferences.

Moreover, as reported in Tables II and III and Figures 3 and 4, decision-maker characteristics also determine the importance given to brand reputation and prior purchases (namely, the department he/she belongs) and brand awareness (namely, if the role is that of a gatekeeper). As stated in the literature, top directors and gatekeepers, responsible for information management in the buying process, were found to be more sensitive to brands (namely, reputation and awareness, respectively), with gatekeepers focusing mostly on affective brand values (Bendixen *et al.*, 2004; Lynch and de Chernatony, 2007). Conversely, when decision-makers do not belong to the board of directors, the frequency of prior purchases from the same supplier is considered more relevant. According to the literature (Leek and Christodoulides, 2011; Brown *et al.*, 2012), other departments may be more transaction oriented than top directors and may repeatedly buy the same brand to minimize search costs. Contrary to earlier research (Mudambi, 2002), this study showed that only firm dimension was not confirmed as a determinant of brand relevance in the B2B purchasing process, as tested in *H3*.

This research makes several contributions, especially as B2B brand research is scarce. Some recent articles have examined B2B brands, but much still remains to be done (Roberts and Merrilees, 2007; Aspara and Tikkanen, 2008a). Also, B2B brand research has been too supplier oriented (Keränen *et al.*, 2012), with only a few studies focusing on it from the buyers' perspective (Mudambi, 2002; Bendixen *et al.*, 2004). By investigating the influence of brands in a B2B purchasing context, considering its specific complexities and examining the real behavior of buyers of an industrial group, this study contributes to bridging this gap in the literature. Moreover, the few studies on the subject have been largely descriptive in nature and managerial oriented (Zablah *et al.*, 2010; Ohnemus, 2009), while our investigation emphasizes hypothesis testing through a proposed research framework. The current study has also evolved B2B brand research by studying a B2B service, namely, a building contractor, a neglected context with respect to B2B brands.

Also, in managerial terms, identifying determinants of the importance given by organizational buyers to brands is critical in deciding when investments in brand development are more likely to payoff. To do that, supplier organizations need to acquire information about the purchase situation and the roles and expectations of the buying center members. Understanding which buyers are likely to be more receptive to brand information is critical to achieving returns from brand building efforts. This is especially critical for B2B brand managers, who are active across a wide range of product categories and heterogeneous customers (Backhaus *et al.*, 2011). When dealing with modified re-buys and new purchases, non-members of the board of directors or non-gatekeepers, branding strategies may focus on the tangible, quantifiable and objective benefits of the product itself. However, to gain a competitive advantage, relying exclusively on this type of criteria may not be enough for building contractors. The products they deliver are not unique, as other companies also have the capacity to manufacture identical buildings and constructions (Blombäck and Axelsson, 2007). Thus, building contractors cannot rely simply on having a capability or a high performance to differentiate them. According to Brown *et al.* (2012), to leverage brand assets, branding strategies should also highlight the service component of the purchase, its intangibility and complexity, heightening perceptions of risk and, therefore, brand importance. When dealing with more brand sensitive situations and actors, branding strategies should highlight the emotional benefits of the brand and the unique nature of each purchase. Organizations can emphasize brand reputation when dealing with top managers and prior purchases when dealing with members of other departments and/or straight repurchases because such information should be relatively influential in the decision process. When dealing with gatekeepers, branding strategies should emphasize awareness. Brand awareness is the customer's ability to recognize and recall the brand under different conditions (Aaker, 1996). Gatekeepers tend to exert their influence at the early stage of the buying process when the full range of competing brands needs to be identified. When the buyer is a gatekeeper, brands with high levels of awareness are more likely to be included in the selection set and chosen, when compared with unknown brands. An emphasis on brands is beneficial in these conditions because it can serve as heuristics for product choice decisions.

However, this study is not without limitations. A larger sample could add to the validity of results. Another suggestion for future research would be to include more dimensions in each determinant or even more determinants, such as, for example, competitive intensity (Zablah *et al.*, 2010). Future studies may also explore the relative importance of the brand according to more specific factors, namely, value drivers. Also, prior research (Blombäck and Axelsson, 2007) argues that brand relevance can change over time. The current study focused only on the final choice, and thus, objective criteria such as price or delivery services were considered to be the most important. However, conclusions might be different when considering early phases of selection. Further studies should test this assumption and assess the determinants of these changes. Finally, a single service industry has been used. However, prior research (Backhaus *et al.*, 2011) confirms that brand relevance differs across product categories. Future studies should expand this study to other industries or products to increase the understanding of a still limited and underresearched academic field.

References

Aaker, D. (1996), *Building Strong Brands*, Free Press, New York, NY.

Aczel, A. (1996), *Complete Business Statistics*, 3rd ed., Irwin/McGraw-Hill, Boston, MA.

Alexander, N., Bick, G., Abratt, R. and Bendixen, M. (2009), "Impact of branding and product augmentation on decision making in the B2B market", *South African Journal of Business Management*, Vol. 40 No. 1, pp. 1-20.

American Marketing Association (1960), *Marketing Definitions: A Glossary of Marketing Terms*, American Marketing Association, Chicago, IL.

Aspara, J. and Tikkanen, H. (2008a), "Adoption of corporate branding by managers: case of a Nordic business-to-business company", *Journal of Brand Management*, Vol. 16 Nos 1/2, pp. 80-91.

Aspara, J. and Tikkanen, H. (2008b), "Significance of corporate brand for business-to-business companies", *The Marketing Review*, Vol. 8 No. 1, pp. 43-60.

Backhaus, K., Steiner, M. and Lugger, K. (2011), "To invest or noy to invest in brands? Drivers of brand relevance in B2B markets", *Industrial Marketing Management*, Vol. 40 No. 7, pp. 1082-1092.

Ballantyne, D. and Aitken, R. (2007), "Branding in B2B markets: insights from the service-dominant logic of marketing", *Journal of Business & Industrial Marketing*, Vol. 22 No. 6, pp. 363-371.

Balmer, J. and Gray, E. (2003), "Corporate brands: what are they? What of them?", *European Journal of Marketing*, Vol. 37 Nos 7/8, pp. 972-997.

Baumgarth, C. (2008), "Integrated model of marketing quality (MARKET-Q) in the B-to-B sector", *Journal of Business Market Management*, Vol. 2 No. 1, pp. 41-57.

Bendixen, M., Bukasa, K. and Abratt, R. (2004), "Brand equity in the business-to-business market", *Industrial Marketing Management*, Vol. 33 No. 5, pp. 371-380.

Bengtsson, A. and Servais, P. (2005), "Co-branding on industrial markets", *Industrial Marketing Management*, Vol. 34 No. 7, pp. 706-713.

Blombäck, A. and Axelsson, B. (2007), "The role of corporate brand image in the selection of new subcontractors", *Journal of Business and Industrial Marketing*, Vol. 22 No. 6, pp. 418-430.

Brown, B., Bellenger, D. and Johnston, W. (2007), "The implications of business-to-business and consumer market differences for B2B branding strategy", *Journal of Business Market Management*, Vol. 1 No. 3, pp. 209-229.

Brown, B., Zablah, A., Bellenger, D. and Donthu, N. (2012), "What factors influence buying center brand sensitivity?", *Industrial Marketing Management*, Vol. 41 No. 3, pp. 508-520.

Brown, B., Zablah, A. Bellenger, D. and Johnston, W. (2011), "When do B2B brands influence the decision-making of organizational buyers? An examination of the relationship between purchase risk and brand sensitivity", *International Journal of Research in Marketing*, Vol. 28 No. 3, pp. 194-204.

Burns, R. (2000), *Introduction to Research Methods*, 4th ed., Sage, London.

Campbell, C., Papania, L., Parent, M. and Cyr, D. (2010), "An exploratory study into brand alignment in B2B relationships", *Industrial Marketing Management*, Vol. 39 No. 5, pp. 712-720.

Cretu, A. and Brodie, R. (2007), "The influence of brand image and company reputation where manufacturers market to small firms: a customer value perspective", *Industrial Marketing Management*, Vol. 36 No. 2, pp. 230-240.

Davis, D., Golicic, S. and Marquardt, A. (2008), "Branding a B2B service: does a brand differentiate a logistics service provider?", *Industrial Marketing Management*, Vol. 37 No. 2, pp. 218-227.

Glynn, M. (2012), "Primer in B2B brand-building strategies with a reader practicum", *Journal of Business Research*, Vol. 65 No. 5, pp. 666-675.

Glynn, M., Motion, J. and Brodie, R. (2007), "Sources of brand benefits in manufacturer-reseller B2B relationships", *Journal of Business & Industrial Marketing*, Vol. 22 No. 6, pp. 400-409.

Hansen, H., Samuelsen, B. and Silseth, P. (2008), "Customer perceived value in B2B service relationships: investigating the importance of corporate reputation", *Industrial Marketing Management*, Vol. 37 No. 2, pp. 206-217.

Homburg, C., Klarmann, M. and Schmitt, J. (2010), "Brand awareness in business markets: when is it related to firm performance?", *International Journal of Research in Marketing*, Vol. 27 No. 3, pp. 201-212.

Huang, R. and Sarigöllü, E. (2012), "How brand awareness relates to market outcome, brand equity, and the marketing mix", *Journal of Business Research*, Vol. 65 No. 1, pp. 92-99.

Juntunen, M., Juntunen, J. and Juga, J. (2011), "Corporate brand equity and loyalty in B2B markets: a study among logistics service purchasers", *Journal of Brand Management*, Vol. 18 Nos 4/5, pp. 300-311.

Kalafatis, S., Remizova, N., Riley, D. and Singh, J. (2012), "The differential impact of brand equity on B2B co-branding", *Journal of Business & Industrial Marketing*, Vol. 27 No. 8, pp. 623-634.

Keller, K. (1993), "Conceptualizing, measuring, and managing customer-based brand equity", *Journal of Marketing*, Vol. 57 No. 1, pp. 1-22.

Keränen, J., Piirainen, K. and Salminen, R. (2012), "Systematic review on B2B branding: research issues and avenues for future research", *Journal of Product & Brand Management*, Vol. 21 No. 6, pp. 404-417.

Kotler, P. and Pfoertsch, W. (2007), "Being known or being one of many: the need for brand management for business-to-business (B2B) companies" *Journal of Business-to-Business Marketing*, Vol. 22 No. 6, pp. 357-362.

Kuhn, K., Alpert, F. and Pope, N. (2008), "An application of Keller's brand equity model in a B2B context", *Qualitative Market Research: An International Journal*, Vol. 11 No. 1, pp. 40-58.

Leek, S. and Christodoulides, G. (2011), "A literature review and future agenda for B2B branding: challenges of branding in a B2B context", *Industrial Marketing Management*, Vol. 40 No. 6, pp. 830-837.

Leek, S. and Christodoulides, G. (2012), "A framework of brand value in B2B markets: the contributing role of functional and emotional components", *Industrial Marketing Management*, Vol. 41 No. 1, pp. 106-114.

Low, J. and Blois, K. (2002), "The evolution of generic brands in industrial markets: the challenges to owners of brand equity", *Industrial Marketing Management*, Vol. 31 No. 5, pp. 385-392.

Lynch, J. and de Chernatony, L. (2004), "The power of emotion: brand communication in Business-to-Business markets", *Journal of Brand Management*, Vol. 11 No. 5, pp. 403-441.

Lynch, J. and de Chernatony, L. (2007), "Winning hearts and minds: Business-to-Business branding and the role of the salesperson", *Journal of Marketing Management*, Vol. 23 Nos 1/2, pp. 123-135.

McQuiston, D. (2004), "Successful branding of a commodity product: the case of Raex laser steel", *Industrial Marketing Management*, Vol. 33 No. 4, pp. 345-354.

Marquardt, A., Golicic, S. and Davis, D. (2011), "B2B services branding in the logistics services industry", *Journal of Services Marketing*, Vol. 25 No. 1, pp. 47-57.

Mudambi, S. (2002), "Branding importance in business-to-business markets: three buyer clusters", *Industrial Marketing Management*, Vol. 31 No. 6, pp. 525-533.

Mudambi, S., Doyle, P. and Wong, V. (1997), "An exploration of branding in industrial markets", *Industrial Marketing Management*, Vol. 26 No. 5, pp. 433-446.

Journal of Business & Industrial Marketing
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Ohnemus, L. (2009), "B2B branding: a financial burden for shareholders?", *Business Horizons*, Vol. 52 No. 2, pp. 159-166.

Roberts, J. and Merrilees, B. (2007), "Multiple roles of brands in business-to-business services", *Journal of Business & Industrial Marketing*, Vol. 22 No. 6, pp. 410-417.

Romaniuk, J. and Nenycz-Thiel, M. (2013), "Behavioral brand loyalty and consumer brand associations", *Journal of Business Research*, Vol. 66 No. 1, pp. 67-72.

Sengupta, A., Balaji, M. and Krishnan, B. (2015), "How customers cope with service failure? A study of brand reputation and customer satisfaction", *Journal of Business Research*, Vol. 68 No. 3, pp. 665-674.

Srivastava, K. and Sharma, N. (2013), "Service quality, corporate brand image, and switching behavior: the mediating role of customer satisfaction and repurchase intention", *Services Marketing Quarterly*, Vol. 34 No. 4, pp. 274-291.

Tabachnik, B. and Fidell, L. (2001), *Computer-Assisted Research Design and Analysis*, Allyn & Bacon, Boston.

Walley, K., Custance, P., Taylor, S., Lindgreen, A. and Hingley, M. (2007), "The importance of brand in the industrial purchase decision: a case study of the UK tractor market", *Journal of Business & Industrial Marketing*, Vol. 22 No. 6, pp. 383-393.

Webster, F. and Keller, K. (2004), "A roadmap for branding in industrial markets", *Journal of Brand Management*, Vol. 11 No. 5, pp. 388-402.

Zablah, A., Brown, B. and Donthu, N. (2010), "The relative importance of brands in modified rebuy purchase situations", *International Journal of Research in Marketing*, Vol. 27 No. 3, pp. 248-260.

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